

CYPRESS PRODUCT SELECTOR GUIDE

JANUARY 2013



- AUTOMOTIVE • CAPSense® CAPACITIVE TOUCHSENSING • CLOCKS AND BUFFERS
- LIGHTING AND POWER CONTROL • MEMORY • POWERLINE COMMUNICATION
- PSoC® PROGRAMMABLE SYSTEM-ON-CHIP • TRUE TOUCH® TOUCHSCREEN SOLUTIONS
- USB SOLUTIONS • WEST BRIDGE® PERIPHERAL CONTROLLERS • WIRELESS/RF

PSoC, CapSense, West Bridge, EZ-USB, HOTLink, MoBL, and RoboClock are registered trademarks and Antioch, Autobrite, AutoMoBL, AutoRate Receiver, CapSense Express, COMLINK, ConsuMoBL, enCoRe, EZ-Host, EZ-OTG, EZ-USB AT2LP, EZ-USB FX2LP, EZ-USB NX2LP, EZ-USB NX2LP-Flex, EZ-USB SX2, EZ-USB TX2, FailSafe, FullFlex, HOTLinkDX, HOTLink II, M8, MediaClock, MoBL-USB, No Bus Latency, NoBL, PacketClock, PREMIS, PRoC, PSoC Designer, PSoC Express, RAM9, SLIM, SpreadAware, TrueTouch, WirelessUSB, WirelessUSB LP, WirelessUSB LR, and WirelessUSB LS are trademarks of Cypress Semiconductor Corporation.

QDR RAMs and Quad Data Rate RAMs comprise a new family of products developed by Cypress, IDT, NEC, Renesas and Samsung. XScale is a registered trademark of Marvell, Inc. Rambus and Direct Rambus are registered trademarks of Rambus, Inc. All other product and company names mentioned in this document are the trademarks of their respective holders and may be registered in some jurisdictions.

© Copyright 2013 Cypress Semiconductor Corporation. All rights reserved.

The information contained herein is subject to change without notice. Cypress Semiconductor Corporation assumes no responsibility for the use of any circuitry other than circuitry embodied in a Cypress product. Nor does it convey or imply any license under patent or other rights. Cypress products are not warranted nor intended to be used for medical, life support, life saving, critical control or safety applications, unless pursuant to an express written agreement with Cypress. Furthermore, Cypress does not authorize its products for use as critical components in life-support systems where a malfunction or failure may reasonably be expected to result in significant injury to the user. The inclusion of Cypress products in life-support systems application implies that the manufacturer assumes all risk of such use and in doing so indemnifies Cypress against all charges.

Products, specifications and availability are subject to change. Please contact your local sales representative or visit the Cypress website at www.cypress.com for the most current information.

TABLE OF CONTENTS

AUTOMOTIVE SOLUTIONS	1
PSoC Programmable System-on-Chip	1
CAPSENSE Touchsensing Solutions	2
TRUETOUCH Touchscreen Solutions	4
SRAM	5
USB	10
Clock Distribution	11
CAPSENSE CAPACITIVE TOUCHSENSING SOLUTIONS	1
CapSense Express	1
CapSense	4
CapSense Plus	5
CLOCKS AND BUFFERS	1
Clock Distribution	1
High Performance Buffers	1
Non-Zero Delay Buffers	3
RoboClock Skew Management Buffers	4
Zero Delay Buffers	7
Clock Generation	13
Application Specific Clocks	13
EMI Reduction Clocks	14
FlexO High Performance Clock Generator	18
Programmable Clocks	21
Programmable XOs	23
VCXO Clocks	23
LIGHTING AND POWER CONTROL	1
EZ Color HB LED Controllers	1
PowerPSoC Power Controllers	3
MEMORY	1
Electronic PSG	1
Asynchronous SRAMs	2
Asynchronous Fast SRAMs	2
Asynchronous Micropower SRAMs	10
Dual-Port SRAMs	18
FIFOs	25
MoBL Dual-Ports	29
Nonvolatile Products	31
F-RAM Parallel	31
F-RAM Processor Companion	32
F-RAM Serial	32
F-RAM Wireless	34

MEMORY (CONTINUED)

Parallel Nonvolatile SRAMs	34
Serial Nonvolatile SRAMs	40
QuadPort DSE SRAMs	43
Synchronous SRAMs	44
DDR-II CIO	44
DDR-II SIO	45
DDR-II+ CIO	46
DDR-II+ Xtreme	50
NoBL	51
QDR	56
QDR-II	56
QDR-II+	61
QDR-II+ Xtreme	67
Standard Sync.	70

INTERFACE	1
Control Communications	1
Multi-Protocol PHYs	2
Sonet and SDH PHYs	3
Powerline Communication	4
Video (SMPTE) PHYs	6

PSoC PROGRAMMABLE SYSTEM-ON-CHIP	1
PSoC World	1
Electronic Product Selector Guide (ePSG)	2
Design Win Replication (DWR) Highlights	3
PSoC 1	4
PSoC 3	12
PSoC 5	18
PSoC 5LP	21
PSoC Software	24

TRUETOUCH TOUCHSCREEN SOLUTIONS	1
--	----------

USB SOLUTIONS	1
West Bridge Peripheral Controllers	1
USB Full-Speed Peripherals	3
USB High-Speed Hubs	5
USB High-Speed Peripherals	7
USB Hosts	9
USB Low-Speed Peripherals	10
USB Super-Speed Peripherals	11
USB Transceivers	12

WIRELESS/RF	1
CyFi Low-Power RF	1
RF Companion Microcontrollers	1
RF Transceivers	4

AUTOMOTIVE SOLUTIONS

Cypress's automotive-grade products adhere to the most stringent standards in the industry.

These products:

- Meet or exceed the toughest automotive-grade qualifications
- Employ strict, zero-defect manufacturing processes
- Give automotive customers pipeline visibility and end-to-end traceability
- Benefit from long product lifecycles based on reliable process technologies
- Utilize dedicated process flows with in-line inspections, controls, and monitors

PSoC® PROGRAMMABLE SYSTEM-ON-CHIP

Cypress's PSoC® programmable system-on-chip device integrates configurable analog and digital peripheral functions, memory, and a microcontroller on a single chip. With an extremely flexible visual embedded design methodology that includes preconfigured, user-defined peripherals and hierarchical schematic entry, you can change your mind as often as you want and still stay on schedule.

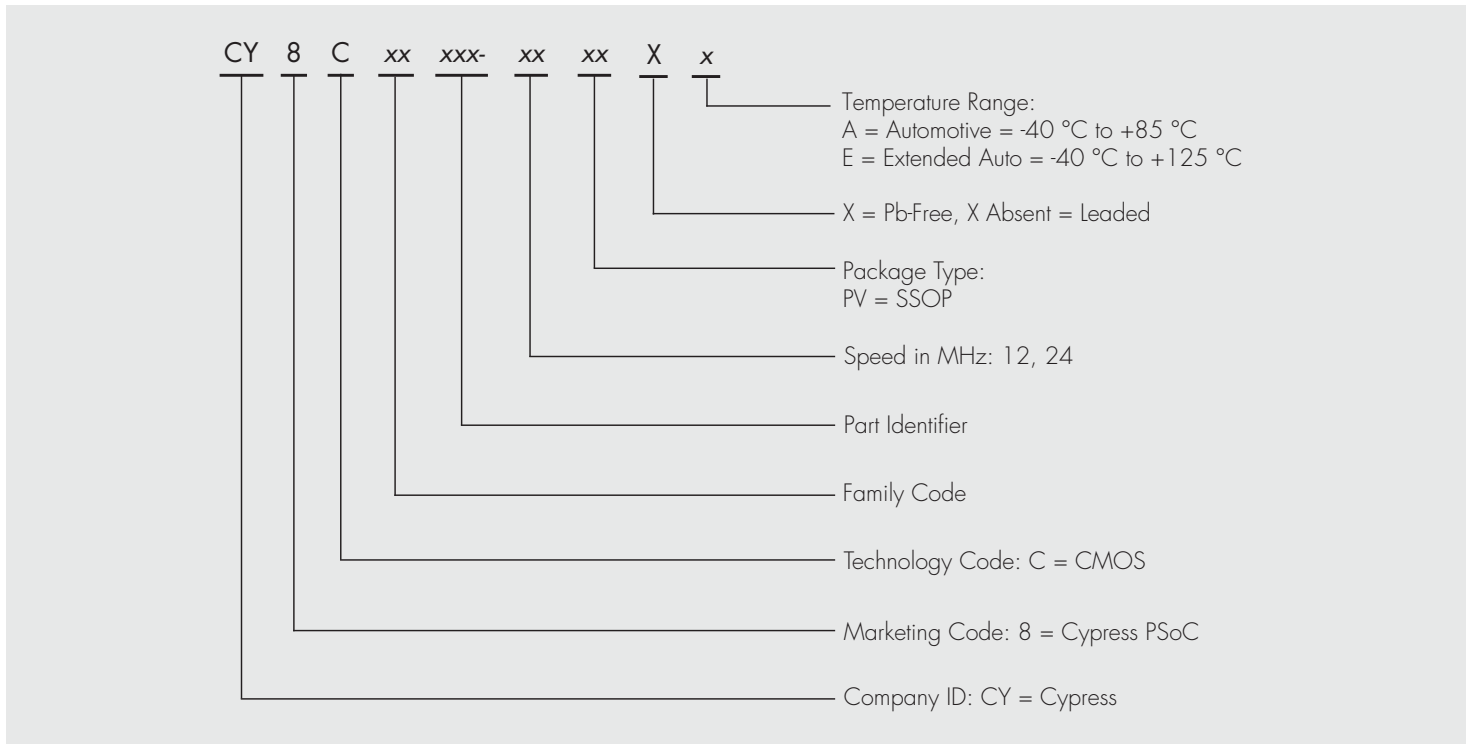
PSoC's configurable blocks enable you to:

- Adapt to changing feature requirements
- Meet aggressive development deadlines
- Make products that satisfy market demands
- Adjust designs during debug/system qualification

PSoC PROGRAMMABLE SYSTEM-ON-CHIP

Part Number	V _{CC} (V)	Digital I/O	Analog Input	Analog Output	Analog PSoC Blocks	Digital PSoC Blocks	Flash	RAM	Comm. Interface	Package	Temperature Range	Status
CY8C24223A-12PVXE	4.75 to 5.25	16	8	2	6	4	4 KB	256 B	I ² C, SPI, UART	20 SSOP	-40 to +125 °C	In production
CY8C24223A-24PVXA	3.0 to 5.25	16	8	2	6	4	4 KB	256 B	I ² C, SPI, UART	20 SSOP	-40 to +85 °C	In production
CY8C24423A-12PVXE	4.75 to 5.25	24	12	2	6	4	4 KB	256 B	I ² C, SPI, UART	28 SSOP	-40 to +125 °C	In production
CY8C24423A-24PVXA	3.0 to 5.25	24	12	2	6	4	4 KB	256 B	I ² C, SPI, UART	28 SSOP	-40 to +85 °C	In production
CY8C29466-12PVXE	4.75 to 5.25	24	12	4	12	16	32 KB	2 KB	I ² C, SPI, UART	28 SSOP	-40 to +125 °C	In production
CY8C29466-24PVXA	3.0 to 5.25	24	12	4	12	16	32 KB	2 KB	I ² C, SPI, UART	28 SSOP	-40 to +85 °C	In production
CY8C29666-12PVXE	4.75 to 5.25	44	12	4	12	16	32 KB	2 KB	I ² C, SPI, UART	48 SSOP	-40 to +125 °C	In production
CY8C29666-24PVXA	3.0 to 5.25	44	12	4	12	16	32 KB	2 KB	I ² C, SPI, UART	48 SSOP	-40 to +85 °C	In production

PSOC PART NUMBER DECODER



CAPSENSE® TOUCHSENSING SOLUTIONS

Automotive CapSense® solutions (CY8C20x34) are a fully-programmable platform that support up to 10 capacitive buttons and two sliders. In addition, two-dimensional track pad solutions are also supported. The CapSense Plus™ family has the most features in the CapSense portfolio. It can support up to 44 capacitive buttons and up to eight sliders. CapSense Plus also provides support for advanced functionalities such as proximity detection, two-dimensional track pads, and analog/digital design integration. In addition to these, we also have devices, which support LIN protocol for in-car connectivity needs.

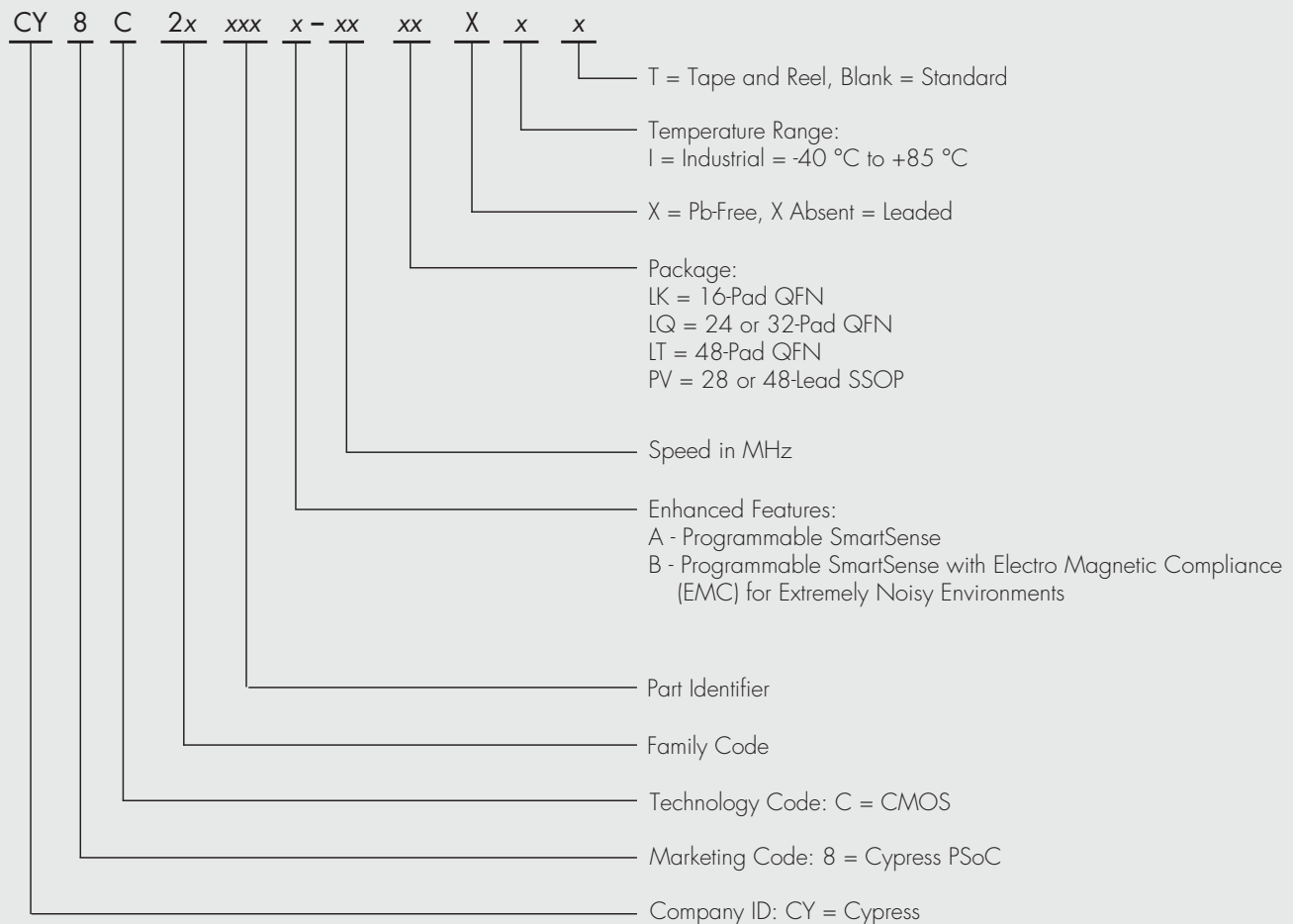
CAPSENSE TOUCHSENSING DEVICES

Part Number	V _{cc} (V)	GPIO	Capacitive I/O	Buttons	Sliders	PWMs	Touch Pads	Proximity Sensing	Analog PSoc Blocks	Digital PSoc Blocks	Flash	RAM	Comm. Interface	Package	Temperature Range	Status
CY8C20234-12LKXA	3.0 to 5.25	13	10	10	2	SW	Y	N	1 CapSense	0	8 KB	512 B	I ² C, SPI	16 QFN	-40 to +85 °C	In production
CY8C21334-12PVXE	4.75 to 5.25	16	12	12	2	HW	Y	Y	4	4	8 KB	512 B	I ² C, SPI, UART	20 SSOP	-40 to +125 °C	In production
CY8C21334-24PVXA	3.0 to 5.25	16	12	12	2	HW	Y	Y	4	4	8 KB	512 B	I ² C, SPI, UART	20 SSOP	-40 to +85 °C	In production
CY8C21534-12PVXE	4.75 to 5.25	24	20	20	4	HW	Y	Y	4	4	8 KB	512 B	I ² C, SPI, UART	28 SSOP	-40 to +125 °C	In production
CY8C21534-24PVXA	3.0 to 5.25	24	20	20	4	HW	Y	Y	4	4	8 KB	512 B	I ² C, SPI, UART	28 SSOP	-40 to +85 °C	In production
CY8C24894-24LFXA	3.0 to 5.25	49	43	43	8	HW	Y	Y	6	4	16 KB	1 KB	I ² C, SPI, UART	56 QFN	-40 to +85 °C	In production
CY8C21345-12PVXE	4.75 to 5.25	24	21	21	4	HW	Y	Y	6	4	8 KB	512 B	I ² C, SPI, UART, LIN	28 SSOP	-40 to +125 °C	In production
CY8C21345-24PVXA	3.0 to 5.25	24	21	21	4	HW	Y	Y	6	4	8 KB	512 B	I ² C, SPI, UART, LIN	28 SSOP	-40 to +85 °C	In production
CY8C22345-12PVXE	4.75 to 5.25	24	21	21	4	HW	Y	Y	6	8	16 KB	1 KB	I ² C, SPI, UART, LIN	28 SSOP	-40 to +125 °C	In production
CY8C22345-24PVXA	3.0 to 5.25	24	21	21	4	HW	Y	Y	6	8	16 KB	1 KB	I ² C, SPI, UART, LIN	28 SSOP	-40 to +85 °C	In production
CY8C21645-12PVXE	4.75 to 5.25	39	36	36	7	HW	Y	Y	6	4	8 KB	512 B	I ² C, SPI, UART, LIN	48 SSOP	-40 to +125 °C	In production
CY8C21645-24PVXA	3.0 to 5.25	39	36	36	7	HW	Y	Y	6	4	8 KB	512 B	I ² C, SPI, UART, LIN	48 SSOP	-40 to +85 °C	In production
CY8C22645-12PVXE	4.75 to 5.25	39	36	36	7	HW	Y	Y	6	8	16 KB	1 KB	I ² C, SPI, UART, LIN	48 SSOP	-40 to +125 °C	In production
CY8C22645-24PVXA	3.0 to 5.25	39	36	36	7	HW	Y	Y	6	8	16 KB	1 KB	I ² C, SPI, UART, LIN	48 SSOP	-40 to +85 °C	In production
CY8C21312-24PVXA	3.0 to 5.25	16	12	12	2	HW	Y	Y	1 CapSense	1	8 KB	512 B	I ² C, SPI, UART	20 SSOP	-40 to +85 °C	In production
CY8C21512-24PVXA	3.0 to 5.25	24	20	20	4	HW	Y	Y	1 CapSense	1	8 KB	512 B	I ² C, SPI, UART	28 SSOP	-40 to +85 °C	In production
CY8C20236A-24LKXA	1.71 to 5.5	13	10	10	2	SW	Y	Y	1 CapSense	0	8 KB	1 KB	I ² C, SPI	16 QFN	-40 to +85 °C	In production
CY8C21312-12PVXE	4.75 to 5.25	16	12	0	0	HW	Y	Y	1 CapSense	1	8 KB	512 B	I ² C, SPI, UART	20 SSOP	-40 to +125 °C	In production
CY8C21512-12PVXE	4.75 to 5.25	24	20	0	0	HW	Y	Y	1 CapSense	1	8 KB	512 B	I ² C, SPI, UART	28 SSOP	-40 to +125 °C	In production

PLANNED CAPSENSE TOUCHSENSING DEVICES

Part Number	Vcc (V)	GPIO	Capacitive I/O	Buttons	Sliders	PWMs	Touch Pads	Proximity Sensing	Analog PSoC Blocks	Digital PSoC Blocks	Flash	RAM	Comm. Interface	Package	Temperature Range	Status
CY8C20566A-24PVXA	1.71 to 5.5	36	33	33	6	SW	Y	N	1 CapSense	0	32 KB	2 KB	I ² C, SPI	48 SSOP	-40 to +85 °C	Available in Q113

CAPSENSE TOUCHSENSING DEVICE PART NUMBER DECODER



TRUETOUCH® TOUCHSCREEN SOLUTIONS

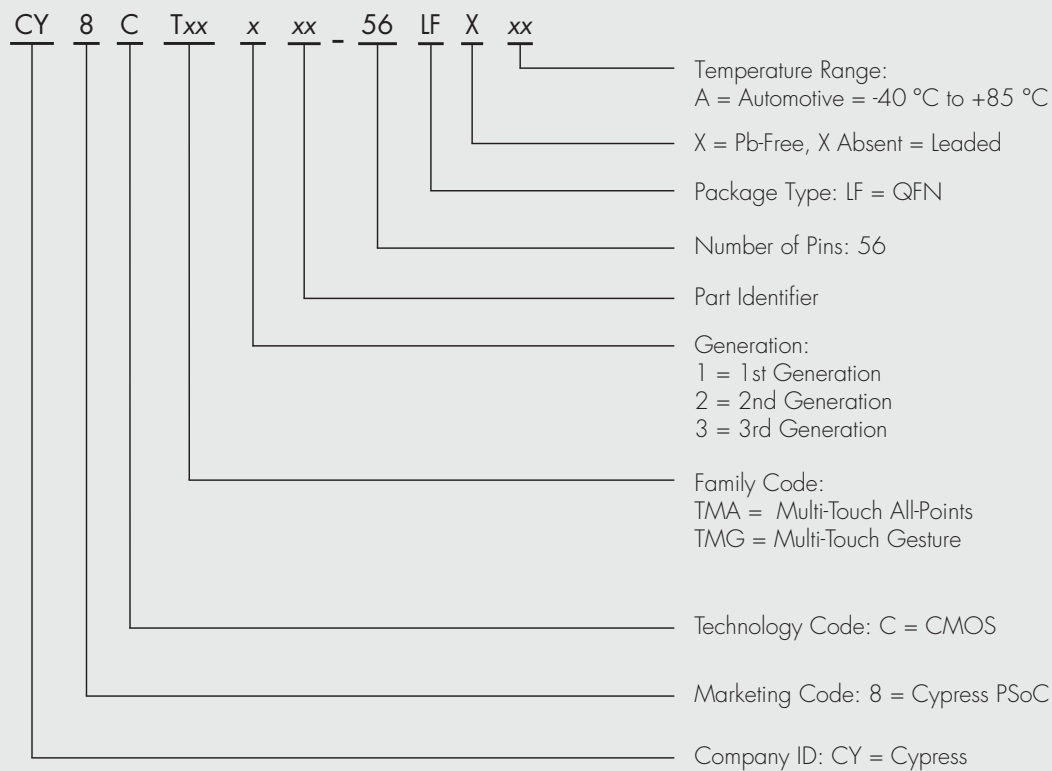
Cypress, the leader in capacitive touchsensing solutions, is revolutionizing the touchscreen market. Cypress's TrueTouch® touchscreen solutions, powered by PSoC technology, offer unmatched flexibility and the broadest portfolio available. The projected capacitive TrueTouch solutions give designers a choice between different usage models, different touchscreen vendors, and different LCD vendors. They also enable designers to accommodate last minute changes - something no other touchscreen product can deliver.

Cypress's automotive portfolio includes multitouch gesture solutions for mid-level capabilities and multitouch all-point solutions for the maximum in touch interaction.

TRUETOUCH TOUCHSCREEN DEVICES

Part Number	Flash	RAM	Typical Scan Speed per Sensor	Average Current Consumption (mA)	Vcc (V)	Max Sensor Inputs	Max Screen Size (inches)	Package	Temperature Range	Status
CY8CTMA120-56LFXA	16 KB	1 KB	0.12 ms	16	3 to 5.25	37	7.3	56 QFN	-40 to +85 °C	In production
CY8CTMG120-56LFXA	16 KB	1 KB	0.5 ms	16	3 to 5.25	44	8.4	56 QFN	-40 to +85 °C	In production

TRUETOUCH PART NUMBER DECODER

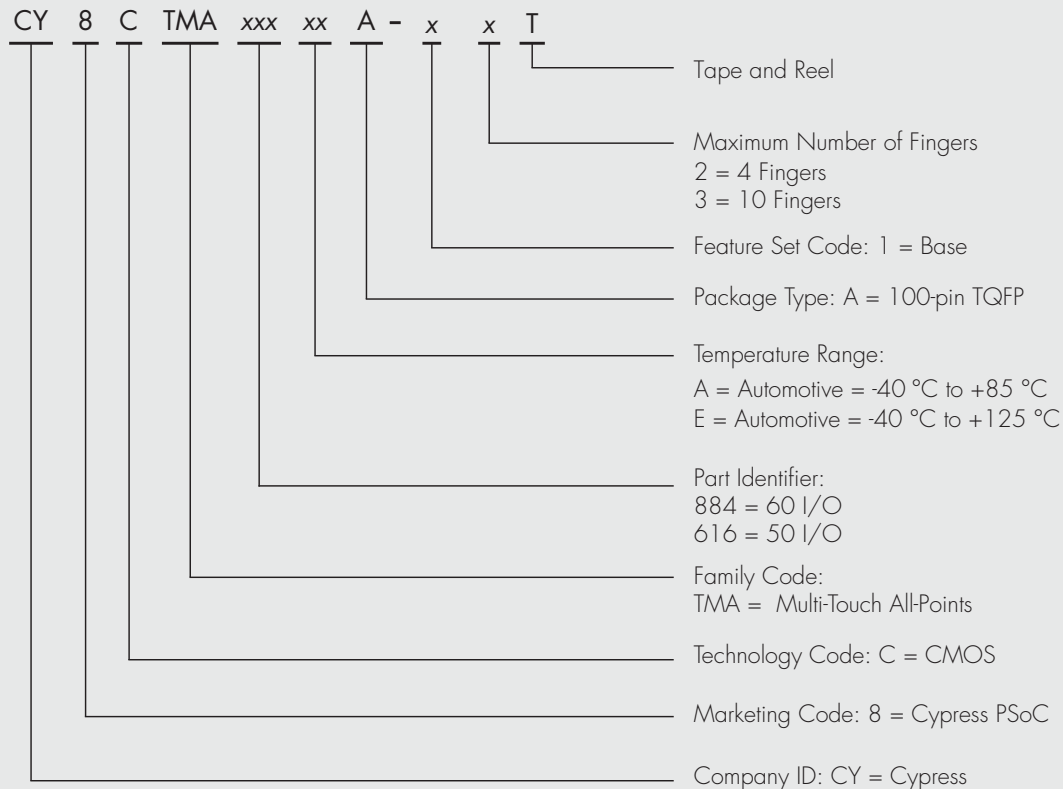


PLANNED TrueTOUCH TOUCHSCREEN DEVICES

CY8CTMA884/616 are single-chip solutions for automotive touchscreen applications. TMA884 delivers up to 884-node, high-performance, projected-capacitance sensing for up to 11.6-inch designs. It employs TrueTouch multi-touch all-points sensing to track up to 10 fingers simultaneously with no ghosting and 0.5-mm accuracy.

Part Number	Max. Sensor Inputs	Max. Fingers Supported	I ² C	Capacitive Buttons	Gestures	Temperature Range (°C)	Packages	Status
CY8CTMA616AA-12	50	4	Y	N	N	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA616AA-13	50	10	Y	N	N	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA616AE-12	50	4	Y	N	N	-40 °C to +125 °C	100-pin TQFP	Available in Q412
CY8CTMA616AE-13	50	10	Y	N	N	-40 °C to +125 °C	100-pin TQFP	Available in Q412
CY8CTMA884AA-12	60	4	Y	N	N	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA884AA-13	60	10	Y	N	N	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA884AE-12	60	4	Y	N	N	-40 °C to +125 °C	100-pin TQFP	Available in Q412
CY8CTMA884AE-13	60	10	Y	N	N	-40 °C to +125 °C	100-pin TQFP	Available in Q412
CY8CTMA616AA-22	50	4	Y	Y	Y	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA616AA-23	50	10	Y	Y	Y	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA616AE-22	50	4	Y	Y	Y	-40 °C to +125 °C	100-pin TQFP	Available in Q412
CY8CTMA616AE-23	50	10	Y	Y	Y	-40 °C to +125 °C	100-pin TQFP	Available in Q412
CY8CTMA884AA-22	60	4	Y	Y	Y	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA884AA-23	60	10	Y	Y	Y	-40 °C to +85 °C	100-pin TQFP	Available in Q412
CY8CTMA884AE-22	60	4	Y	Y	Y	-40 °C to +125 °C	100-pin TQFP	Available in Q412
CY8CTMA884AE-23	60	10	Y	Y	Y	-40 °C to +125 °C	100-pin TQFP	Available in Q412

PLANNED TrueTOUCH PART NUMBER DECODER



SRAM

Cypress provides the broadest SRAM portfolio from 256 Kb to 4 Mbit for its fast asynchronous memories and 256 Kbit to 16 Mbit for its low-power asynchronous memories. The products are available in industry standard voltage, bus width, and package options. Cypress's SRAMs are ideal for ECUs, TCUs, infotainment systems, dashboard clusters, and other applications. We also have a 9 Mbit standard synchronous SRAM in our portfolio.

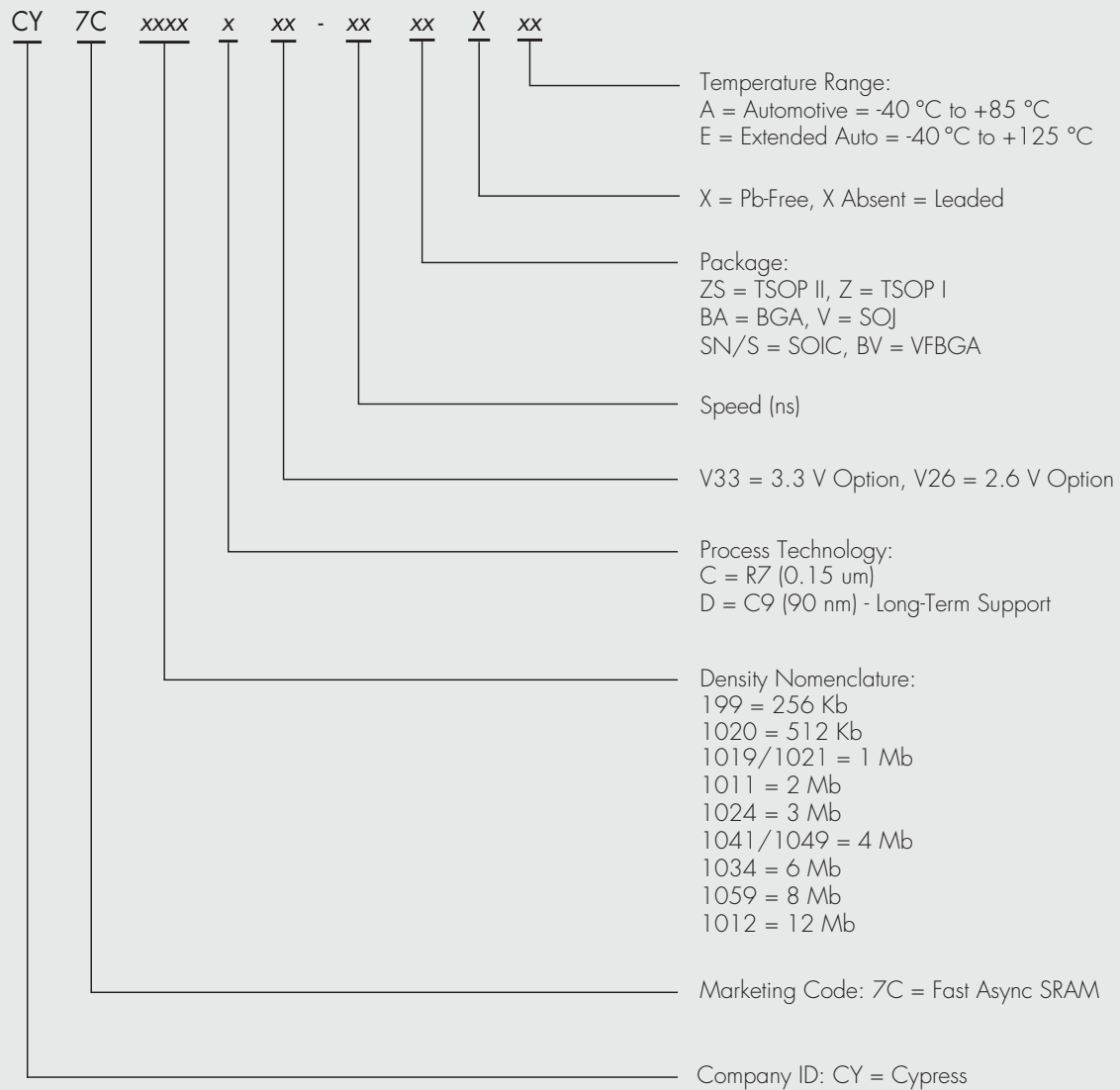
ASYNCHRONOUS FAST SRAMS

Part Number	Density	Type of SRAM	Organization	Vcc (V)	Speed	Package	Temperature Range	Status
CY7C199CN-12VXA	256 Kb	Fast	32 Kb x 8	5.0	12 ns	28 SOJ	-40 °C to +85 °C	In production
CY7C1020CV26-15ZSXE	512 Kb	Fast	32 Kb x 16	2.6	15 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C1020CV33-15ZSXE	512 Kb	Fast	32 Kb x 16	3.3	15 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C1019CV33-10ZXA	1 Mb	Fast	128 Kb x 8	3.3	10 ns	32 TSOP II	-40 °C to +85 °C	In production
CY7C1021CV26-15ZSXE	1 Mb	Fast	64 Kb x 16	2.6	15 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C1021BN-15ZSXE	1 Mb	Fast	64 Kb x 16	5.0	15 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C1021BN-15VXE	1 Mb	Fast	64 Kb x 16	5.0	15 ns	44 SOJ	-40 °C to +125 °C	In production
CY7C1021BNL-15ZSXA	1 Mb	Fast	64 Kb x 16	5.0	15 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1021D-10ZSXA	1 Mb	Fast	64 Kb x 16	5.0	10 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1021CV33-10ZSXA	1 Mb	Fast	64 Kb x 16	3.3	10 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1021DV33-10ZSXA	1 Mb	Fast	64 Kb x 16	3.3	10 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1021CV33-12VXE	1 Mb	Fast	64 Kb x 16	3.3	12 ns	44 SOJ	-40 °C to +125 °C	In production
CY7C1021CV33-12ZSXE	1 Mb	Fast	64 Kb x 16	3.3	12 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C10212CV33-12BAXE	1 Mb	Fast	64 Kb x 16	3.3	12 ns	48 FBGA	-40 °C to +125 °C	In production
CY7C1011CV33-10ZSXA	2 Mb	Fast	128 Kb x 16	3.3	10 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1011CV33-12ZSXE	2 Mb	Fast	128 Kb x 16	3.3	12 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C1041BN-20ZSXA	4 Mb	Fast	256 Kb x 16	5.0	20 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1041CV33-10BAXE	4 Mb	Fast	256 Kb x 16	3.3	10 ns	48 FBGA	-40 °C to +85 °C	In production
CY7C1041CV33-10BAXE	4 Mb	Fast	256 Kb x 16	3.3	10 ns	48 FBGA	-40 °C to +125 °C	In production
CY7C1041CV33-10ZSXA	4 Mb	Fast	256 Kb x 16	3.3	10 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1041CV33-20ZSXA	4 Mb	Fast	256 Kb x 16	3.3	20 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1041CV33-12BAXE	4 Mb	Fast	256 Kb x 16	3.3	12 ns	48 FBGA	-40 °C to +125 °C	In production
CY7C1041CV33-12ZSXE	4 Mb	Fast	256 Kb x 16	3.3	12 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C1041CV33-20ZSXE	4 Mb	Fast	256 Kb x 16	3.3	20 ns	44 TSOP II	-40 °C to +125 °C	In production
CY7C1049CV33-10VXA	4 Mb	Fast	512 Kb x 8	3.3	10 ns	44 SOJ	-40 °C to +85 °C	In production
CY7C1049CV33-12ZSXA	4 Mb	Fast	512 Kb x 8	3.3	12 ns	44 TSOP II	-40 °C to +85 °C	In production
CY7C1049CV33-15VXE	4 Mb	Fast	512 Kb x 8	3.3	15 ns	44 SOJ	-40 °C to +125 °C	In production
CY7C1049CV33-15ZSXE	4 Mb	Fast	512 Kb x 8	3.3	15 ns	44 TSOP II	-40 °C to +125 °C	In production

PLANNED ASYNCHRONOUS FAST SRAMS

Part Number	Density	Type of SRAM	Organization	Vcc (V)	Speed	Package	Temperature Range	Status
CY7C199D-25SXE	256 K	Fast	32 Kb x 8	5.0	25 ns	28 SNC	-40 °C to +125 °C	Available in Q113

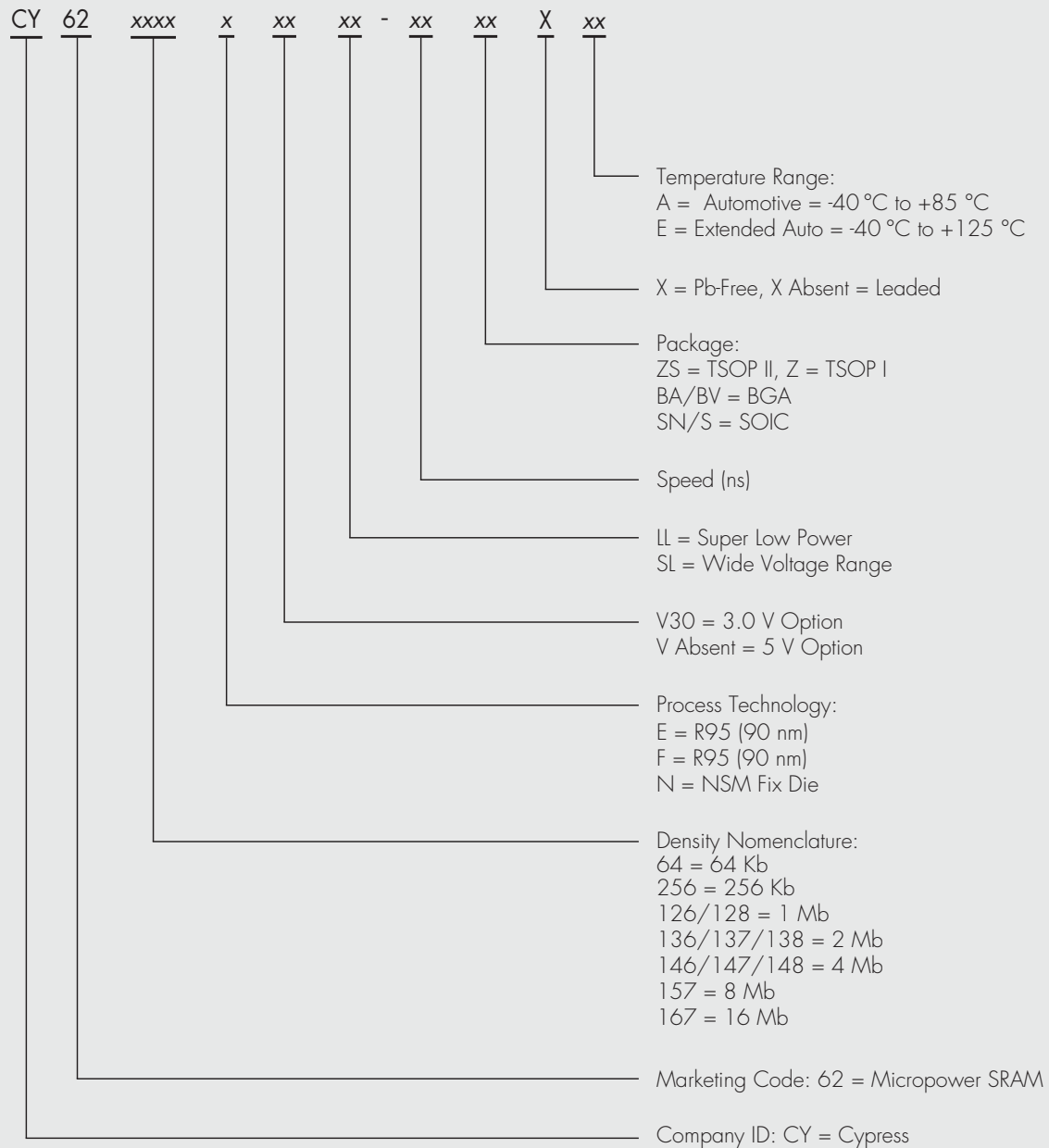
ASYNC SRAM PART NUMBER DECODER



ASYNCHRONOUS MICROPPOWER SRAMS

Part Number	Density	Type of SRAM	Organization	V _{cc} (V)	Speed	Package	Temperature Range	Status
CY62256NLL-55SNXE	256 Kb	Micropower	32 Kb x 8	5.0	55 ns	28 SNC	-40C to +125C	In production
CY62256NLL-55ZXA	256 Kb	Micropower	32 Kb x 8	5.0	55 ns	28 TSOP I	-40C to +85C	In production
CY62256NLL-55ZXE	256 Kb	Micropower	32 Kb x 8	5.0	55 ns	28 TSOP I	-40C to +125C	In production
CY62256NLL-70SNXA	256 Kb	Micropower	32 Kb x 8	5.0	70 ns	28 SNC	-40C to +85C	In production
CY62256VNL-70ZXE	256 Kb	Micropower	32 Kb x 8	3.0	70 ns	28 TSOP I	-40C to +125C	In production
CY62256VNL-70SNXE	256 Kb	Micropower	32 Kb x 8	3.0	70 ns	28 SNC	-40C to +125C	In production
CY62126EV30LL-45ZSXA	1 Mb	Micropower	64 Kb x 16	3.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62126EV30LL-55BVXE	1 Mb	Micropower	64 Kb x 16	3.0	55 ns	48 VFBGA	-40C to +125C	In production
CY62126EV30LL-55ZSXE	1 Mb	Micropower	64 Kb x 16	3.0	55 ns	44 TSOP II	-40C to +125C	In production
CY62126ESL-45ZSXA	1 Mb	Micropower	64 Kb x 16	3/5	45 ns	44 TSOP II	-40C to +85C	In production
CY62128EV30LL-45SXA	1 Mb	Micropower	128 Kb x 8	3.0	45 ns	32 SOIC	-40C to +85C	In production
CY62128EV30LL-45ZAXA	1 Mb	Micropower	128 Kb x 8	3.0	45 ns	32 STSOP	-40C to +85C	In production
CY62128EV30LL-45ZXA	1 Mb	Micropower	128 Kb x 8	3.0	45 ns	32 TSOP I	-40C to +85C	In production
CY62128EV30LL-55ZXE	1 Mb	Micropower	128 Kb x 8	3.0	55 ns	32 TSOP I	-40C to +125C	In production
CY62128EV30LL-55SXE	1 Mb	Micropower	128 Kb x 8	3.0	55 ns	32 SOIC	-40C to +125C	In production
CY62128ELL-45SXA	1 Mb	Micropower	128 Kb x 8	5.0	45 ns	32 SOIC	-40C to +85C	In production
CY62128ELL-45ZXA	1 Mb	Micropower	128 Kb x 8	5.0	45 ns	32 TSOP	-40C to +85C	In production
CY62128ELL-55SXE	1 Mb	Micropower	128 Kb x 8	5.0	55 ns	32 SOIC	-40C to +125C	In production
CY62128ELL-55ZAXE	1 Mb	Micropower	128 Kb x 8	5.0	55 ns	32 STSOP	-40C to +125C	In production
CY621282BNLL-70SXE	1 Mb	Micropower	128 Kb x 8	5.0	70 ns	32 SOIC	-40C to +125C	In production
CY62136FV30LL-45ZSXA	2 Mb	Micropower	128 Kb x 16	3.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62136FV30LL-55ZSXE	2 Mb	Micropower	128 Kb x 16	3.0	55 ns	44 TSOP II	-40C to +125C	In production
CY62137FV30LL-45ZSXA	2 Mb	Micropower	128 Kb x 16	3.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62137FV30LL-55ZSXE	2 Mb	Micropower	128 Kb x 16	3.0	55 ns	44 TSOP II	-40C to +125C	In production
CY62138FV30LL-45ZAXA	2 Mb	Micropower	256 Kb x 8	3.0	45 ns	STSOP	-40C to +85C	In production
CY62146EV30LL-45ZSXA	4 Mb	Micropower	256 Kb x 16	3.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62147EV30LL-45BVXA	4 Mb	Micropower	256 Kb x 16	3.0	45 ns	48 VFBGA	-40C to +85C	In production
CY62147EV30LL-45ZSXA	4 Mb	Micropower	256 Kb x 16	3.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62147EV30LL-55ZSXE	4 Mb	Micropower	256 Kb x 16	3.0	55 ns	44 TSOP II	-40C to +125C	In production
CY62147EV30LL-45B2XA	4 Mb	Micropower	256 Kb x 16	3.0	45 ns	48 VFBGA	-40C to +85C	In production
CY62146ELL-45ZSXA	4 Mb	Micropower	256 Kb x 16	5.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62148EV30LL-45ZSXA	4 Mb	Micropower	512 Kb x 8	3.0	45 ns	32 TSOP II	-40C to +85C	In production
CY62148ELL-55SXA	4 Mb	Micropower	512 Kb x 8	5.0	55 ns	32 SOIC	-40C to +85C	In production
CY62148ELL-45ZSXA	4 Mb	Micropower	512 Kb x 8	5.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62148ESL-55ZAXA	4 Mb	Micropower	512 Kb x 8	3/5	55 ns	32 STSOP	-40C to +85C	In production
CY62148EV30LL-55ZSXE	4 Mb	Micropower	512 Kb x 8	3.0	55 ns	32 TSOP II	-40C to +125C	In production
CY62157EV30LL-45BVXA	8 Mb	Micropower	512 Kb x 16	3.0	45 ns	48 VFBGA	-40C to +85C	In production
CY62157EV30LL-45ZSXA	8 Mb	Micropower	512 Kb x 16	3.0	45 ns	44 TSOP II	-40C to +85C	In production
CY62157EV30LL-45ZXA	8 Mb	Micropower	512 Kb x 16	3.0	45 ns	48 TSOP I	-40C to +85C	In production
CY62157EV30LL-55ZSXE	8 Mb	Micropower	512 Kb x 16	3.0	55 ns	44 TSOP II	-40C to +125C	In production
CY62157EV30LL-55ZXE	8 Mb	Micropower	512 Kb x 16	3.0	55 ns	48 TSOP I	-40C to +125C	In production
CY62157ELL-55BVXE	8 Mb	Micropower	512 Kb x 16	5.0	55 ns	48 VFBGA	-40C to +125C	In production
CY62157ELL-55ZSXE	8 Mb	Micropower	512 Kb x 16	5.0	55 ns	44 TSOP II	-40C to +125C	In production
CY62167EV30LL-45BVXA	16 Mb	Micropower	1 Mb x 16	3.0	45 ns	48 VFBGA	-40C to +85C	In production
CY62167EV30LL-45ZXA	16 Mb	Micropower	1 Mb x 16 / 2 Mb x 8	3.0	45 ns	48 TSOP I	-40C to +85C	In production

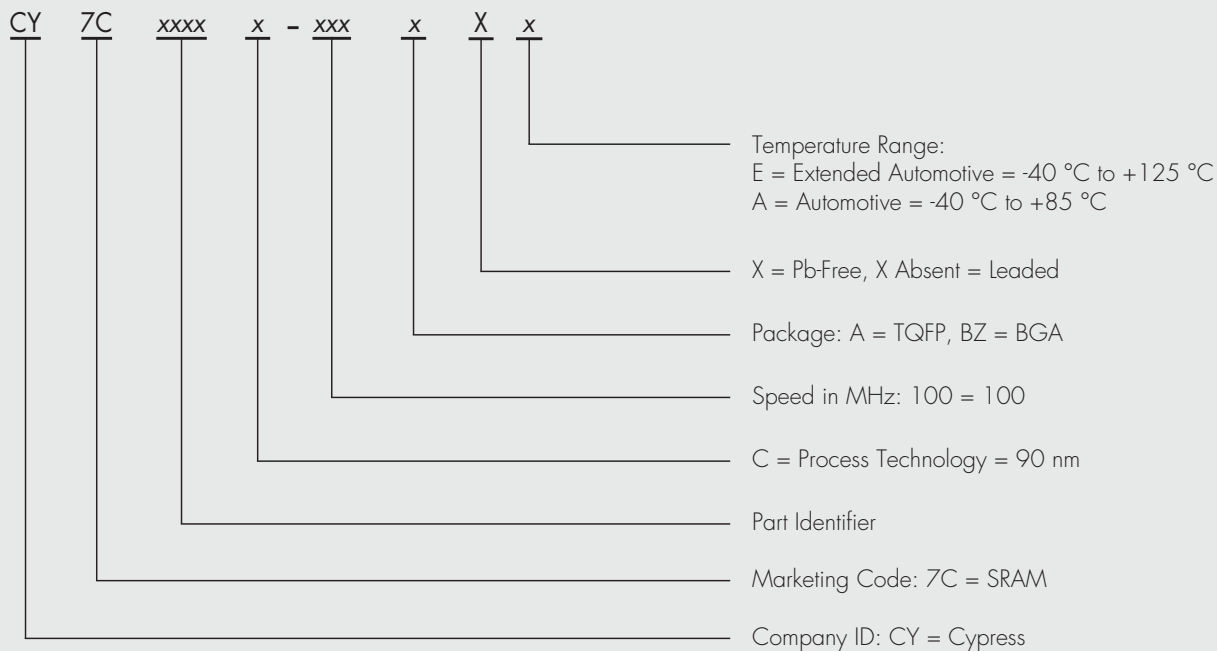
MICROPOWER SRAM PART NUMBER DECODER



SYNCHRONOUS SRAMS

Part Number	Architecture	Density	Organization	V _{DD} (V)	Speed	Package	Temperature Range	Status
CY7C1361C-100AXE	Flow-through	9 Mb	256 Kb x 36	3.3	100 MHz	100 TQFP	-40 to +125 °C	In production

SYNCHRONOUS SRAM PART NUMBER DECODER



USB

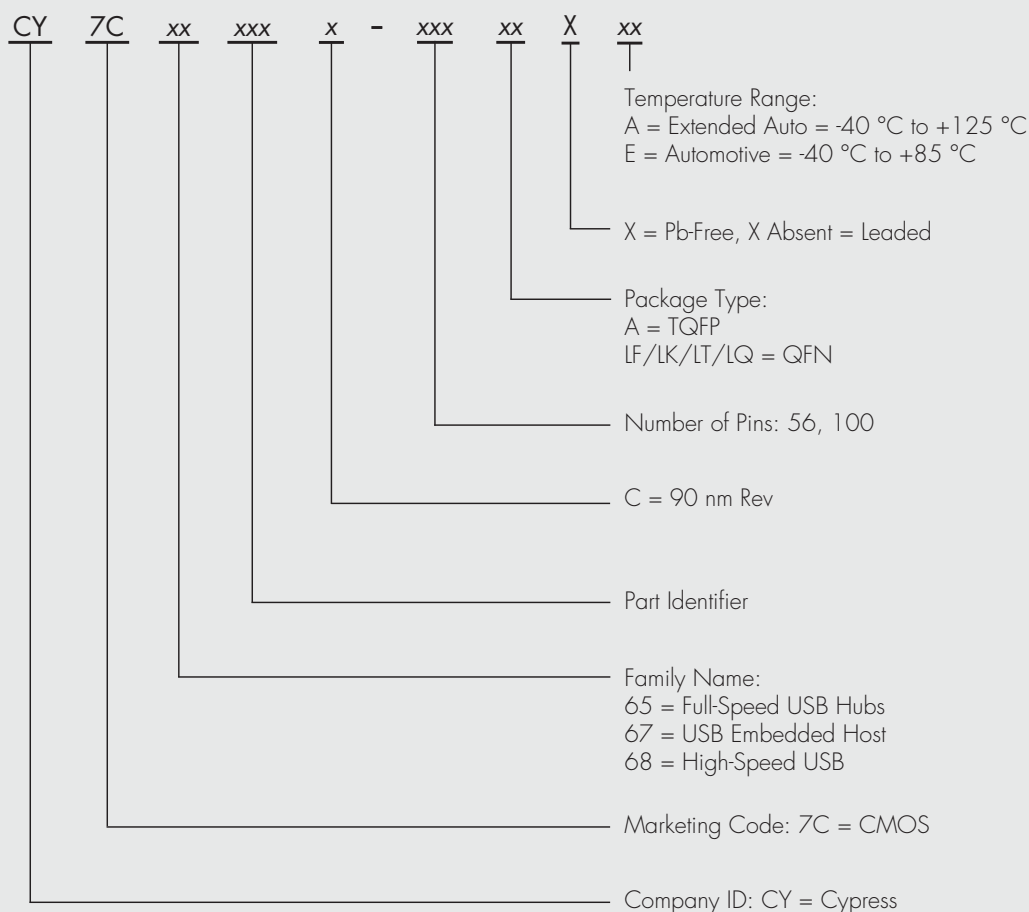
The main applications for USB devices in automotive include entertainment systems, navigation systems, and data recorders where USB allows devices such as phones, CD/HD drives, and pen drives to be connected to these systems. Based on the application, one would either need a host, hub, or a peripheral. The following devices are already AEC Q100 qualified and Cypress plans to add more devices from our industrial portfolio based on customer requirements.

- USB Embedded Full-Speed Hosts: World's first automotive-qualified Full-Speed embedded host/peripheral controller; microprocessor-based 4-port embedded host/ peripheral controller
- USB Embedded High-Speed Hub: Automotive-qualified, low-power USB 2.0 hub controller, 2/4-port/single transaction translator

USB PRODUCTS

Part Number	USB Application	Data Transfers	Hub Ports / End Points	Package	Development Kit	Temperature Range	Status
CY7C65630-56LFXA	EZ-USB HX2LP High Speed Hub	Bulk, Interrupt, Isochronous	4 ports	56 QFN	CY4606	-40 to +85 °C	In production
CY7C67300-100AXA	MULTIPOINT HOST/SLAVE	Bulk, Interrupt, Isochronous	4 ports	100 TQFP	CY4645	-40 to +85 °C	In production
CY7C65620-56LFXA	EZ-USB HX2LP High Speed Hub	Bulk, Interrupt, Isochronous	2 ports	56 QFN	CY4606	-40 to +85 °C	In production

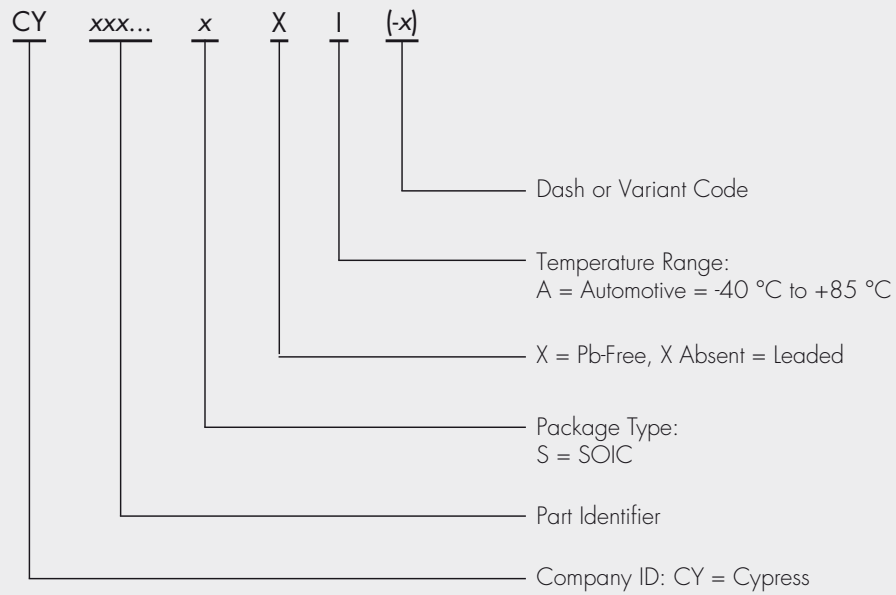
USB PART NUMBER DECODER



CLOCK DISTRIBUTION

Part Number	Min. Operating Voltage (V)	No. of Outputs	Output Frequency Min. (MHz)	Core Voltage (V)	Input Signal Type	Max. Operating Voltage (V)	Output Frequency Max. (MHz)	Output Signal Type	Input Frequency Max. (MHz)	Input Frequency Min. (MHz)	Status
CY2305CSXA-1H	3	5	10	3.3	LVC MOS/ LV TTL	3.6	133	LVC MOS	133	10	In production

CLOCK PART DECODER



CAPSENSE® CAPACITIVE TOUCHSENSING SOLUTIONS

Cypress is the world leader in capacitive sensing technologies. Our broad range of solutions provide robust noise immunity, enable quick time-to-market, and system scalability. This vast portfolio ranges from simple buttons and sliders to more sophisticated solutions integrating other system components to reduce total BOM cost and system form factor.

The key requirements of this market are low power consumption, wide voltage range operation, small form factor packaging, and performance across a variety of overlay materials and thicknesses. Cypress's low-power technology enables run-mode current as low as 15 μ A per button and operating voltage as low as 1.71 volts. Industry-leading small form factor packaging such as WLCSP that is under 2 mm x 2 mm and a wide variety of small outline and QFN packages optimize board space. Advanced sensing techniques easily provide finger detection through 15 mm glass or 5 mm plastic overlays. This portfolio also enables additional user interface functionality such as LED effects, proximity, and water proofing.

CapSense® Express™ is a hardware or I²C configurable family supporting simple button/slider designs with up to 16 capacitive buttons and one slider. The CapSense programmable family supports up to 33 capacitive buttons and five sliders. The full-featured CapSensePLUS™ offering handles up to 44 capacitive buttons and eight sliders. It also supports advanced functionalities such as proximity detection, water tolerance, and system integration of various analog and digital blocks. Cypress recently introduced the revolutionary SmartSense™ Auto-tuning solution to the CapSense portfolio. This innovation is the next quantum step in the simplicity of adding a capacitive sense user experience to an ever-broader range of end products.

CAPSENSE EXPRESS

Cypress's CapSense Express with SmartSense Auto-tuning takes the guesswork out of touchsensing design. CapSense Express solutions make button replacement easy by eliminating unnecessary software tools, firmware development, device programming, and system tuning. This reduces time-to-market and eliminates the learning curve for designers who are new to capacitive touchsensing interfaces.

ADVANCED TOUCHSENSING SOLUTION

In a typical CapSense application, there can be significant variation in baseline signal counts due to variability in environmental and noise conditions. Cypress's revolutionary SmartSense Auto-tuning technology, built into CapSense Express, establishes, monitors and maintains the requisite SNR (Signal-to-Noise Ratio) levels for optimal CapSense performance. Further, in moving from the prototype stage to mass production, manufacturing variations in PCB and/or overlay material can affect the parasitic or intrinsic capacitance of the system. SmartSense Auto-tuning automatically detects the sensor capacitance threshold level and dynamically optimizes system performance. The CapSense Express family makes the most of Cypress's broad technology portfolio and years of user-interface know-how so designers can focus on end product development and timely market introductions.

CAPSENSE EXPRESS: THE SMART AND SIMPLE ANSWER TO BUTTON REPLACEMENT

Cypress offers the broadest portfolio of capacitive touchsensing products on the market. It's CapSense Express Mechanical Button Replacement (MBR) family of capacitive touchsensing controllers is designed for a wide range of applications, with broad operating ranges, strong immunity to RF and AC noise, and the ability to operate at very low power levels.

The CY8CMBR2044 solution provides up to four hardware-configurable CapSense buttons with direct LED drive capability. It is provided in the smallest CapSense Express package, a 16-pad QFN (3x3x0.6 mm).

The CY8CMBR2016 makes it easy to create a capacitive matrix keypad, with hardware-configurable options to implement either a keypad or up to 16 individual CapSense buttons. Featuring industry-standard host interface communication protocols, such as Keypad Scan, Truth Table, and Encoded GPO, this solution is available in a 48-pad QFN (6x6x0.6 mm) package.

The CY8CMBR2010 is a 10-button hardware configurable CapSense Express solution with direct LED drive capability. This solution is available in a 32-pad QFN (5x5x0.6 mm) package.

The CY8CMBR2110 (register configurable variant) is a 10-button CapSense Express solution that is paired with the new EZ-Click Customizer Tool to offer a wide array of LED effects without the need to create custom firmware.

CY8CMBR2X10 ULTRA LOW POWER 10 BUTTON/10 LED CAPSENSE EXPRESS WITH SMARTSENSE™ AUTO-TUNING TECHNOLOGY

The CapSense Express family is further strengthened with the addition of a new series, the CY8CMBR2x10-24LQXI/T. This device is a follow-on to the CY8CMBR2044, (four button/ four LED solution) device with an added feature of pre-configured LED effects. Cypress's CapSense Express solutions make button replacement easy by eliminating unnecessary software tools, firmware development, device programming, and system tuning. This reduces time-to-market and eliminates the learning curve for designers who are new to capacitive touch-sensing interfaces.

The CY8CMBR2x10 is a ten-button hardware/register configured CapSense Express solution that offers a direct LED drive and enables pre-configured LED effects. It has a wide operating voltage range: 1.71 V to 5.5 V and ultra low-power consumption of 15 uA per button active current and 100 nA deep sleep. The hardware/register configurability feature eliminates the need for software tools, firmware development and chip programming. The capacitive sensing technology is based on patented CSD technology for robust immunity to conducted and radiated noise. The CY8CMBR2x10 device is enabled with Cypress's revolutionary SmartSense™ auto-tuning algorithm eliminating the need for system tuning. This advancement in solution simplicity enables designers to include a capacitive touch sensing UI without risk to the end product development schedule. Essentially, the UI design task has been reduced to the PCB layout of the sensor board – the CapSense Express controller handles rest. The register-configurable variant CY8CMBR2110-24LQXI will be paired with the new EZ-Click™ Customizer Tool for fully customizable LED effects without the need to write custom firmware. This feature will accelerate time-to market by providing simple graphical configuration options. This device also comes with system diagnostics features such as Failure mode analysis and Serial Debug data.

Key Applications: Industrial control panels, portable medical devices, small home appliances, fitness equipment, digital still and video cameras, gaming devices, handheld devices, home entertainment, home automation, portable media players, remote controls, toys, security systems, Bluetooth headsets, LCD TVs, monitors, white goods, printers, industrial applications, consumer electronics, mobile phones.

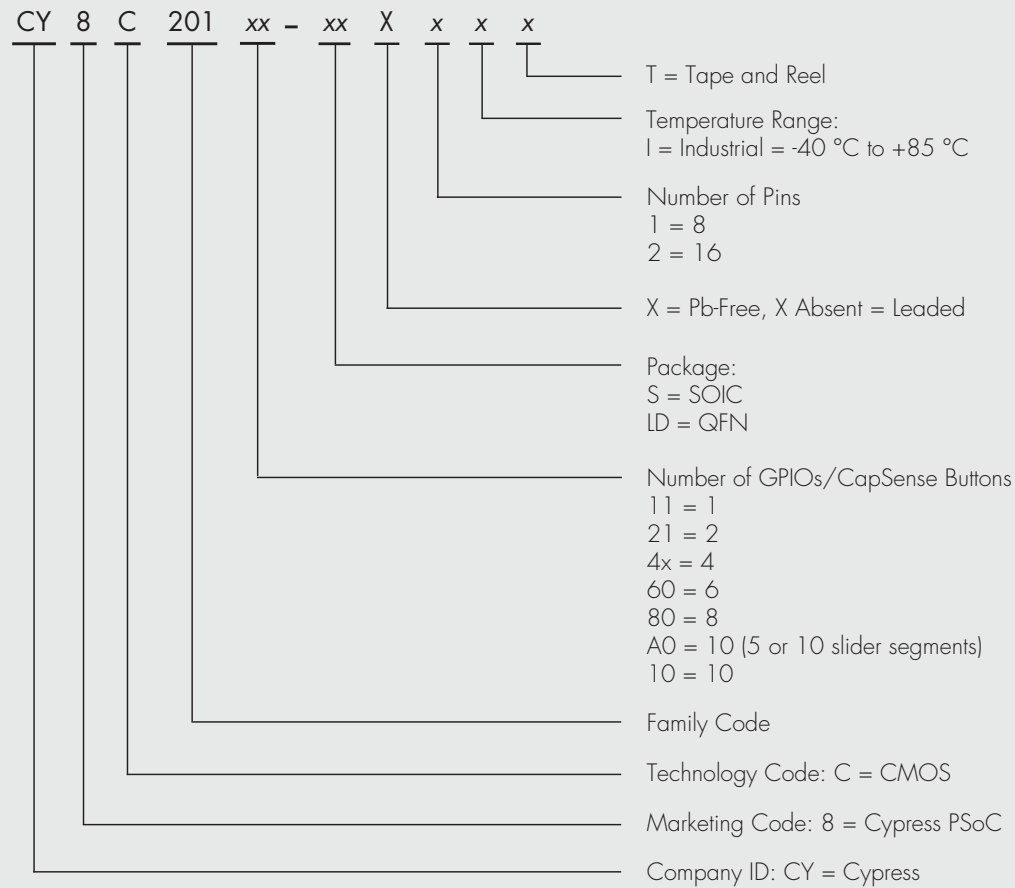
CAPSENSE EXPRESS

Part Number	Voltage (V _{DD})	GPIO	Capacitive I/O	Buttons	SmartSense Enabled	PWMs	Slider	Slider Segments	Proximity Sensing	Comm. Interface	Package	Status
CY8C20111-SX1I	2.4 to 5.25 V	1*	1*	1	N	N	N	NA	N	I ² C	8 SOIC	In production
CY8C20121-SX1I	2.4 to 5.25 V	2*	2*	2	N	N	N	NA	N	I ² C	8 SOIC	In production
CY8C20140-LDX2I	2.4 to 5.25 V	4	4	4	N	N	N	NA	N	I ² C	16 QFN	In production
CY8C20140-SX2I	2.4 to 5.25 V	4	4	4	N	N	N	NA	N	I ² C	16 SOIC	In production
CY8C20142-SX1I	2.4 to 5.25 V	4	4	4	N	N	N	NA	N	I ² C	8 SOIC	In production
CY8C20160-LDX2I	2.4 to 5.25 V	6	6	6	N	N	N	NA	N	I ² C	16 QFN	In production
CY8C20160-SX2I	2.4 to 5.25 V	6	6	6	N	N	N	NA	N	I ² C	16 SOIC	In production
CY8C20180-LDX2I	2.4 to 5.25 V	8	8	8	N	N	N	NA	N	I ² C	16 QFN	In production
CY8C20180-SX2I	2.4 to 5.25 V	8	8	8	N	N	N	NA	N	I ² C	16 SOIC	In production
CY8C201A0-LDX2I	2.4 to 5.25 V	10	10	5	N	N	Y	5 or 10	N	I ² C	16 QFN	In production
CY8C201A0-SX2I	2.4 to 5.25 V	10	10	5	N	N	Y	5 or 10	N	I ² C	16 SOIC	In production
CY8C20110-LDX2I	2.4 to 5.25 V	10	10	10	N	Y	N	NA	N	I ² C	16 QFN	In production
CY8C20110-SX2I	2.4 to 5.25 V	10	10	10	N	Y	N	NA	N	I ² C	16 SOIC	In production
CY8CMBR2044-24LKXI	1.71 to 5.5 V	4*	4*	4*	Y	N	N	NA	N	GPO	16 QFN	In production
CY8CMBR2010-24LQXI	1.71 to 5.5 V	10*	10*	10*	Y	N	N	NA	N	GPO	32 QFN	In production
CY8CMBR2016-24LQXI	1.71 to 5.5 V	16*	16*	16*	Y	N	N	NA	N	GPO	48 QFN	In production
CY8CMBR2110-24LQXI	1.71 to 5.5 V	10*	10*	10*	Y	N	N	NA	N	I ² C	32 QFN	In production

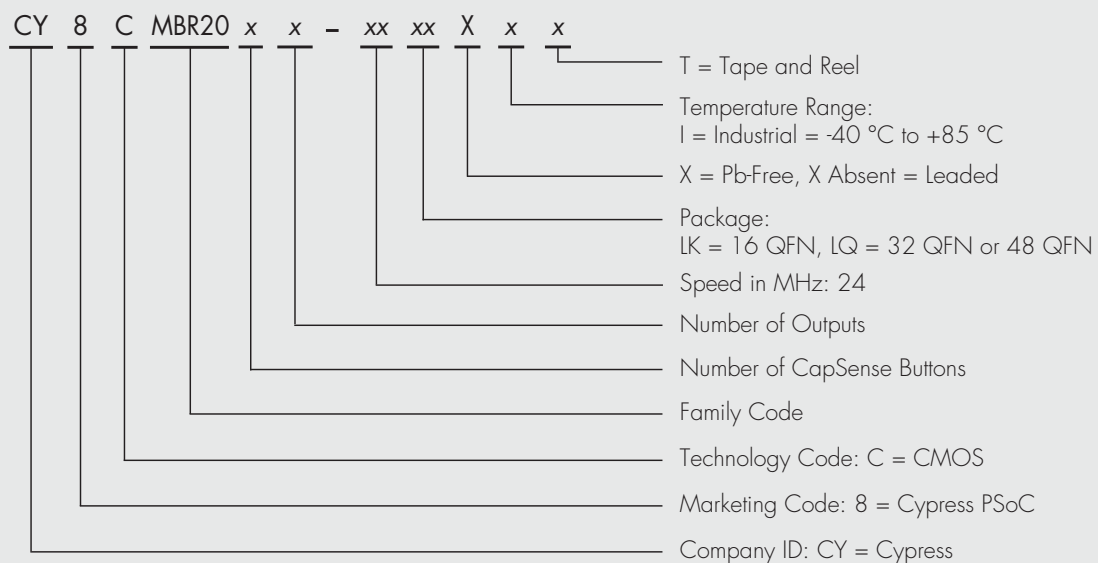
*GPIO and Capacitive I/O pins are dedicated and fixed. These pins function simultaneously, i.e. a finger on the Capacitive I/O pin triggers the state change on the pre-assigned GPIO pin.

Key Applications: Security panels, card reader keypads, biometric scanner keypad, fire alarm control panel, thermostats, consumer and medical devices, mobiles, industrial devices

Part Number Decoder for CapSense Express Parts



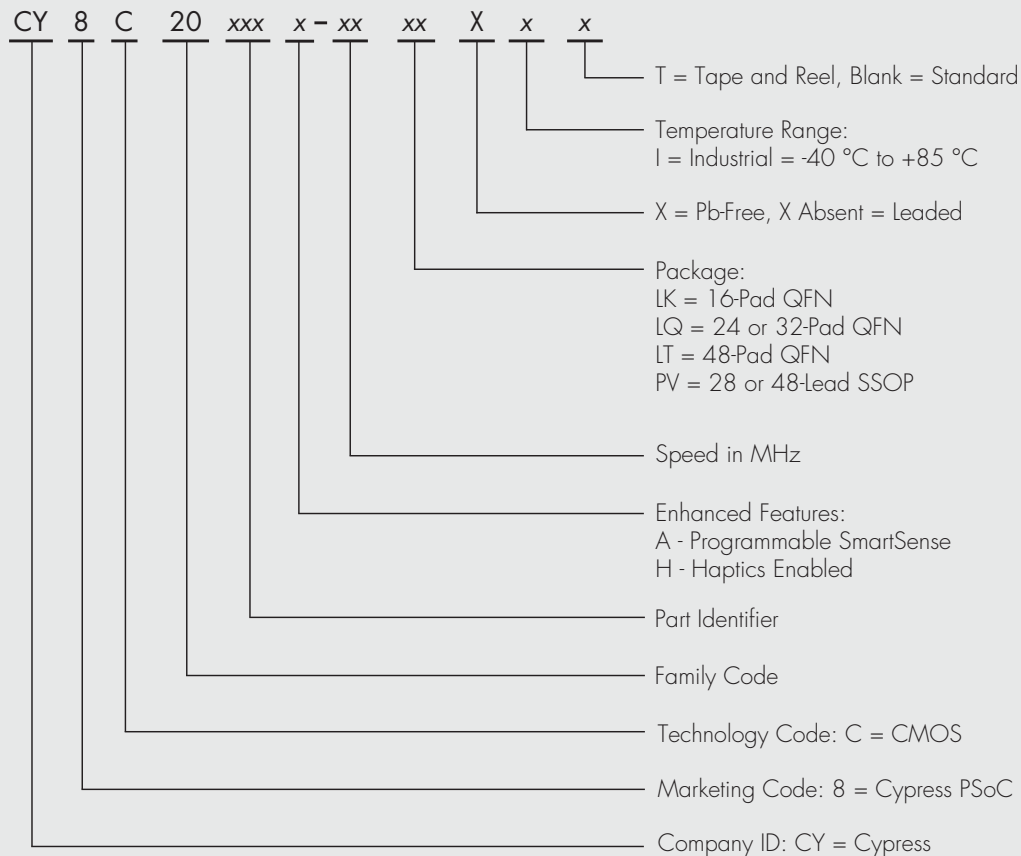
Part Number Decoder for SmartSense-Enabled CapSense Express Parts



CAPSENSE

Part Number	Voltage (V _{DD})	Capacitive Buttons	Sliders	SmartSense Enabled	GPIO	PWMs	Touchpads	Proximity Sensing	Flash (Bytes)	RAM (Bytes)	Comm. Interface	Package	Status
CY8C20234-12LKXI	2.4 to 5.25 V	10	2	N	13	SW	Y	Y	8 K	512	I ² C, SPI	16 QFN	In production
CY8C20334-12LQXI	2.4 to 5.25 V	17	3	N	20	SW	Y	Y	8 K	512	I ² C, SPI	24 QFN	In production
CY8C20434-12LQXI	2.4 to 5.25 V	25	5	N	28	SW	Y	Y	8 K	512	I ² C, SPI	32 QFN	In production
CY8C20534-12PVXI	2.4 to 5.25 V	21	4	N	24	SW	Y	Y	8 K	512	I ² C, SPI	28 SSOP	In production
CY8C20634-12FDXI	2.4 to 5.25 V	24	6	N	27	SW	Y	Y	8 K	512	I ² C, SPI	30-ball WLCSP	In production
CY8C20236A-24LKXI	1.71 to 5.5 V	10	2	Y	13	SW	Y	N	8 K	1 K	I ² C, SPI	16 QFN	In production
CY8C20336A-24LQXI	1.71 to 5.5 V	17	3	Y	20	SW	Y	N	8 K	1 K	I ² C, SPI	24 QFN	In production
CY8C20436A-24LQXI	1.71 to 5.5 V	25	5	Y	28	SW	Y	N	8 K	1 K	I ² C, SPI	32 QFN	In production
CY8C20536A-24PVXI	1.71 to 5.5 V	31	6	Y	34	SW	Y	N	8 K	1 K	I ² C, SPI	48 SSOP	In production
CY8C20636A-24LTXI	1.71 to 5.5 V	33	6	Y	36	SW	Y	N	8 K	1 K	I ² C, SPI	48 QFN	In production
CY8C20237-24SXI	1.71 to 5.5 V	10	2	N	13	SW	Y	Y	8 K	1 K	I ² C, SPI	16 SOIC	In production
CY8C20237-24LKXI	1.71 to 5.5 V	10	2	N	13	SW	Y	Y	8 K	1 K	I ² C, SPI	16 QFN	In production
CY8C20337-24LQXI	1.71 to 5.5 V	16	3	N	19	SW	Y	Y	8 K	1 K	I ² C, SPI	24 QFN	In production
CY8C20437-24LQXI	1.71 to 5.5 V	25	5	N	28	SW	Y	Y	8 K	1 K	I ² C, SPI	32 QFN	In production
CY8C20637-24LQXI	1.71 to 5.5 V	31	6	N	34	SW	Y	Y	8 K	1 K	I ² C, SPI	48 QFN	In production

CapSense Part Number Decoder



CAPSENSEPLUS

Part Number	Voltage (V _{DD})	Capacitive Buttons	Sliders	SmartSense Enabled	GPIO	PWMs	Touchpads	Proximity Sensing	Analog Blocks	Digital Blocks	Flash (Bytes)	RAM (Bytes)	Comm. Interface	Package	Status
CY8C24794-24LTXI	3.0 to 5.25	44	8	N	50	HW	Y	Y	5	3	16 K	1 K	I ² C, SPI, UART, USB	56 QFN	In production
CY8C24894-24LTXI	3.0 to 5.25	43	8	N	49	HW	Y	Y	5	3	16 K	1 K	I ² C, SPI, UART, USB	56 QFN	In production
CY8C24994-24BVBX	3.0 to 5.25	44	8	N	56	HW	Y	Y	5	3	16 K	1 K	I ² C, SPI, UART, USB	100 VFBGA	In production
CY8C24994-24LTXI	3.0 to 5.25	44	8	N	56	HW	Y	Y	5	3	16 K	1 K	I ² C, SPI, UART, USB	68 QFN	In production
CY8C21234-24SXI	2.7 to 5.25	8	1	N	12	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	16 SOIC	In production
CY8C21334-24PVXI	2.7 to 5.25	12	2	N	16	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	20 SSOP	In production
CY8C21434-24LCXI	2.7 to 5.25	24	4	N	28	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	32 QFN (0.4 mm thin)	In production
CY8C21434-24LTXI	2.7 to 5.25	24	4	N	28	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	32 QFN (1.0 mm thin)	In production
CY8C21434-24LQXI	2.7 to 5.25	24	4	N	28	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	32 QFN (0.6 mm thin)	In production
CY8C21534-24PVXI	2.7 to 5.25	20	4	N	24	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	28 SSOP	In production
CY8C21634-24LTXI	2.7 to 5.25	22	4	N	26	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	32 QFN	In production
CY8C20246A-24LXXI	1.71 to 5.5	10	2	Y	13	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	16 QFN	In production
CY8C20346A-24LQXI	1.71 to 5.5	17	3	Y	20	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	24 QFN	In production
CY8C20396A-24LQXI	1.71 to 5.5	16	3	Y	19	SW	Y	N	0	0	16 K	2 K	I ² C, SPI, USB	24 QFN	In production
CY8C20446A-24LQXI	1.71 to 5.5	25	5	Y	28	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	32 QFN	In production
CY8C20466A-24LQXI	1.71 to 5.5	25	5	Y	28	SW	Y	N	0	0	32 K	2 K	I ² C, SPI	32 QFN	In production
CY8C20566A-24PVXI	1.71 to 5.5	31	6	Y	34	SW	Y	N	0	0	32 K	2 K	I ² C, SPI	48 SSOP	In production
CY8C20666A-24LTXI	1.71 to 5.5	33	6	Y	36	SW	Y	N	0	0	32 K	2 K	I ² C, SPI, USB	48 QFN	In production
CY8C20496A-24LQXI	1.71 to 5.5	22	5	Y	25	SW	Y	N	0	0	16 K	2 K	I ² C, SPI, USB	32 QFN	In production
CY8C20546A-24PVXI	1.71 to 5.5	33	6	Y	34	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	48 SSOP	In production
CY8C20646A-24LTXI	1.71 to 5.5	33	6	Y	36	SW	Y	N	0	0	16 K	2 K	I ² C, SPI, USB	48 QFN	In production
CY8C20746A-24FDXC	1.71 to 5.5	24	4	Y	27	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	30-ball WLCSP	In production
CY8C20766A-24FDXC	1.71 to 5.5	24	4	Y	27	SW	Y	N	0	0	32 K	2 K	I ² C, SPI	30-ball WLCSP	In production
CY8C20336H-24LQXI	1.71 to 5.5	15	3	Y	20	SW	Y	N	0	0	8 K	1 K	I ² C, SPI	24 QFN	In production
CY8C20446H-24LQXI	1.71 to 5.5	23	5	Y	28	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	32 QFN	In production
CY8C21434B-24LTXI	2.7 to 5.25	24	4	Y	28	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	32 QFN	In production
CY8C21434B-24LQXI	2.7 to 5.25	24	4	Y	28	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	32 QFN	In production
CY8C21634B-24LTXI	2.7 to 5.25	22	4	Y	26	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	32 QFN	In production
CY8C21534B-24PVXI	2.7 to 5.25	20	4	Y	24	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	28 SSOP	In production
CY8C21334B-24PVXI	2.7 to 5.25	12	2	Y	16	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	20 SSOP	In production
CY8C21234B-24SXI	2.7 to 5.25	8	1	Y	12	HW	Y	Y	1	3	8 K	512	I ² C, SPI, UART	16 SOIC	In production
CY8C20246AS-24LXXI	1.71 to 5.5	10	2	Y	13	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	16 QFN	In production
CY8C20346AS-24LQXI	1.71 to 5.5	17	3	Y	20	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	24 QFN	In production
CY8C20446AS-24LQXI	1.71 to 5.5	25	5	Y	28	SW	Y	N	0	0	16 K	2 K	I ² C, SPI	32 QFN	In production
CY8C20466AS-24LQXI	1.71 to 5.5	25	5	Y	28	SW	Y	N	0	0	32 K	2 K	I ² C, SPI	32 QFN	In production
CY8C20666AS-24LQXI	1.71 to 5.5	33	6	Y	36	SW	Y	N	0	0	32 K	2 K	I ² C, SPI, USB	48 QFN	In production
CY8C20646AS-24LQXI	1.71 to 5.5	33	6	Y	36	SW	Y	N	0	0	16 K	2 K	I ² C, SPI, USB	48 QFN	In production
CY8C20247-24LXXI	1.71 to 5.5	10	2	N	13	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	16 QFN	In production
CY8C20247-24SXI	1.71 to 5.5	10	2	N	13	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	16 SOIC	In production
CY8C20247S-24LXXI	1.71 to 5.5	10	2	Y	13	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	16 QFN	In production
CY8C20347S-24LQXI	1.71 to 5.5	16	3	N	19	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	24 QFN	In production
CY8C20347S-24LQXI	1.71 to 5.5	16	3	Y	19	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	24 QFN	In production
CY8C20447-24LQXI	1.71 to 5.5	25	5	N	28	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	32 QFN	In production
CY8C20467-24LQXI	1.71 to 5.5	25	5	N	28	SW	Y	Y	0	0	32 K	2 K	I ² C, SPI	32 QFN	In production
CY8C20467S-24LQXI	1.71 to 5.5	25	5	Y	28	SW	Y	Y	0	0	32 K	2 K	I ² C, SPI	32 QFN	In production
CY8C20647S-24LQXI	1.71 to 5.5	31	6	N	34	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	48 QFN	In production
CY8C20647S-24LQXI	1.71 to 5.5	31	6	Y	34	SW	Y	Y	0	0	16 K	2 K	I ² C, SPI	48 QFN	In production
CY8C20667-24LQXI	1.71 to 5.5	31	6	N	34	SW	Y	Y	0	0	32 K	2 K	I ² C, SPI	48 QFN	In production
CY8C20667S-24LQXI	1.71 to 5.5	31	6	Y	34	SW	Y	Y	0	0	32 K	2 K	I ² C, SPI	48 QFN	In production
CY8C20747-24FDXCT	1.71 to 5.5	26	4	N	27	SW	Y	Y	0	0	16 K	1 K	I ² C, SPI	30-ball WLCSP	In production
CY8C20767-24FDXCT	1.71 to 5.5	26	4	N	27	SW	Y	Y	0	0	32 K	2 K	I ² C, SPI	30-ball WLCSP	In production

CY8C20xx7/S ULTRA-LOW POWER CAPSENSE CONTROLLER WITH BEST-IN-CLASS SNR AND NOISE IMMUNITY FOR PROXIMITY AND WATER-TOLERANT DESIGNS

The latest addition to the Cypress CapSense® controller portfolio– the ultra low power CY8C20xx7/S family supports up to 31 capacitive touch sensing channels to enable buttons, sliders, wheels and proximity sensors. Featuring the industry's lowest average power consumption - 28 μ A per sensor at a 125 ms scan rate makes it ideal for portable applications. The wide operating voltage range of 1.71 to 5.5 V enables a broad range of end products, fitting the regulated 1.8 V, 3 V, and 5 V space as well as in unregulated battery applications.

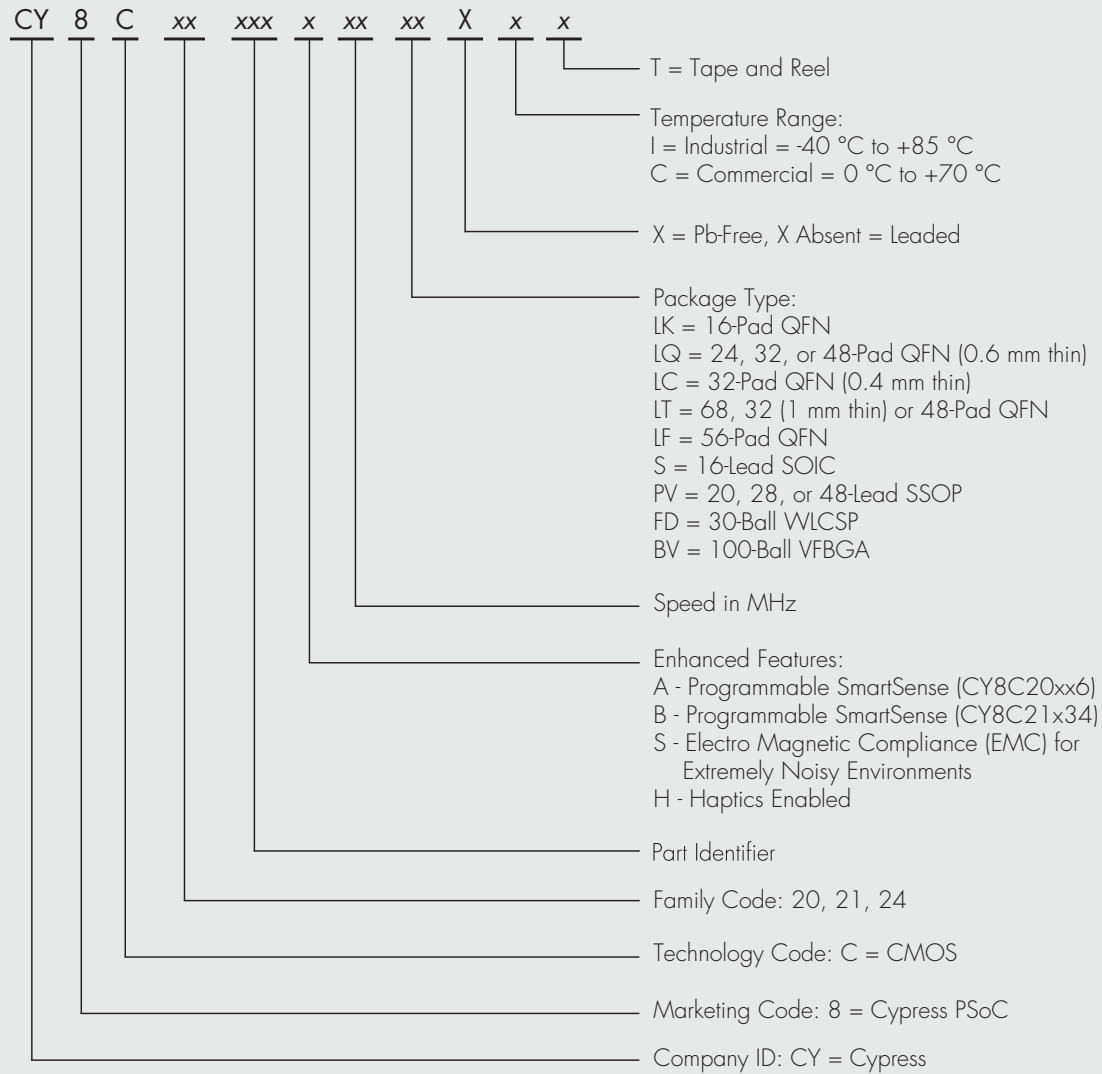
Cypress' QuietZone™ technology based on years of R&D efforts and user-interface design experience enhances immunity against radiated and conducted noise. A key component of this technology is the Capacitive Sigma Delta (CSD PLUS) sensing algorithm delivering superior SNR for optimal sensor performance even in extreme noisy environments. The CY8C20xx7S devices feature the patented SmartSense™ auto-tuning which monitors and maintains optimal sensor performance in run time.

The CY8C20xx7/S family enables proximity sensing up to 30 cm at 1.8 volts. These devices feature driven shield to enable water tolerance delivering accurate touch responses in moist conditions like mist and water droplets and eliminates false triggers in the presence of streaming water.

APPLICATIONS BEST SUITED FOR CY8C20xx7/S

- White goods • Small home appliances • PC peripherals • STB, DVD players, PMP • TVs and monitors • Tablet and mobile handsets

CapSensePLUS Part Number Decoder



CapSense – Quick Reference – Layout Best Practices

The information and parameters in the following table are recommendations for achieving optimal sensitivity for capacitive sensing with Cypress CapSense and CapSense Express devices. These recommendations are not hard and fast rules. Rather, they serve as a guide for designers as CapSense applications are developed. For more information and explanations of each of these parameters, please refer to the 'Getting Started Guide' and the User Module datasheets for CSA and CSD.

	Category	Minimum	Maximum	Remarks / Recommendations
1	Button shape	-	-	Solid round pattern or rectangle with curved edges
2	Button size	5 mm	15 mm	Recommended 10 mm
3	Button-button spacing	1 mm	-	Spacing between two adjacent buttons should be large enough that if one button is pressed, the finger should not reach the annular gap of the other button.
4	Button ground clearance	0.5 mm	2 mm	Button ground clearance = overlay thickness
5	Ground flood - top layer	-	-	Hatched ground 7 mil trace and 45 mil grid
6	Ground flood - bottom layer	-	-	Hatched ground 7 mil trace and 70 mil grid
7	Slider segment pattern	-	-	Sawtooth pattern
8	Number of slider segments	5	-	Maximum depends on available I/O CapSense pins
9	Slider segment size	2 mm	7 mm	2 mm
10	Slider segment spacing	0.5 mm	2 mm	Slider segment spacing = overlay thickness
11	Trace length from pin to CapSense - buttons	-	300 mm	<100 mm. Trace length should be minimized. Long trace length requires large sensor size and a thin overlay in order to provide adequate signal from the sensor.
12	Trace length from pin to CapSense - slider	-	230 mm	<100 mm
13	Trace width	0.17 mm	0.20 mm	0.17 mm (7 mil)
14	Trace routing	-	-	Traces should be routed on the non-sensor side. If any non-CapSense trace crosses CapSense trace, ensure that intersection is orthogonal.
15	Via position for the sensors	-	-	Via should be placed near the edge of the button/slider to reduce trace length thereby increasing sensitivity.
16	Via hole size for sensor traces	-	-	10 mil
17	Number of via on sensor trace	1	2	1
18	CapSense and LED resistor placement	-	-	Place CapSense and LED resistors close to PSOC for noise suppression. CapSense resistors have highest priority - place them first.
19	Distance between any CapSense trace to ground flood	10 mil	20 mil	20 mil
20	CapSense controller placement	-	-	Mount CapSense controller on the layer opposite to sensor. The distance between CapSense controller and sensors should be minimized.
21	Placement of components in two layer PCB			Top layer - buttons; Bottom layer - CapSense controller, other components and traces
22	Placement of components in four layer PCB			Top layer - buttons; Layer 2 - traces; Layer 3 - ground; Bottom layer - CapSense controller and other components
23	Overlay thickness - buttons	0 mm	5 mm (acrylic/plastic overlay)	Based on customer requirement
24	Overlay thickness - sliders	0 mm	2 mm	Based on customer requirement
25	Overlay material			Needs to be non-conductive material - glass, ABS plastic, formica.
26	Overlay adhesives			Adhesive should be non-conductive and dielectrically homogenous. Use 467MP and 468MP adhesives made by 3M.
27	Board thickness	0.5 mm		Standard board thickness for CapSense FR4-based designs is 1.6 mm.

CLOCKS & BUFFERS

Cypress is the leader in programmable timing solutions for consumer electronics, communication, networking, and industrial applications. Cypress has a broad portfolio of devices including single and multiple-PLL programmable clock synthesizers, programmable crystal oscillators, VCXO, EMI reduction clocks, programmable skew, and zero and non-zero delay buffers.

CLOCK DISTRIBUTION

Cypress provides the industry's broadest buffer portfolio which includes:

- Non-Zero Delay Clock Buffers
- Zero Delay Buffers
- RoboClock™ Skew Management Buffers
- High Performance Buffers

High Performance Buffers

The High Performance Buffer (HPB) family of ultra-low jitter, non-PLL fanout buffers delivers up to 10 high-frequency (up to 1.5 GHz) differential outputs (LVPECL, LVDS, or CML). HPB delivers the industry's lowest additive jitter (0.06 ps typical RMS phase jitter) and can provide complete high-frequency, low-jitter clock tree solutions in conjunction with [FlexIO™](#) clock generators.

Key Features

- 2.5 V or 3.3 V operation
- Ultra-low additive RMS phase jitter: 0.06 ps typical
- Up to 10 outputs
- Output frequency up to 1.5 GHz
- Supported outputs: LVPECL, LVDS, or CML
- Supported inputs: LVDS, LVPECL, or LVCMOS
- Low output-output skew: as low as 20 ps
- Commercial and industrial temperature ranges
- Packages: 32-TQFP, 20-TSSOP, 8-TSSOP, 8-SOIC

Competition Comparison

Cypress's High Performance Buffer offers best-in-class jitter as compared to competition.

	Two Output LVPECL (8L SOIC)	Two Output LVPECL (8L TSSOP)	Four Output LVDS	10 Output LVPECL
Cypress	52 fs	58 fs	59 fs	56 fs
Competitor A	128 fs	153 fs	216 fs	146 fs
Competitor B	-	121 fs	-	105 fs
Competitor C	-	-	-	125 fs

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2CP1504ZXC	In Production	4	0	250	0	220	2.38	3.47	2.5/3.3	2.5/3.3	LVC MOS
CY2CP1504ZXCT	In Production	4	0	250	0	220	2.38	3.47	2.5/3.3	2.5/3.3	LVC MOS
CY2CP1504ZXI	In Production	4	0	250	0	220	2.38	3.47	2.5/3.3	2.5/3.3	LVC MOS
CY2CP1504ZXIT	In Production	4	0	250	0	220	2.38	3.47	2.5/3.3	2.5/3.3	LVC MOS
CY2DL1504ZXC	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL1504ZXCT	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL1504ZXI	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL1504ZXIT	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL1510AZC	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL1510AZCT	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL1510AZI	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL1510AZIT	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL15110AZI	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DL15110AZIT	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DM1502ZXC	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DM1502ZXCT	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DM1502ZXI	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DM1502ZXIT	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502SXC	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502SXCT	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502SXI	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502SXIT	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502ZXC	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502ZXCT	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502ZXI	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1502ZXIT	In Production	2	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1504ZXC	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1504ZXCT	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1504ZXI	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1504ZXIT	In Production	4	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1510AXC	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP1510AXCT	In Production	10	0	1500	0	1500	2.38	3.47	2.5/3.3	2.5/3.3	Ref-in differential

Non-Zero Delay Buffers

Cypress's Non-Zero Delay Buffers or Fanout Buffers copy the input clock to multiple outputs. Non-Zero Delay Buffers are ideal for low power requirements with space-saving packages with low skew and low EMI outputs.

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2304NZZI-1	In Production	4	0	140	0	140	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2304NZZI-1T	In Production	4	0	140	0	140	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2304NZZXC-1	In Production	4	0	140	0	140	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2304NZZXC-1T	In Production	4	0	140	0	140	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2304NZZXI-1	In Production	4	0	140	0	140	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2304NZZXI-1T	In Production	4	0	140	0	140	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2309NZSXC-1H	In Production	9	0	133	0	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2309NZSXC-1HT	In Production	9	0	133	0	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2309NZSXI-1H	In Production	9	0	133	0	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2309NZSXI-1HT	In Production	9	0	133	0	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY29940AXC	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29940AXCT	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29940AXI	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29940AXIT	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29942AXC	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29942AXCT	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29942AXI	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29942AXIT	In Production	18	0	200	0	200	2.38	3.45	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29946AXC	In Production	10	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29946AXCT	In Production	10	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29946AXI	In Production	10	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29946AXIT	In Production	10	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29947AXCT	In Production	9	0	200	0	200	3	3.6	2.5/3.3	2.5/3.3	LVC MOS/LVTTL
CY29948AC	NRND	12	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29948ACT	NRND	12	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29948AXC	In Production	12	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29948AXCT	In Production	12	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29948AXI	In Production	12	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29948AXIT	In Production	12	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29949AXI	In Production	15	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY29949AXIT	In Production	15	0	200	0	200	2.38	3.6	2.5/3.3	2.5/3.3	LVPECL/LVC MOS
CY2CC8100XI	In Production	10	0	650	0	650	2.38	3.45	2.5/3.3	2.5/3.3	LVC MOS
CY2CC8100XIT	In Production	10	0	650	0	650	2.38	3.45	2.5/3.3	2.5/3.3	LVC MOS
CY2CC9100XI	In Production	10	0	650	0	650	1.71	3.45	1.8/2.5/3.3	1.8/2.5/3.3	LVC MOS
CY2CC9100XIT	In Production	10	0	650	0	650	1.71	3.45	1.8/2.5/3.3	1.8/2.5/3.3	LVC MOS
CY2DL814ZXI	In Production	4	0	400	0	400	3.13	3.45	3.3	3.3	LVDS/LVPECL/LVTTL
CY2DL814ZXIT	In Production	4	0	400	0	400	3.13	3.45	3.3	3.3	LVDS/LVPECL/LVTTL
CY2DP1510AXCES	Sampling	10	0	650	0	650	2.3	3.47	2.5/3.3	2.5/3.3	Ref-in differential
CY2DP814ZXC	In Production	4	0	450	0	450	3.13	3.45	3.3	3.3	LVDS/LVPECL/LVTTL
CY2DP814ZXCCT	In Production	4	0	450	0	450	3.13	3.45	3.3	3.3	LVDS/LVPECL/LVTTL
CY2DP818ZXC	NRND	8	0	350	0	350	3.13	3.45	3.3	3.3	LVDS/LVPECL/LVTTL

RoboClock™ Skew Management Buffers

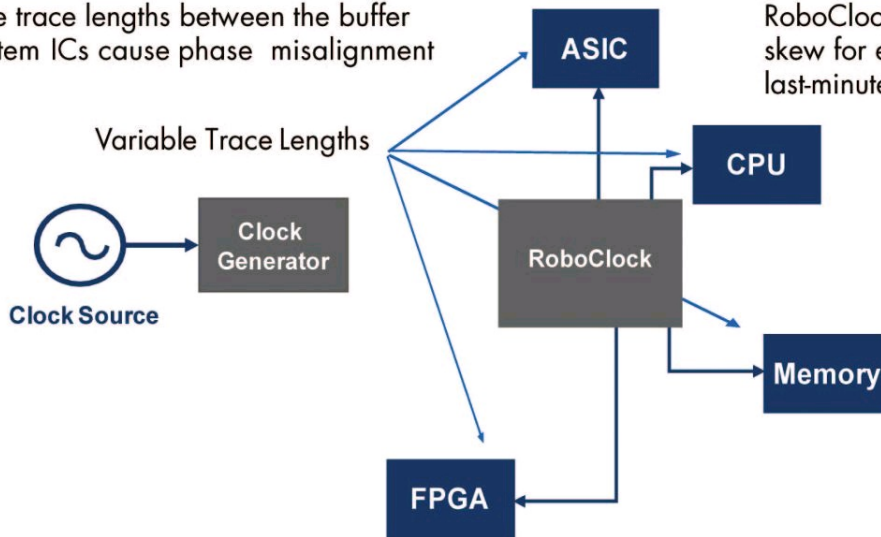
The RoboClock™ high-speed, multiphase, phase-locked loop (PLL) clock buffer offers features such as:

- Programmable output skew
- A programmable multiply/divide factor
- User-selectable redundant reference clocks that provide fault tolerance

Designers can control output skew and multiply and divide factors to help accommodate last-minute changes. Maximum flexibility and extensive AC testing on each device ensures a safe design. RoboClock offers a high-performance timing solution for designers of communications, computation, and storage networking applications.

CHALLENGE:

Variable trace lengths between the buffer and system ICs cause phase misalignment



CYPRESS SOLUTION:

RoboClock buffer has programmable output skew for each individual output clock, accommodates last-minute changes and ensures safe design

Cypress RoboClock Solution

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY7B991-2JXC	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-2JXCT	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-5JI	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-5JIT	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-5JXC	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-5JXCT	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-5JXI	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-5JXIT	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-7JI	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-7JXC	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B991-7JXCT	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	TTL
CY7B9910-5SXI	In Production	8	15	80	15	80	4.5	5.5	5	5.0	TTL
CY7B9910-5SXIT	In Production	8	15	80	15	80	4.5	5.5	5	5.0	TTL
CY7B9911-5JC	In Production	8	3.75	100	3.75	100	4.5	5.5	5	5.0	TTL
CY7B9911-5JCT	In Production	8	3.75	100	3.75	100	4.5	5.5	5	5.0	TTL
CY7B9911V5JC	In Production	8	3.75	110	3.75	110	3	3.6	3.3	3.3	LVTTTL
CY7B9911V5JCT	In Production	8	3.75	110	3.75	110	3	3.6	3.3	3.3	LVTTTL
CY7B9911V5JXC	In Production	8	3.75	110	3.75	110	3	3.6	3.3	3.3	LVTTTL
CY7B9911V5JXCT	In Production	8	3.75	110	3.75	110	3	3.6	3.3	3.3	LVTTTL
CY7B991V2JC	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL

RoboClock™ Skew Management Buffers

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY7B991V2JCT	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V2JXC	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V2JXCT	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V5JI	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V5JIT	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V5JXC	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V5JXCT	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V5JXI	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V5JXIT	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V7JXC	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B991V7JXCT	In Production	8	3.75	80	3.75	80	3	3.6	3.3	3.3	LVTTTL
CY7B992-5JXI	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	CMOS
CY7B992-5JXIT	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	CMOS
CY7B992-7JC	NRND	8	3.75	80	3.75	80	4.5	5.5	5	5.0	CMOS
CY7B992-7JCT	NRND	8	3.75	80	3.75	80	4.5	5.5	5	5.0	CMOS
CY7B992-7JI	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	CMOS
CY7B992-7JXC	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	CMOS
CY7B992-7JXCT	In Production	8	3.75	80	3.75	80	4.5	5.5	5	5.0	CMOS
CY7B9920-SSI	In Production	8	15	80	15	80	4.5	5.5	5	5.0	CMOS
CY7B9930V5AXC	In Production	10	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9930V5AXCKG	Contact Sales	10	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9930V5AXCT	In Production	10	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B993V2AXC	In Production	18	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B993V2AXCT	In Production	18	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B993V2AXI	In Production	18	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B993V5AXC	In Production	18	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B993V5AXCT	In Production	18	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B993V5AXI	In Production	18	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B993V5AXIT	In Production	18	12	100	12	100	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9940V2AXC	In Production	10	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9940V2AXCT	In Production	10	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9940V5AXC	In Production	10	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9940V5AXCT	In Production	10	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9940V5AXI	NRND	10	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9940V5AXIT	NRND	10	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL

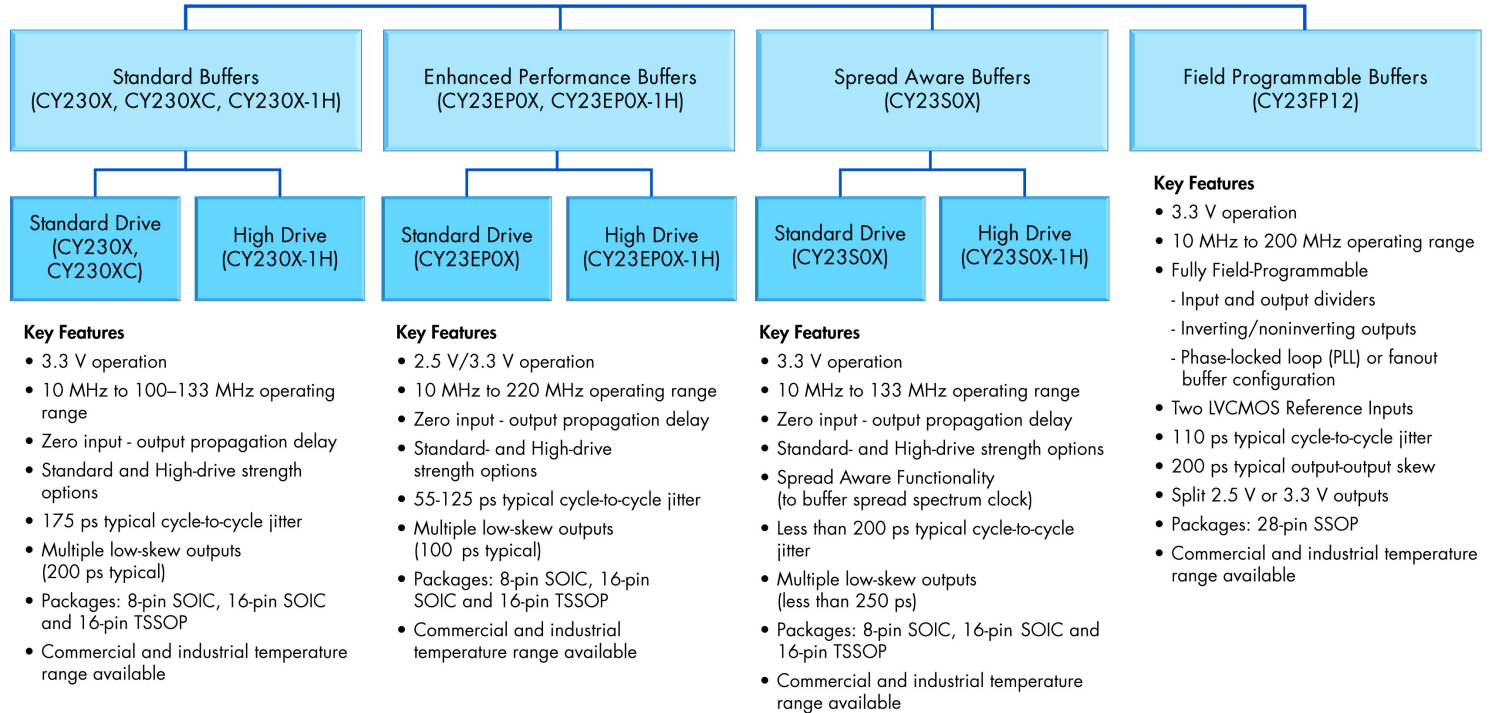
RoboClock™ Skew Management Buffers

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY7B9945V2AXC	In Production	11	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9945V2AXCT	In Production	11	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9945V2AXI	In Production	11	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9945V2AXIT	In Production	11	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2AXC	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2AXCT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2AXI	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2AXIT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2BBI	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2BBIT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2BBXC	NRND	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2BBXCT	NRND	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2BBXI	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V2BBXIT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5AXC	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5AXCT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5AXI	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5AXIT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5BBC	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5BBCT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5BBXI	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B994V5BBXIT	In Production	18	24	200	24	200	3	3.6	3.3	3.3	LVTTTL, LVPECL
CY7B9950AXC	In Production	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL
CY7B9950AXCKG	Sampling	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL
CY7B9950AXCT	In Production	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL
CY7B9950AXI	In Production	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL
CY7B9950AXIT	In Production	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL
CY7B995AXC	In Production	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL
CY7B995AXCT	In Production	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL
CY7B995AXI	In Production	8	6	200	6	200	2.38	3.6	2.5/3.3	2.5/3.3	LVCMOS/LVTTTL

Zero Delay Buffers

Cypress has a broad portfolio of zero delay buffers (ZDB). Cypress's ZDB family contains devices with different architectures, feedback mechanisms, frequency multiplications, number of outputs, output enable functionalities, spread aware functionalities, field programmable functionalities and many more. See diagram below for the ZDB family tree.

Zero Delay Buffer



For more information on Zero Delay Buffers, visit www.cypress.com/go/zdb.

Specification Comparison - CY2305/CY2309

CY2305 and CY2309 are the most popular devices in the ZDB family. The table below compares specifications for these devices for standard drive and high drive version.

Output Drive Option	Buffer Types	Five-Output Devices	Nine-Output Devices	Supply Voltage (V)	Frequency (MHz)	Cycle-Cycle Jitter (ps) ^[1]	Output Skew (ps)	Rise & Fall Time, max (ns) ^[2]	Duty Cycle (%) ^[3]	Spread Aware
Standard Drive (I _{OL} = 8 mA I _{OH} = 8 mA)	Standard Buffer	CY2305	CY2309	3.3	10 – 133	200	250	2.5	40/60	No
	Standard Buffer	CY2305C	CY2309C	3.3	10 - 133	175	200	2.25	45/55	No
	Enhanced Performance Buffer	CY23EP05	CY23EP09	3.3 2.5	10 – 167 10 – 133	55 – 125 95 – 100	100	0.6 – 1.6 1.5	47/53	No
	Spread Aware Buffer	CY23S05	CY23S09	3.3	10 - 133	200	250	2.5	40/60	Yes
High Drive (I _{OL} = 12 mA I _{OH} = 12 mA)	Standard Buffer	CY2305	CY2309	3.3	10 - 133	200	250	1.5	45/55	No
	Standard Buffer	CY2305C	CY2309C	3.3	10 – 133	175	200	1.5	45/55	No
	Enhanced Performance Buffer	CY23EP05	CY23EP09	3.3 2.5	10 – 220 10 – 200	55 – 100 65 – 145	100 100 – 110	0.5 – 1.2 1.2 – 2.1	47/53	No
	Spread Aware Buffer	CY23S05	CY23S09	3.3	10 – 133	200	250	1.5	45/55	Yes
			CY2309NZ	3.3	0 – 133	N/A	250	1.5	40/60	N/A

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY23005XC	In Production	4	10	166.67	20	83.3	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23005XCT	In Production	4	10	166.67	20	83.3	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23025XC-1	In Production	2	10	133	10	133	3.13	5.5	3.3/5.0	3.3/5.0	LVC MOS/LVTTL
CY23025XC-1T	In Production	2	10	133	10	133	3.13	5.5	3.3/5.0	3.3/5.0	LVC MOS/LVTTL
CY23025XI-1	In Production	2	10	133	10	133	3.13	5.5	3.3/5.0	3.3/5.0	LVC MOS/LVTTL
CY23025XI-1T	In Production	2	10	133	10	133	3.13	5.5	3.3/5.0	3.3/5.0	LVC MOS/LVTTL
CY23035XC	In Production	3	10	166.67	10	41.67	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23035XCKN	Contact Sales	3	10	166.67	10	41.67	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23035XCT	In Production	3	10	166.67	10	41.67	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XC-1	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XC-1T	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XC-2	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XC-2T	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XI-1	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XI-1T	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XI-2	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY23045XI-2T	In Production	4	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXA-1H	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXA-1HT	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXC-1	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXC-1H	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXC-1HT	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXC-1T	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXI-1	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXI-1H	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXI-1HT	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305CSXI-1T	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXC-1	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXC-1H	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXC-1HT	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXC-1T	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXI-1	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXI-1H	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXI-1HT	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2305SXI-1T	In Production	5	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-1	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-1H	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-1HT	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-1T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-2	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-2T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-3	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-3T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-4	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXC-4T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY2308SXI-1	In Production	8	10	133	10	133	3	3.6	3.3	3.3	LVC MOS/LVTTL

Zero Delay Buffers

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2308SXI-1H	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-1HT	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-1T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-2	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-2T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-3	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-3T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-4	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308SXI-4T	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308ZXC-1H	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308ZXC-1HT	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308ZXI-1H	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2308ZXI-1HT	In Production	8	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXC-1	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXC-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXC-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXC-1T	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXI-1	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXI-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXI-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CSXI-1T	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXC-1	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXC-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXC-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXC-1T	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXI-1	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXI-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXI-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309CZXI-1T	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXC-1	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXC-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXC-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXC-1T	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXI-1	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXI-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXI-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309SXI-1T	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309ZXC-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309ZXC-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309ZXI-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309ZXI-1HT	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2309ZXC-1	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP05SXC-1H	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP05SXC-1HT	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP05SXC-1T	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP05SXI-1	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP05SXI-1H	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP05SXI-1HT	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP05SXI-1T	In Production	5	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09SXC-1	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09SXC-1H	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09SXC-1HT	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL

Zero Delay Buffers

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY23EP09SXC-1T	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09SXI-1	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09SXI-1H	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09SXI-1HT	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09SXI-1T	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09ZXC-1H	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09ZXC-1HT	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09ZXI-1H	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23EP09ZXI-1HT	In Production	9	10	220	10	220	2.3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FP12OXC	In Production	12	10	200	10	200	3.13	3.45	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FP12OXC-002	NRND	12	10	200	10	200	3.14	3.47	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FP12OXC-002T	NRND	12	10	200	10	200	3.14	3.47	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FP12OXCT	In Production	12	10	200	10	200	3.13	3.45	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FP12OXI	In Production	12	10	200	10	200	3.13	3.45	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FP12OXIT	In Production	12	10	200	10	200	3.13	3.45	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FS04ZXC	In Production	4	4	170	4	170	3.13	3.45	3.3	2.5/3.3	Xtal/I ² C/MOS/LVTTL
CY23FS04ZXC-1T	In Production	4	4	170	4	170	3.13	3.45	3.3	2.5/3.3	Xtal/I ² C/MOS/LVTTL
CY23FS04ZXI	In Production	4	4	170	4	170	3.13	3.45	3.3	2.5/3.3	Xtal/I ² C/MOS/LVTTL
CY23FS04ZXI-3	NRND	4	4	166.67	4	166.67	3.14	3.47	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FS04ZXI-3T	NRND	4	4	166.67	4	166.67	3.14	3.47	3.3	2.5/3.3	I ² C/MOS/LVTTL
CY23FS04ZXIKO	Contact Sales	4	4	170	4	170	3.13	3.45	3.3	2.5/3.3	Xtal/I ² C/MOS/LVTTL
CY23FS04ZXIT	In Production	4	4	170	4	170	3.13	3.45	3.3	2.5/3.3	Xtal/I ² C/MOS/LVTTL
CY23FS08OXC	In Production	8	1	200	1	200	3.13	3.45	3.3	2.5/3.3	Xtal/I ² C/MOS/LVTTL
CY23FS08OXI	In Production	8	1	166.67	1	166.67	3.13	3.45	3.3	2.5/3.3	Xtal/I ² C/MOS/LVTTL
CY23S02SXI-1	In Production	2	20	133	10	133	3.13	5.5	3.3/5.0	3.3/5.0	I ² C/MOS/LVTTL
CY23S02SXI-1T	In Production	2	20	133	10	133	3.13	5.5	3.3/5.0	3.3/5.0	I ² C/MOS/LVTTL
CY23S05SXC-1	In Production	5	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S05SXC-1H	In Production	5	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S05SXI-1	In Production	5	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S05SXI-1T	In Production	5	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S08SXI-1H	In Production	8	10	140	10	140	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S08SXI-1HT	In Production	8	10	140	10	140	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S09SXC-1	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S09SXC-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY23S09ZXC-1H	In Production	9	10	133	10	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2509ZXC-1	In Production	10	40	140	40	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2509ZXC-1T	In Production	10	40	140	40	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2510ZXC-1	In Production	11	40	140	40	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY2510ZXC-1T	In Production	11	40	140	40	133	3	3.6	3.3	3.3	I ² C/MOS/LVTTL
CY29352AXI	In Production	11	16	200	16	200	2.38	3.45	2.5/3.3	2.5/3.3	I ² C/LVTTL
CY29352AXIKG	Contact Sales	11	16	200	16	200	2.38	3.45	2.5/3.3	2.5/3.3	I ² C/LVTTL
CY29352AXIT	In Production	11	16	200	16	200	2.38	3.45	2.5/3.3	2.5/3.3	I ² C/LVTTL
CY29947AXC	In Production	9	0	200	0	200	3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY29947AXI	In Production	9	0	200	0	200	3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY29947AXIT	In Production	9	0	200	0	200	3	3.6	2.5/3.3	2.5/3.3	I ² C/MOS/LVTTL
CY29972AXI	In Production	12	0	125	0	125	3	3.6	3.3	3.3	Xtal/I ² C/MOS/LVTTL
CY29972AXIT	In Production	12	0	125	0	125	3	3.6	3.3	3.3	Xtal/I ² C/MOS/LVTTL
CY29973AXI	In Production	12	0	125	0	125	3	3.6	3.3	3.3	I ² C/LVTTL

Zero Delay Buffers

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY29973AXIT	In Production	12	0	125	0	125	3	3.6	3.3	3.3	LVPECL/LVCMOS
CY29976AXI	In Production	12	0	125	0	125	3	3.6	3.3	3.3	LVPECL/LVCMOS
CY29976AXIT	In Production	12	0	125	0	125	3	3.6	3.3	3.3	LVPECL/LVCMOS

CLOCK GENERATION

Cypress has a broad portfolio of devices that comprises:

- Application Specific Clocks
- EMI Reduction Clocks
- FlexIO™ High Performance Clocks
- Programmable Clocks
- Programmable XO's
- VCXO Clocks

Application Specific Clocks

Application Specific Clocks are optimized for the special requirements of their target system applications. They include:

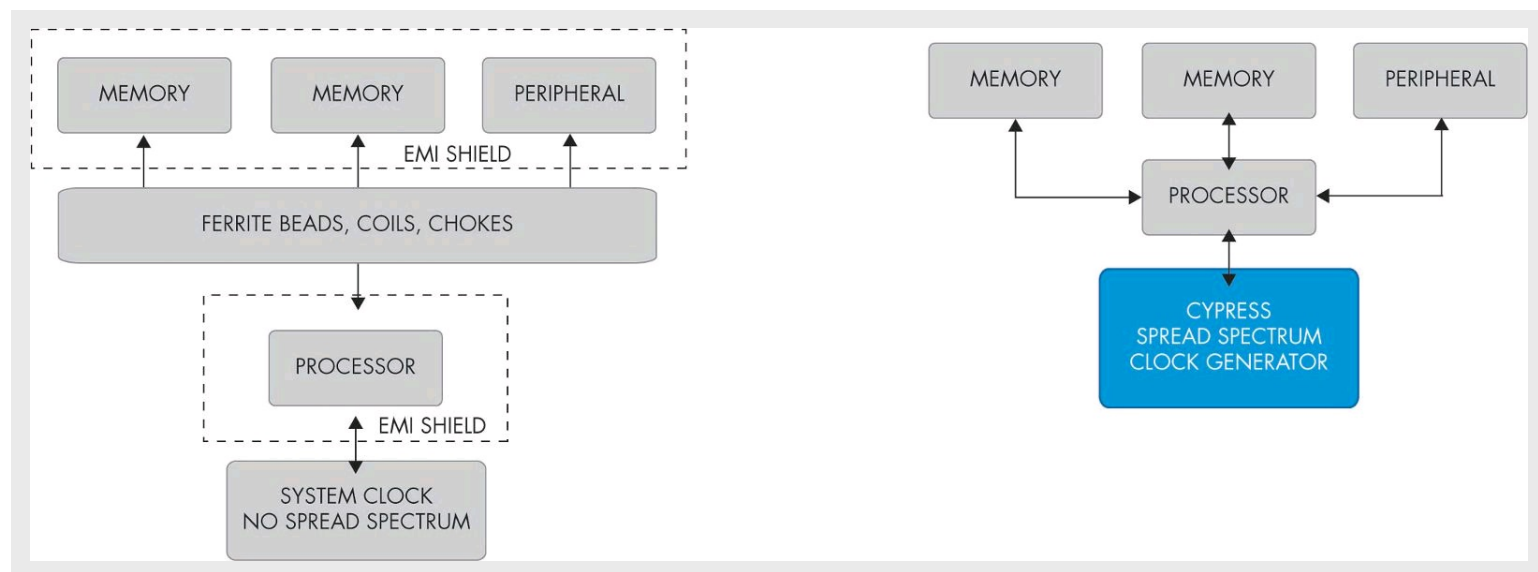
Direct Rambus® Clock Generator - Cypress provides XDR Clock Generator (XCG) for Rambus Extreme Data Rate (XDR) clocking – up to 800 MHz. Cypress XCG enables Rambus XDR to provide 6.4 Gbps peak bandwidth. They are ideal for graphics processing, consumer electronics, and server applications.

PCI Express Clock Generator - Cypress offers Clock source for PCI Express SERDES / Interface with 100 MHz differential signaling (HCSL). These devices incorporate Lexmark Spread Spectrum profile for maximum electromagnetic interference (EMI) reduction. Commercial and industrial grade parts are available for each device.

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY24271ZX	In Production	4	300	800	100	133	2.38	2.6	2.5	2.5	Ref-in differential
CY24271ZXCT	In Production	4	300	800	100	133	2.38	2.6	2.5	2.5	Ref-in differential
CY24272ZX	In Production	4	300	667	100	133	2.38	2.6	2.5	2.5	Ref-in differential
CY24272ZXCT	In Production	4	300	667	100	133	2.38	2.6	2.5	2.5	Ref-in differential
CY24292LFX	In Production	5	25	100	25	25	3	3.6	3.3	3.3	Xtal/LVCMOS/LVTTL
CY24292LFXCT	In Production	5	25	100	25	25	3	3.6	3.3	3.3	Xtal/LVCMOS/LVTTL
CY24292LFXI	In Production	5	25	100	25	25	3	3.6	3.3	3.3	Xtal/LVCMOS/LVTTL
CY24292LFXIT	In Production	5	25	100	25	25	3	3.6	3.3	3.3	Xtal/LVCMOS/LVTTL
CY24293ZX	In Production	2	25	200	25	25	3	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY24293ZXCT	In Production	2	25	200	25	25	3	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY24293ZXI	In Production	2	25	200	25	25	3	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY24293ZXIT	In Production	2	25	200	25	25	3	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY26049ZX-36	In Production	3	0.008	155.52	0.008	60	3.15	3.45	3.3	3.3	LVCMS/LVTTL
CY26049ZX-36T	In Production	3	0.008	155.52	0.008	60	3.15	3.45	3.3	3.3	LVCMS/LVTTL
CY26049ZXI-36	In Production	3	0.008	155.52	0.008	60	3.15	3.45	3.3	3.3	LVCMS/LVTTL
CY26049ZXI-36T	In Production	3	0.008	155.52	0.008	60	3.15	3.45	3.3	3.3	LVCMS/LVTTL

EMI Reduction Clocks

Cypress offers clock generators with programmable spread spectrum to optimize EMI reduction. By using a Cypress spread spectrum clock, you never need to worry about potential EMI test failures or changing your design. Cypress even has a spread spectrum clock in a standard crystal oscillator ceramic package which can be used as a drop-in spread spectrum replacement for any crystal oscillator.



Other Clock Solutions versus Cypress Clock Solution

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY24242OXC	In Production	10	14.31818	133.3	14.31818	14.31818	3	3.6	3.3	2.5/3.3	Xtal/Ref-in CMOS
CY24242OXCT	In Production	10	14.31818	133.3	14.31818	14.31818	3	3.6	3.3	2.5/3.3	Xtal/Ref-in CMOS
CY25100SXCF	In Production	2	3	200	8	166	3.13	3.45	3.3	3.3	Xtal/Ref-in CMOS
CY25100SXIF	In Production	2	3	200	8	166	3.13	3.45	3.3	3.3	Xtal/Ref-in CMOS
CY25100ZXCF	In Production	2	3	200	8	166	3.13	3.45	3.3	3.3	Xtal/Ref-in CMOS
CY25100ZXIF	In Production	2	3	200	8	166	3.13	3.45	3.3	3.3	Xtal/Ref-in CMOS
CY25200KFZXC	In Production	6	3	200	8	166	2.38	3.45	3.3	2.5/3.3	Xtal/Ref-in CMOS
CY25402SXC	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25402SXCT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25402SXI	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS

EMI Reduction Clocks

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY25402SXIT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25403SXC	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25403SXCT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25403SXI	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25403SXIT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25404ZXC	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25404ZXI	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY25422FSXI	In Production	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25422FSXIT	In Production	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/LVCMOS/LVTTL
CY25422SXC	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25422SXCT	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25422SXI	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25422SXIT	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25423SXC	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25423SXCT	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25423SXI	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25423SXIT	Sampling	3	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2544C	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2544CT	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2544I	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2544IT	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2545C	Sampling	8	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2545CT	Sampling	8	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2545I	Sampling	8	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2545IT	Sampling	8	3	166	8	166	2.25	3.6	2.5/3.0/3.3	1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
CY2546C	Sampling	9	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2546CT	Sampling	9	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2546I	Sampling	9	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2546IT	Sampling	9	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2547C	Sampling	8	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2547CT	Sampling	8	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2547I	Sampling	8	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY2547IT	Sampling	8	3	166	8	166	1.65	1.95	1.8	1.8	Xtal/Ref-in CMOS
CY25482SXC	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25482SXCT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25482SXI	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25482SXIT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25483SXC	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25483SXCT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25483SXI	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25483SXIT	Sampling	3	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY2548C	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY2548CT	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY2548I	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY2548IT	Sampling	9	3	166	8	166	2.25	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Ref-in CMOS
CY25560SXC	In Production	1	25	100	25	100	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25560SXCT	In Production	1	25	100	25	100	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25560SXI	In Production	1	25	100	25	100	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25560SXIT	In Production	1	25	100	25	100	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25561SXC	In Production	1	50	166	50	166	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS

EMI Reduction Clocks

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY25561SXCT	In Production	1	50	166	50	166	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25562SXC	In Production	1	50	200	50	200	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25562SXCT	In Production	1	50	200	50	200	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25568SXC	In Production	4	4	128	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25568SXCT	In Production	4	4	128	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25811SXC	In Production	1	4	32	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25811SXCT	In Production	1	4	32	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25811SXI	In Production	1	4	32	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25811SXIT	In Production	1	4	32	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25812SXC	In Production	1	8	64	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25812SXCT	In Production	1	8	64	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25812ZXC	In Production	1	8	64	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25812ZXCT	In Production	1	8	64	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25814SXC	In Production	1	16	128	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25814SXCT	In Production	1	16	128	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25814SXI	In Production	1	16	128	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25814SXIT	In Production	1	16	128	4	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25819SXC	In Production	2	16	32	16	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25819SXCT	In Production	2	16	32	16	32	2.97	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY25823ZXC	In Production	2	96	100	14.13	14.13	3.13	3.45	3.3	3.3	Ref-in CMOS
CY25823ZXCT	In Production	2	96	100	14.13	14.13	3.13	3.45	3.3	3.3	Ref-in CMOS
CY26121KZXI-21	In Production	5	25	33.33	25	25	3.13	3.45	3.3	3.3	Xtal/Ref-in CMOS
CY26121KZXI-21T	In Production	5	25	33.33	25	25	3.13	3.45	3.3	3.3	Xtal/Ref-in CMOS
CY27020SXC	In Production	2	48	48	48	48	2.5	3.6	3.3	3.3	Xtal/Ref-in CMOS
CY27020SXCT	In Production	2	48	48	48	48	2.5	3.6	3.3	3.3	Xtal/Ref-in CMOS

EMI Reduction Clocks

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
M200LFXI	Sampling	3	3	50	1	48	1.65	1.95	1.8	1.5/1.8/2.5/3.0/3.3	Ref-in CMOS
M200LFXIT	Sampling	3	3	50	1	48	1.65	1.95	1.8	1.5/1.8/2.5/3.0/3.3	Ref-in CMOS
M300LFXI	Sampling	3	3	50	1	48	1.65	1.95	1.8	1.5/1.8/2.5/3.0/3.3	Ref-in CMOS
M300LFXIT	Sampling	3	3	50	1	48	1.65	1.95	1.8	1.5/1.8/2.5/3.0/3.3	Ref-in CMOS
M4000LFXI	Sampling	8	3	50	1	48	1.65	1.95	1.8	1.5/1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
M4000LFXIT	Sampling	8	3	50	1	48	1.65	1.95	1.8	1.5/1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
M6000LFXI	Sampling	8	3	50	1	48	2.25	3.6	2.5/3.0/3.3	1.5/1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
M6000LFXIT	Sampling	8	3	50	1	48	2.25	3.6	2.5/3.0/3.3	1.5/1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
M600LFXI	Sampling	3	3	50	1	48	2.25	3.6	2.5/3.0/3.3	1.5/1.8/2.5/3.0/3.3	Ref-in CMOS
M600LFXIT	Sampling	3	3	50	1	48	2.25	3.6	2.5/3.0/3.3	1.5/1.8/2.5/3.0/3.3	Ref-in CMOS
M8000LFXI	Sampling	8	3	50	1	48	2.25	3.6	2.5/3.0/3.3	1.5/1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS
M8000LFXIT	Sampling	8	3	50	1	48	2.25	3.6	2.5/3.0/3.3	1.5/1.8/2.5/3.0/3.3	Xtal/Ref-in CMOS

FleXO™ High Performance Clock Generator

FleXO™ is the industry's most flexible family of ultra low-jitter clock generators, ideal for networking equipment and other high-performance applications. The FleXO family exceeds the clock requirements for demanding high-speed serial interface standards such as 10 Gigabit Ethernet, 10 Gigabit Fibre Channel, SAS/SATA, and PCI Express.

FleXO clock generators can be instantly programmed in the factory or field to frequencies up to 690 MHz, enabling designers to optimize system performance and use a single device across a family of platforms. A key FleXO feature, frequency margining, enables designers to vary clock frequency with 100 ppm precision to test system robustness across potential frequency fluctuations during both design and production stages.

FleXO products are available both as clock synthesizers (requiring external crystals) and as crystal oscillators (XOs) with integrated crystals. The XOs come in an industry standard 5.0 mm x 3.2 mm ceramic LCC package and can operate at 2.5 V or 3.3 V with LVDS and LVPECL outputs, while the synthesizers come in 8-pin or 16-pin TSSOP packages. The FleXO high performance PLL-based XOs fill the gap between regular PLL-based XOs and SAW oscillators, maintaining the advantages of the former (low cost, short cycle times, good temperature stability) while offering competitive performance with the latter (output frequencies up to 690 MHz, typical RMS phase jitter below 0.6 ps).

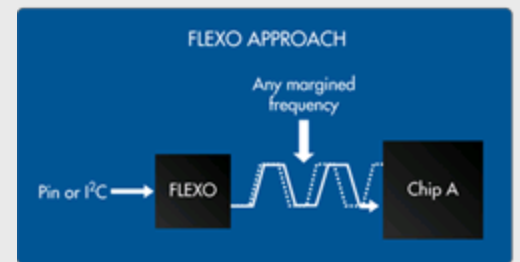
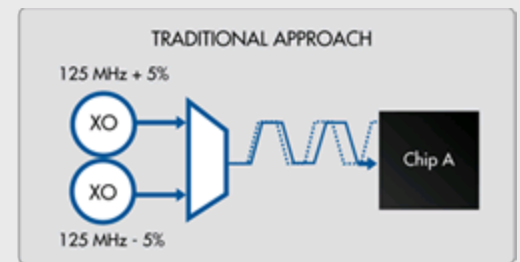
FleXO-THE INDUSTRY'S MOST FLEXIBLE FAMILY OF ULTRA-LOW JITTER CLOCK GENERATOR

Features:

- Ultra-low jitter maximizes system performance and reliability
 - RMS Phase Jitter (12 kHz to 20 MHz): as low as 0.6 ps typical
 - Differential output: LVPECL or LVDS
- Unparalleled flexibility
 - Programmable frequency from 50 to 690 MHz
 - Integrated frequency margining with 100 ppm precision
- Cost-effective architecture provides strong alternative to SAW oscillators and overtone XOs
- Available as synthesizer, VCO, crystal-inside XO, and VCXO options

Key Applications: Switches, routers, storage servers, blade servers, wireless basestations, test equipment, and enterprise hard-disk drives

For more information on FleXO visit www.cypress.com/go/flexo



Integrated Frequency Margining

FleXO clock generators enable designers to vary clock frequency with 100 ppm precision to test system robustness across potential frequency fluctuations

The following table lists available FleXO crystal oscillators pre-configured to support commonly-used frequencies in networking, communications, and other high-speed, high-end consumer applications.

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2V013FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2V014FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2VC511ZXC	NRND	1	27	27	27	27	3.13	3.47	3.3	3.3	Ref-in CMOS
CY2VC511ZXCT	NRND	1	27	27	27	27	3.13	3.47	3.3	3.3	Ref-in CMOS
CY2VC521ZXC-2	NRND	1	216	216	27	27	3.15	3.45	3.3	3.3	Xtal Inside
CY2VC521ZXC-2T	NRND	1	216	216	27	27	3.15	3.45	3.3	3.3	Xtal
CY2X013FLXCT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2X013FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside

FlexO™ High Performance Clock Generator

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2X013LX100T	NRND	1	100	100	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X013LX1122T	NRND	1	122.88	122.88	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X013LX1125T	In Production	1	125	125	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X013LX1156T	NRND	1	156.25	156.25	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014FLXC	Sampling	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014FLXCT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014FLXI	Sampling	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1106T	NRND	1	106.25	106.25	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1122T	NRND	1	122.88	122.88	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1125T	NRND	1	125	125	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1132T	NRND	1	132.8125	132.8125	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1153T	NRND	1	153.6	153.6	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1155T	NRND	1	155.52	155.52	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1156T	NRND	1	156.25	156.25	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1159T	NRND	1	159.375	159.375	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1212T	NRND	1	212.5	212.5	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1311T	NRND	1	311.04	311.04	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1312T	NRND	1	312.5	312.5	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2X014LX1622T	NRND	1	622.08	622.08	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF23FLXC	Sampling	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF23FLXCT	In Production	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF23FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF23LX1625T	NRND	1	78.125	625	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF24FLXC	Sampling	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF24FLXCT	In Production	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF24FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF24LX1625T	NRND	1	78.125	625	N/A	N/A	2.38	3.47	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF32FLXC	Sampling	1	8	200	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF32FLXCT	In Production	1	8	200	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF33FLXC	Sampling	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF33FLXCT	In Production	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF33FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF34FLXC	Sampling	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF34FLXCT	In Production	1	50	690	N/A	N/A	2.38	3.45	2.5/3.3	2.5/3.3	Xtal Inside
CY2XF34FLXIT	In Production	1	50	690	N/A	N/A	2.38	3.6	2.5/3.3	2.5/3.3	Xtal Inside
CY2XL11ZXC	In Production	1	100	100	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XL11ZXCT	In Production	1	100	100	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XP22ZXC	In Production	1	62.5	125	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XP22ZXCT	In Production	1	62.5	125	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XP24ZXC	NRND	1	156.25	187.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal
CY2XP24ZXCT	NRND	1	156.25	187.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal
CY2XP24ZXI	NRND	1	156.25	187.5	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XP24ZXIT	NRND	1	156.25	187.5	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XP311ZXC	In Production	1	312.5	312.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal
CY2XP311ZXCT	In Production	1	312.5	312.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal
CY2XP311ZXI	In Production	1	312.5	312.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal
CY2XP311ZXIT	In Production	1	312.5	312.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal
CY2XP31ZXC	NRND	1	312.5	312.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal
CY2XP31ZXCT	NRND	1	312.5	312.5	25	25	2.38	3.47	2.5/3.3	2.5/3.3	Xtal

FleXO™ High Performance Clock Generator

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2XP31ZXI	NRND	1	312.5	312.5	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XP31ZXIT	NRND	1	312.5	312.5	25	25	2.38	3.45	2.5/3.3	2.5/3.3	Xtal
CY2XP41ZXC	NRND	1	62.5	75	25	25	3.13	3.47	3.3	3.3	Xtal
CY2XP41ZXCT	NRND	1	62.5	75	25	25	3.13	3.45	3.3	3.3	Xtal

Programmable Clocks

Programmable timing solutions combine the convenience of field programming with the customary high performance of Cypress's timing products. Use CyClockWizard software to optimize device parameters.

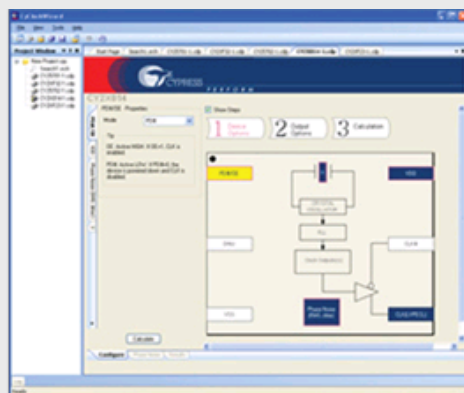
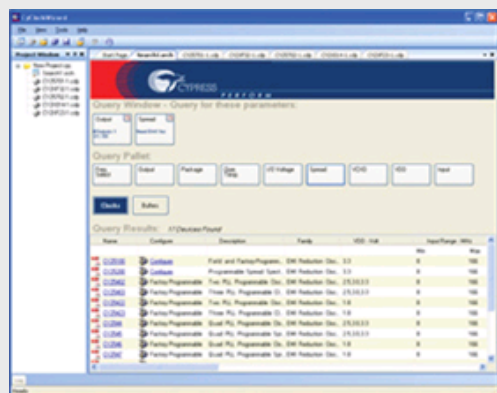
View software and drivers online at www.cypress.com/go/clocksoftware. Each programmed device can be optimized for a specific board layout.

In-System Programmable (ISP) Clocks, also known as In-System Reprogrammable (ISR) Clocks, are customizable at any point in the lifetime of the product. A customized clock configuration can be programmed through the I2C interface to enable one part number to be ordered, stocked, and placed on different boards, then customized with the specific frequencies as required.

CYCLOCKWIZARD 1.0

CyClockWizard is a software tool that enables users to customize Cypress timing solutions to meet their unique requirements in three easy steps:

1. Identify the right timing solution through a parametric search engine
2. Custom-configure the device using an intuitive GUI
3. Program the field-programmable devices for engineering evaluation



CyClockWizard supports the following devices:

CY2077, CY22394, CY25701, CY2213, CY22395, CY25702, CY2291, CY22801, CY2X013, CY2292, CY22M1L, CY2X014, CY22050, CY22M1S, CY2XF23, CY22150, CY22U1L, CY2XF24, CY22381, CY22U1S, CY2XF32, CY22392, CY25100, CY2XF33, CY22393, CY25200, CY2XF34

For more information on CyClockWizard 1.0 visit www.cypress.com/go/CyClockWizard

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2077FSXC	In Production	1	0.39	133	1	75	3	5.5	3.3/5.0	3.3/5.0	Xtal/LVCMOS/LVTTL
CY2077FSXCT	In Production	1	0.39	133	1	75	3	5.5	3.3/5.0	3.3/5.0	Xtal/LVCMOS/LVTTL
CY2077FZXI	In Production	1	0.39	133	1	75	3	5.5	3.3/5.0	3.3/5.0	Xtal/LVCMOS/LVTTL
CY2077FZXIT	In Production	1	0.39	133	1	75	3	5.5	3.3/5.0	3.3/5.0	Xtal/LVCMOS/LVTTL
CY2077FZZ	In Production	1	0.39	133	1	75	3	5.5	3.3/5.0	3.3/5.0	Xtal/LVCMOS/LVTTL
CY22050KFC	In Production	6	0.08	200	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY22050KFI	In Production	6	0.08	166.6	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY22050KFZXC	In Production	6	0.08	200	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY22050KFZXI	In Production	6	0.08	166.6	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY2213ZXC-1	In Production	1	125	400	1	133	3	3.6	3.3	3.3	Xtal

Programmable Clocks

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2213ZXC-1T	In Production	1	125	400	1	133	3	3.6	3.3	3.3	Xtal
CY22150FZXC	In Production	6	0.08	200	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY22150FZXCT	In Production	6	0.08	200	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY22150FZXI	In Production	6	0.08	166.6	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY22150FZXIT	In Production	6	0.08	166.6	1	133	3.13	3.45	3.3	2.5/3.3	Xtal/LVCMOS/LVTTL
CY22150KFZXI	In Production	6	0.08	166.6	1	133	3.13	3.45	3.3	2.5/3.3	Xtal Inside
CY223811FXI	In Production	3	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22381FXC	In Production	3	0	200	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22381FXCT	In Production	3	0	200	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22381FXI	In Production	3	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22381FXIT	In Production	3	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22392FXC	In Production	6	0	200	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22392FXCT	In Production	6	0	200	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22392FXI	In Production	6	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22392FXIKO	Contact Sales	6	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22392FXIT	In Production	6	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY223931FXI	In Production	6	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22393FXC	In Production	6	0	200	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22393FXCT	In Production	6	0	200	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22393FXI	In Production	6	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22393FXIT	In Production	6	0	166	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22394FXC	In Production	5	0	400	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22394FXCT	In Production	5	0	400	1	166	3.13	3.45	3.3	3.3	Xtal Inside
CY22394FXI	In Production	5	0	375	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22394FXIT	In Production	5	0	375	1	150	3.13	3.45	3.3	3.3	Xtal Inside
CY22395FXC	In Production	5	0	200	1	166	3.13	3.45	3.3	2.5/3.3	Xtal Inside
CY22395FXCKO	Contact Sales	5	0	200	1	166	3.13	3.45	3.3	2.5/3.3	Xtal Inside
CY22395FXCT	In Production	5	0	200	1	166	3.13	3.45	3.3	2.5/3.3	Xtal Inside
CY22395FXI	In Production	5	0	166	1	150	3.13	3.45	3.3	2.5/3.3	Xtal Inside
CY22395FXIT	In Production	5	0	166	1	150	3.13	3.45	3.3	2.5/3.3	Xtal Inside
CY22800KFXC	In Production	3	1	200	0.5	100	3.14	3.47	3.3	3.3	Xtal Inside
CY22800KFXT	In Production	3	1	200	0.5	100	3.14	3.47	3.3	3.3	Xtal Inside
CY22800KFXI	In Production	3	1	166	0.5	100	3.14	3.47	3.3	3.3	Xtal Inside
CY22800KFXT	In Production	3	1	166	0.5	100	3.14	3.47	3.3	3.3	Xtal Inside
CY22801KFXC	In Production	3	1	200	1	133	3.14	3.47	3.3	3.3	Xtal Inside
CY22801KFXT	In Production	3	1	200	1	133	3.14	3.47	3.3	3.3	Xtal Inside
CY22801KFXI	In Production	3	1	166.6	1	133	3.14	3.47	3.3	3.3	Xtal Inside
CY22801KFXT	In Production	3	1	166.6	1	133	3.14	3.47	3.3	3.3	Xtal Inside
CY2291FX	In Production	8	0.077	90	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY2291FXT	In Production	8	0.077	90	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY2292FXC	In Production	6	0.077	90	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY2292FXCT	In Production	6	0.077	90	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY2292FXI	In Production	6	0.077	80	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY2292FXIKO	Contact Sales	6	0.077	80	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY2292FXIT	In Production	6	0.077	80	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside

Programmable Clocks

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2292FZXI	In Production	6	0.077	80	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY2292FZXIT	In Production	6	0.077	80	1	30	3	5.5	3.3/5.0	3.3/5.0	Xtal Inside
CY22M1LCALGXC-00	NRND	1	1	80	1	80	1.6	2	1.8	1.8	Xtal/Ref-in CMOS
CY22U1LCALGXC-00	NRND	1	1	200	1	166	1.6	2	1.8	1.8	Xtal/Ref-in CMOS
CY22U1LCALGX1-00	In Production	1	1	200	1	166	1.6	2	1.8	1.8	Xtal Inside
CY22U1SCALGXC-00	NRND	1	1	200	1	166	2.2	3.6	2.5/3.0/3.3	2.5/3.0/3.3	Xtal/Ref-in CMOS

Programmable XO's

Cypress's Programmable Crystal Oscillators are cost-effective programmable clock generators that can take a reference or crystal input and generate an output frequency. The devices can also be programmed in the field using a clock programming kit, so samples can be instantly customized.

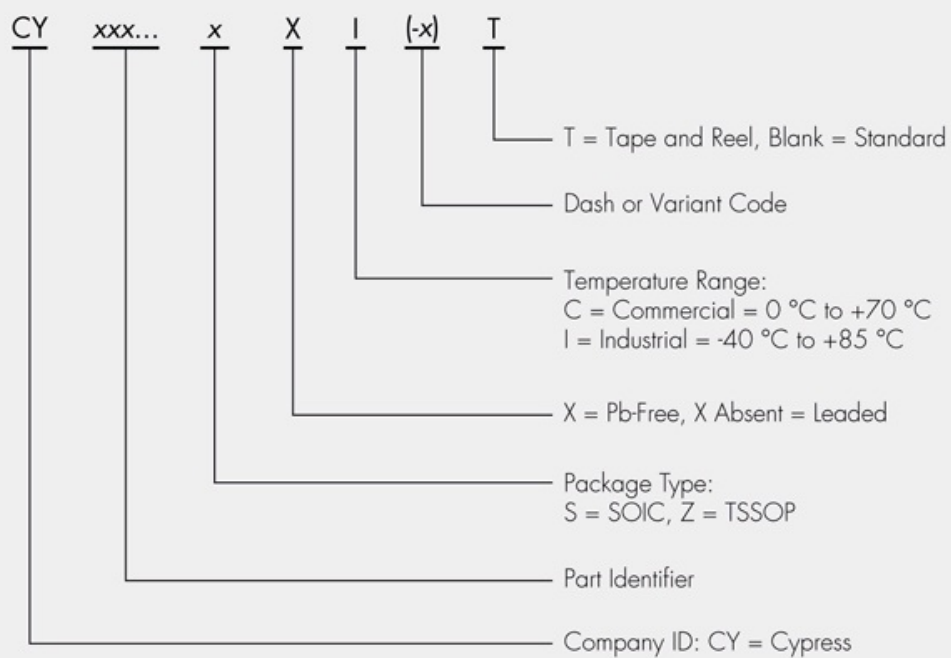
Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY2037EBWAF-IL	In Production	1	1	133	10	30	2.7	5.5	3.3/5.0	3.3/5.0	Xtal
CY25701FLXCT	In Production	1	10	166	N/A	N/A	3	3.6	3.3	3.3	Xtal Inside
CY25701FLXIT	In Production	1	10	166	N/A	N/A	3	3.6	3.3	3.3	Xtal Inside

VCXO Clocks

Cypress offers both digital and analog VCXOs used for frequency tuning based on input control voltage.

Part Number	Status	No. of Outputs	Output Frequency Min. (MHz)	Output Frequency Max. (MHz)	Input Frequency Min. (MHz)	Input Frequency Max. (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Core Voltage (V)	I/O Voltage (V)	Input Signal Type
CY22388FZXC	In Production	5	6	166	1	100	3	3.6	3.3	3.0	LVC MOS/LVTTL
CY22388FZXCT	In Production	5	6	166	1	100	3	3.6	3.3	3.3	LVC MOS/LVTTL
CY241V8ASXC-1S	Sampling	1	27	27	13.5	13.5	3.13	3.45	3.3	3.3	Xtal
CY24488ZXC	In Production	5	4.9152	148.5	27	27	3	3.6	3.3	2.5/3.3	Xtal/Ref-in CMOS
CY24488ZXCT	In Production	5	4.9152	148.5	27	27	3	3.6	3.3	2.5/3.3	Xtal/Ref-in CMOS

Clock Part Number Decoder



LIGHTING & POWER CONTROL

EZ COLOR™ HB LED CONTROLLERS

Cypress's EZ-Color™ devices combine the power and flexibility of Cypress's PSoC programmable system-on-chip with Cypress's PrISM™ (Precise Illumination Signal Modulation) drive technology, providing lighting designers with a customizable and integrated lighting solution platform.

EZ-Color devices support up to 16 independent LED channels with up to 32 bits of resolution per channel, giving lighting designers the flexibility to choose the LED array size and color quality. These features, along with Cypress's best-in-class quality and design support, make EZ-Color the ideal choice for intelligent HB LED control applications.

Key Applications: LED ballasts, architectural lighting, general illumination lighting, stage lighting, and automotive lighting

CY8CLED16—16 CHANNEL HIGHT BRIGHTNESS LED CONTROLLER

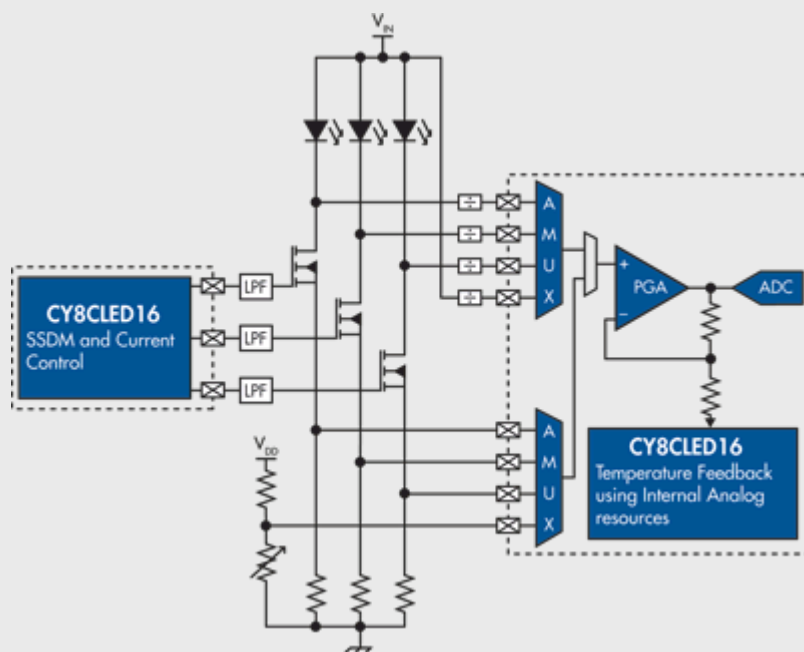
Platform Solution:

- Configurable dimmers support up to 16 LED channels
- Dimmers independently programmable from 8 to 32 bits of resolution
- PrISM method eliminates low frequency blinking inherent in typical PWM solution
- Spread spectrum signal decreases radiated EMI immunity

Easy to use:

- Modular development tools enable faster time-to-market

Learn more at www.cypress.com/go/LED16



16 Channel

Contact the [Cypress Sales team](#) for more information on product offerings.

2 Channel

Contact the [Cypress Sales team](#) for more information on product offerings.

4 Channel

Contact the [Cypress Sales team](#) for more information on product offerings.

8 Channel

Contact the [Cypress Sales team](#) for more information on product offerings.

POWERPSOC® POWER CONTROLLERS

PowerPSoC® is the first device to combine the power of an embedded controller with integrated high-power peripheral functionality. This includes four internal 32 V, 1 A rated low-side n-channel MOSFETs, four 32 V, 6 MHz rated current sense amplifiers with adjustable gain settings, four 2 MHz hysteretic controllers that can be configured as either buck, boost, or buck-boost, and a 32 V input voltage regulator. Due to the flexibility of working with the already integrated power of PSoC®, PowerPSoC offers additional functionality including Cypress's CapSense™, and additional digital (PWMs, timers, counters), analog (ADCs, PGAs), and communication (DMX512, DALI, SP I, RS -232) options. The ability to reconfigure power with this level of integration can simplify hardware design, lower testing time, and decrease bill-of-materials costs.

Key Applications: LED ballasts, general illumination, architectural lighting, stage lighting, automotive lighting, relay/solenoid drive, fan control

Part Number	Status	No. of GPIOs	SRAM (Bytes)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY8CLED01D01-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N
CY8CLED01D01-56LTXQ	In Production	10	1024	7	32	8	16	QFN	-40	105	N
CY8CLED02D01-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N
CY8CLED03D01-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N
CY8CLED03D02-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N
CY8CLED03G01-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N
CY8CLED04D01-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N
CY8CLED04D02-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N
CY8CLED04DOCD1-56LTXI	In Production	10	1024	7	32	8	16	QFN	-40	85	N

WORLD'S FIRST EMBEDDED POWER CONTROLLER

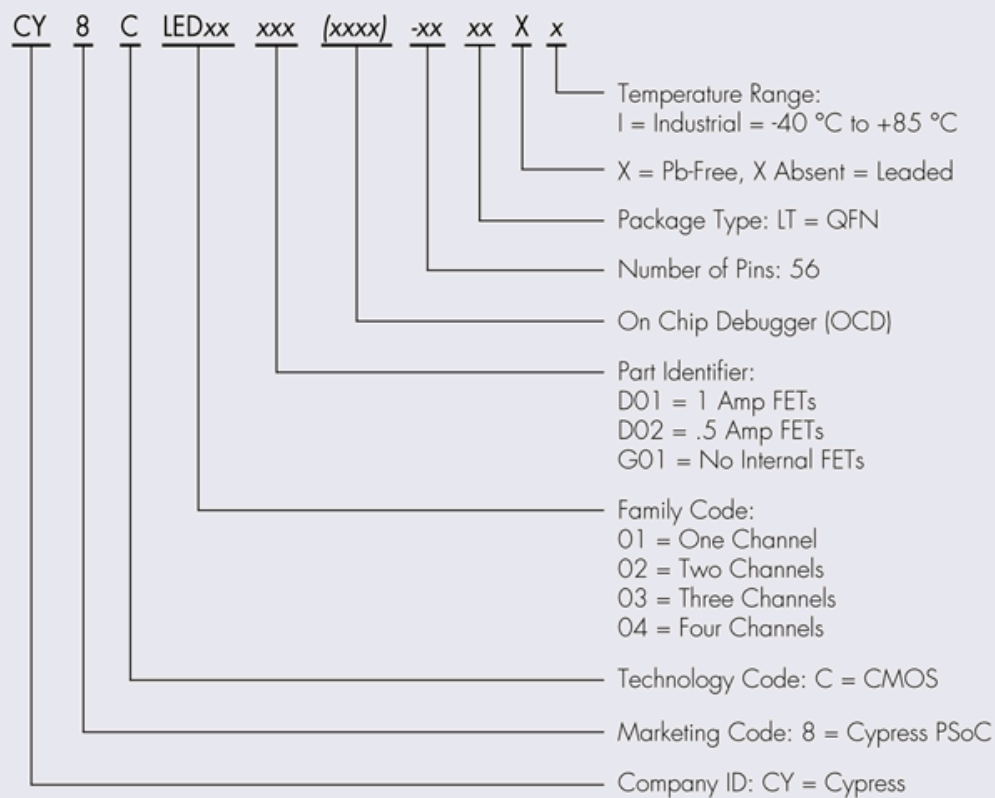
PowerPSoC Features:

- Four low-side 32 V n-channel MOSFETs
- Four 32 V, 6 MHz current sense amplifiers
- Four 2 MHz hysteretic controllers
- Six fast-response (100 ns) voltage comparators
- Fourteen 8-bit reference DACs
- 32 V input voltage regulator
- Adjustable gain on current sense amplifiers
- Buck, boost, or buck-boost options on hysteretic controllers
- Adjustable hysteresis levels

Learn more at www.cypress.com/go/powerpsoc



PowerPSoC Part Number Decoder



MEMORY

Cypress is an industry leader in synchronous, fast asynchronous, low power asynchronous and non-volatile SRAMs, as well as in multiport solutions and FIFO products. Cypress remains an innovative, reliable, committed supplier for your memory needs. Our long-term commitment to the broadest product line, product development, industry longevity, and most advanced technology sets Cypress apart as a memory supplier of choice. Whatever your application—from handhelds to network gear—Cypress's memory lineup is a testament to versatility: micropower, fast-asynchronous, synchronous, and nonvolatile SRAMs, as well as multiport, FIFO, and serial EEPROM memories. In a market landscape dotted by "EOL", Cypress gives you the support and confidence you need for the long run.

ELECTRONIC PRODUCT SELECTOR GUIDE (ePSG)

The ePSG is an interactive online tool that helps in quick selection of Memory devices based on the peripheral functions. It allows you to compare devices, click on part numbers for more information, and rearrange columns to highlight the most relevant data. Download the interactive Memory product selector guide at www.cypress.com/go/downloaddepsg. (Note: You must first install the Adobe Air runtime. Download it at <http://get.adobe.com/air/>.)

Cypress Semiconductor ePSG, v1.0.3 - Beta

Async SRAMs Filter By Criteria Reset All Criteria

Min. Operating Voltage (V)	Density (Kb)	Max. Operating Voltage (V)	Organization (X x Y)	Frequency (MHz)	Speed (ns)	Temp. Classification	Package	Automotive Qualified
1.65 (2)	4 (2)	2.20 (2)	1Kb x 4 (2)	N/A (281)	8 (2)	Commercial (71)	BGA (12)	N (237)
2.50 (4)	16 (4)	2.70 (4)	1Mb x 1 (6)		10 (141)	Industrial (166)	SOJ (102)	Y (44)
3.00 (165)	64 (7)	3.60 (165)	1Mb x 4 (4)		12 (40)	Automotive(A) (18)	FBGA (15)	

Hide Hide Hide Hide Hide Hide Hide Hide

281 Results Export to Spreadsheet

Compare	Part Number	Status	Min. Operating Voltage (V)	Density (Kb)	Max. Operating Voltage (V)	Organization (X x Y)	Frequency (MHz)	Speed (ns)	Temp. Classification	Package	Automotive Qualified
☐	CY7C1006D-10VXI	In Production	4.50	1024	5.50	256Kb x 4	N/A	10	Industrial	SOJ	N
☐	CY7C1006D-10VXII	In Production	4.50	1024	5.50	256Kb x 4	N/A	10	Industrial	SOJ	N
☐	CY7C1007D-10VXI	In Production	4.50	1024	5.50	1Mb x 1	N/A	10	Industrial	SOJ	N
☐	CY7C1007D-10VXII	In Production	4.50	1024	5.50	1Mb x 1	N/A	10	Industrial	SOJ	N
☐	CY7C1009BN-15VI	In Production	4.50	1024	5.50	128Kb x 8	N/A	15	Industrial	SOJ	N
☐	CY7C1009BN-15VII	In Production	4.50	1024	5.50	128Kb x 8	N/A	15	Industrial	SOJ	N

Don't see what you are looking for? Try our obsolete part search:

Product information last updated: Thu Jun 30 2011 12:15:54 PM

ASYNCHRONOUS SRAM

Cypress is a market leader in the Asynchronous SRAM space, and offers the broadest portfolio of fast asynchronous and low-power asynchronous SRAM (MoBL™) devices. Asynchronous SRAMs are used in a wide variety of industrial, medical, commercial, automotive and military applications that require the highest standards of reliability and performance. Best-in class process technology and manufacturing; steadfast customer support; and high quality design ensure that Cypress asynchronous SRAM devices meet and exceed expectations.

Async Fast SRAMs

Cypress's fast asynchronous SRAM product offerings range from 4 Kb to 64 Mb. Fabricated using Cypress's high-performance CMOS technology, these devices offer fast access times (8 to 12 ns), which makes them an ideal choice in applications such as switches and routers, IP phones, test equipment, DSLAM cards, and automotive electronics.

NEW ASYNC SRAM PRODUCT OFFERINGS 32 MB FAST ASYNC

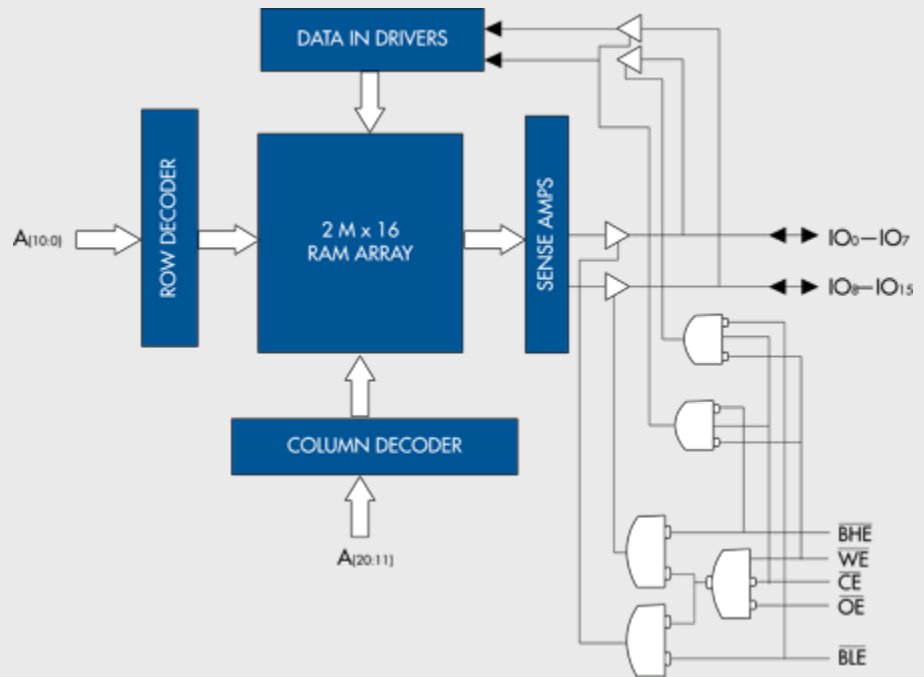
Features:

- 2 Mb x 16 and 4 Mb x 8 configuration
- 12 ns access time
- RoHS-compliant 48-BGA package with smallest ever footprint
- Based on 90-nanometer C9™ CMOS technology

The CY7C1071DV33-12BAXI and CY7C1079DV33-12BAXI, 32 M fast asynchronous SRAM devices, are in production and available today.

Key Applications: Industrial tester, high-end servers, and networking equivalence

Learn more at www.cypress.com/go/AsyncSRAMs



Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C1006D-10VXI	In Production	1024	256K x 4	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1006D-10VXIT	In Production	1024	256K x 4	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1007D-10VXI	In Production	1024	1M x 1	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1007D-10VXIT	In Production	1024	1M x 1	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1009BN-15VI	NRND	1024	128K x 8	15	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1009BN-15VIT	NRND	1024	128K x 8	15	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1009D-10VXI	In Production	1024	128K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1009D-10VXIT	In Production	1024	128K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1010DV33-10VXI	In Production	2048	256K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1010DV33-10VXIT	In Production	2048	256K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1010DV33-10ZSXI	In Production	2048	256K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1010DV33-10ZSXIT	In Production	2048	256K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1011CV33-10ZSXA	In Production	2048	128K x 16	10	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1011CV33-10ZSXAT	In Production	2048	128K x 16	10	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1011CV33-12AXI	NRND	2048	128K x 16	12	3.00	3.60	TQFP	Industrial	-40	85	N
CY7C1011CV33-12AXIT	NRND	2048	128K x 16	12	3.00	3.60	TQFP	Industrial	-40	85	N
CY7C1011CV33-12ZSXE	In Production	2048	128K x 16	12	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1011CV33-12ZSXET	In Production	2048	128K x 16	12	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1011DV33-10BVI	NRND	2048	128K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1011DV33-10BVIT	NRND	2048	128K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1011DV33-10BVXI	In Production	2048	128K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1011DV33-10BVXIT	In Production	2048	128K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1011DV33-10ZSXI	In Production	2048	128K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1011DV33-10ZSXIT	In Production	2048	128K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1012AV33-8BGC	In Production	12288	512K x 24	8	3.00	3.60	BGA	Commercial	0	70	N
CY7C1012AV33-8BGCT	In Production	12288	512K x 24	8	3.00	3.60	BGA	Commercial	0	70	N
CY7C1012DV33-10BGXI	In Production	12288	512K x 24	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1012DV33-10BGXIT	In Production	12288	512K x 24	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1018DV33-10VXI	In Production	1024	128K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1018DV33-10VXIT	In Production	1024	128K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1019CV33-10ZXA	In Production	1024	128K x 8	10	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1019CV33-10ZXAT	In Production	1024	128K x 8	10	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1019D-10VXI	In Production	1024	128K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1019D-10VXIT	In Production	1024	128K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1019D-10ZSXI	In Production	1024	128K x 8	10	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1019D-10ZSXIT	In Production	1024	128K x 8	10	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1019DV33-10BVXI	In Production	1024	128K x 8	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1019DV33-10BVXIT	In Production	1024	128K x 8	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1019DV33-10VXI	In Production	1024	128K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1019DV33-10VXIT	In Production	1024	128K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1019DV33-10ZSXI	In Production	1024	128K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1019DV33-10ZSXIT	In Production	1024	128K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1020CV26-15ZSXE	In Production	512	32K x 16	15	2.50	2.70	TSOP II	Automotive(E)	-40	125	Y
CY7C1020CV26-15ZSXET	In Production	512	32K x 16	15	2.50	2.70	TSOP II	Automotive(E)	-40	125	Y
CY7C1020CV33-15ZSXE	In Production	512	32K x 16	15	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1020CV33-15ZSXET	In Production	512	32K x 16	15	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1020D-10VXI	In Production	512	32K x 16	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1020D-10VXIT	In Production	512	32K x 16	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1020D-10ZSXI	In Production	512	32K x 16	10	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1020D-10ZSXIT	In Production	512	32K x 16	10	4.50	5.50	TSOP II	Industrial	-40	85	N

Async Fast SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C1020DV33-10VXI	NRND	512	32K x 16	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1020DV33-10VXIT	NRND	512	32K x 16	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1020DV33-10ZSXI	In Production	512	32K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1020DV33-10ZSXIT	In Production	512	32K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C10212CV33-12BAXE	In Production	1024	64K x 16	12	3.00	3.60	FBGA	Automotive[E]	-40	125	Y
CY7C10212CV33-12BAXET	In Production	1024	64K x 16	12	3.00	3.60	FBGA	Automotive[E]	-40	125	Y
CY7C1021BN-15ZSXE	In Production	1024	64K x 16	15	4.50	5.50	TSOP II	Automotive[E]	-40	125	Y
CY7C1021BN-15ZSXET	In Production	1024	64K x 16	15	4.50	5.50	TSOP II	Automotive[E]	-40	125	Y
CY7C1021BNL-15VXC	In Production	1024	64K x 16	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C1021BNL-15VXCT	In Production	1024	64K x 16	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C1021BNL-15ZXI	In Production	1024	64K x 16	15	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1021BNL-15ZXIT	In Production	1024	64K x 16	15	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1021BNV33L-15BAI	In Production	1024	64K x 16	15	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1021BNV33L-15BAIT	In Production	1024	64K x 16	15	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1021BNV33L-15ZXI	In Production	1024	64K x 16	15	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1021BNV33L-15ZXIT	In Production	1024	64K x 16	15	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1021CV26-15ZSXE	In Production	1024	64K x 16	15	2.50	2.70	TSOP II	Automotive[E]	-40	125	Y
CY7C1021CV26-15ZSXET	In Production	1024	64K x 16	15	2.50	2.70	TSOP II	Automotive[E]	-40	125	Y
CY7C1021CV33-10ZSXA	In Production	1024	64K x 16	10	3.00	3.60	TSOP II	Automotive[A]	-40	85	Y
CY7C1021CV33-10ZSXAT	In Production	1024	64K x 16	10	3.00	3.60	TSOP II	Automotive[A]	-40	85	Y
CY7C1021CV33-12VXE	In Production	1024	64K x 16	12	3.00	3.60	SOJ	Automotive[E]	-40	125	Y
CY7C1021CV33-12VXET	In Production	1024	64K x 16	12	3.00	3.60	SOJ	Automotive[E]	-40	125	Y
CY7C1021CV33-12ZSXE	In Production	1024	64K x 16	12	3.00	3.60	TSOP II	Automotive[E]	-40	125	Y
CY7C1021CV33-12ZSXET	In Production	1024	64K x 16	12	3.00	3.60	TSOP II	Automotive[E]	-40	125	Y
CY7C1021D-10VXI	In Production	1024	64K x 16	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1021D-10VXIT	In Production	1024	64K x 16	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1021D-10ZSXA	In Production	1024	64K x 16	10	4.50	5.50	TSOP II	Automotive[A]	-40	85	Y
CY7C1021D-10ZSXAT	In Production	1024	64K x 16	10	4.50	5.50	TSOP II	Automotive[A]	-40	85	Y
CY7C1021D-10ZSXI	In Production	1024	64K x 16	10	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1021D-10ZSXIT	In Production	1024	64K x 16	10	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1021D-2XW1	In Production	1024	64K x 16	N/A	4.50	5.50	Wafer	Industrial	-40	85	N
CY7C1021DV33-10BVXI	In Production	1024	64K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1021DV33-10BVXIT	In Production	1024	64K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1021DV33-10VXI	In Production	1024	64K x 16	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1021DV33-10VXIT	In Production	1024	64K x 16	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1021DV33-10ZSXA	In Production	1024	64K x 16	10	3.00	3.60	TSOP II	Automotive[A]	-40	85	Y
CY7C1021DV33-10ZSXAT	In Production	1024	64K x 16	10	3.00	3.60	TSOP II	Automotive[A]	-40	85	Y
CY7C1021DV33-10ZSXI	In Production	1024	64K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1021DV33-10ZSXIT	In Production	1024	64K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1024DV33-10BGXI	In Production	3072	128K x 24	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1024DV33-10BGXIT	In Production	3072	128K x 24	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1034DV33-10BGXI	In Production	6144	256K x 24	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1034DV33-10BGXIT	In Production	6144	256K x 24	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1041BN-15VXIT	NRND	4096	256K x 16	15	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1041BN-15ZXIT	NRND	4096	256K x 16	15	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1041BNL-15ZXC	In Production	4096	256K x 16	15	4.50	5.50	TSOP II	Commercial	0	70	N
CY7C1041BNL-15ZXCT	In Production	4096	256K x 16	15	4.50	5.50	TSOP II	Commercial	0	70	N
CY7C1041BNV33L-12ZXC	In Production	4096	256K x 16	12	3.00	3.60	TSOP II	Commercial	0	70	N
CY7C1041BNV33L-12ZXCT	In Production	4096	256K x 16	12	3.00	3.60	TSOP II	Commercial	0	70	N

Async Fast SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C1041CV33-10BAXA	In Production	4096	256K x 16	10	3.00	3.60	FBGA	Automotive(A)	-40	85	Y
CY7C1041CV33-10BAXAT	In Production	4096	256K x 16	10	3.00	3.60	FBGA	Automotive(A)	-40	85	Y
CY7C1041CV33-10ZSXA	In Production	4096	256K x 16	10	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1041CV33-10ZSXAT	In Production	4096	256K x 16	10	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1041CV33-10ZXI	NRND	4096	256K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1041CV33-10ZXIT	NRND	4096	256K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1041CV33-12BAXE	In Production	4096	256K x 16	12	3.00	3.60	FBGA	Automotive(E)	-40	125	Y
CY7C1041CV33-12BAXET	In Production	4096	256K x 16	12	3.00	3.60	FBGA	Automotive(E)	-40	125	Y
CY7C1041CV33-12ZSXE	In Production	4096	256K x 16	12	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1041CV33-12ZSXET	In Production	4096	256K x 16	12	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1041CV33-20VXE	In Production	4096	256K x 16	20	3.00	3.60	SOJ	Automotive(E)	-40	125	Y
CY7C1041CV33-20VXET	In Production	4096	256K x 16	20	3.00	3.60	SOJ	Automotive(E)	-40	125	Y
CY7C1041CV33-20ZSXA	In Production	4096	256K x 16	20	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1041CV33-20ZSXAT	In Production	4096	256K x 16	20	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1041CV33-20ZSXE	In Production	4096	256K x 16	20	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1041CV33-20ZSXET	In Production	4096	256K x 16	20	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1041CV33-8ZSXI	In Production	4096	256K x 16	8	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1041CV33-8ZSXIT	In Production	4096	256K x 16	8	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1041D-10VXI	In Production	4096	256K x 16	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1041D-10VXIT	In Production	4096	256K x 16	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1041D-10ZSXI	In Production	4096	256K x 16	10	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1041D-10ZSXIT	In Production	4096	256K x 16	10	4.50	5.50	TSOP II	Industrial	-40	85	N
CY7C1041D-2XW1	In Production	4096	256K x 16	N/A	4.50	5.50	Wafer	Industrial	-40	85	N
CY7C1041DV33-10BVI	In Production	4096	256K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1041DV33-10BVIT	In Production	4096	256K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1041DV33-10BVJXI	In Production	4096	256K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1041DV33-10BVJXIT	In Production	4096	256K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1041DV33-10BVXI	In Production	4096	256K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1041DV33-10BVXIT	In Production	4096	256K x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1041DV33-10VXI	In Production	4096	256K x 16	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1041DV33-10VXIT	In Production	4096	256K x 16	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1041DV33-10ZSXI	In Production	4096	256K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1041DV33-10ZSXIT	In Production	4096	256K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1046D-10VXI	In Production	4096	1M x 4	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1046D-10VXIT	In Production	4096	1M x 4	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1046DV33-10VXI	In Production	4096	1M x 4	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1046DV33-10VXIT	In Production	4096	1M x 4	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1049BNL-17VC	In Production	4096	512K x 8	17	4.50	5.50	SOJ	Commercial	0	70	N
CY7C1049BNL-17VCT	In Production	4096	512K x 8	17	4.50	5.50	SOJ	Commercial	0	70	N
CY7C1049CV33-10VXA	In Production	4096	512K x 8	10	3.00	3.60	SOJ	Automotive(A)	-40	85	Y
CY7C1049CV33-10VXAT	In Production	4096	512K x 8	10	3.00	3.60	SOJ	Automotive(A)	-40	85	Y
CY7C1049CV33-10ZXI	NRND	4096	512K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1049CV33-10ZXIT	NRND	4096	512K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1049CV33-12ZSXA	In Production	4096	512K x 8	12	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1049CV33-12ZSXAT	In Production	4096	512K x 8	12	3.00	3.60	TSOP II	Automotive(A)	-40	85	Y
CY7C1049CV33-15VXE	In Production	4096	512K x 8	15	3.00	3.60	SOJ	Automotive(E)	-40	125	Y
CY7C1049CV33-15VXET	In Production	4096	512K x 8	15	3.00	3.60	SOJ	Automotive(E)	-40	125	Y
CY7C1049CV33-15ZSXE	In Production	4096	512K x 8	15	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y
CY7C1049CV33-15ZSXET	In Production	4096	512K x 8	15	3.00	3.60	TSOP II	Automotive(E)	-40	125	Y

Async Fast SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C1049CV33-8ZSXC	Sampling	4096	512K x 8	8	3.00	3.60	TSOP II	Commercial	0	70	N
CY7C1049CV33-8ZSXT	Sampling	4096	512K x 8	8	3.00	3.60	TSOP II	Commercial	0	70	N
CY7C1049D-10VXI	In Production	4096	512K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1049D-10VXIT	In Production	4096	512K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1049DV33-10VXI	In Production	4096	512K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1049DV33-10VXIT	In Production	4096	512K x 8	10	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1049DV33-10ZSXI	In Production	4096	512K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1049DV33-10ZSXT	In Production	4096	512K x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1051DV33-10BAXI	In Production	8192	512K x 16	10	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1051DV33-10BAXIT	In Production	8192	512K x 16	10	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1051DV33-10ZSXI	In Production	8192	512K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1051DV33-10ZSXT	In Production	8192	512K x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1051DV33-12BAXI	In Production	8192	512K x 16	12	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1051DV33-12BAXIT	In Production	8192	512K x 16	12	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1051DV33-12ZSXI	In Production	8192	512K x 16	12	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1051DV33-12ZSXT	In Production	8192	512K x 16	12	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1059DV33-10ZSXI	In Production	8192	1M x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1059DV33-10ZSXT	In Production	8192	1M x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C10612DV33-10ZSXI	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C10612DV33-10ZSXT	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1061AV33-10BAXI	In Production	16384	1M x 16	10	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1061AV33-10BAXIT	In Production	16384	1M x 16	10	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1061AV33-10ZXC	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Commercial	0	70	N
CY7C1061AV33-10ZXT	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Commercial	0	70	N
CY7C1061AV33-10ZXI	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1061AV33-10ZXIT	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1061DV18-15ZSXI	In Production	16384	1M x 16	15	1.65	2.20	TSOP II	Industrial	-40	85	N
CY7C1061DV18-15ZSXT	In Production	16384	1M x 16	15	1.65	2.20	TSOP II	Industrial	-40	85	N
CY7C1061DV33-10BV1XI	In Production	16384	1M x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1061DV33-10BV1XIT	In Production	16384	1M x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1061DV33-10BVJXI	In Production	16384	1M x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1061DV33-10BVJXIT	In Production	16384	1M x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1061DV33-10BVXI	In Production	16384	1M x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1061DV33-10BVXIT	In Production	16384	1M x 16	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1061DV33-10ZSXI	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1061DV33-10ZSXT	In Production	16384	1M x 16	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1062DV33-10BGI	In Production	16384	512K x 32	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1062DV33-10BGIT	In Production	16384	512K x 32	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1062DV33-10BGXI	In Production	16384	512K x 32	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1062DV33-10BGXIT	In Production	16384	512K x 32	10	3.00	3.60	BGA	Industrial	-40	85	N
CY7C1062DV33-2XW11	In Production	16384	512K x 32	N/A	3.00	3.60	Wafer	Industrial	-40	85	N
CY7C1069AV33-10ZXC	In Production	16384	2M x 8	10	3.00	3.60	TSOP II	Commercial	0	70	N
CY7C1069AV33-10ZXT	In Production	16384	2M x 8	10	3.00	3.60	TSOP II	Commercial	0	70	N
CY7C1069AV33-1XW14	In Production	16384	2M x 8	N/A	3.00	3.60	Wafer	Industrial	-40	85	N
CY7C1069DV33-10BVXI	In Production	16384	2M x 8	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1069DV33-10BVXIT	In Production	16384	2M x 8	10	3.00	3.60	VFBGA	Industrial	-40	85	N
CY7C1069DV33-10ZSXI	In Production	16384	2M x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1069DV33-10ZSXT	In Production	16384	2M x 8	10	3.00	3.60	TSOP II	Industrial	-40	85	N
CY7C1068N-15VC	NRND	1024	256K x 4	15	4.50	5.50	SOJ	Commercial	0	70	N

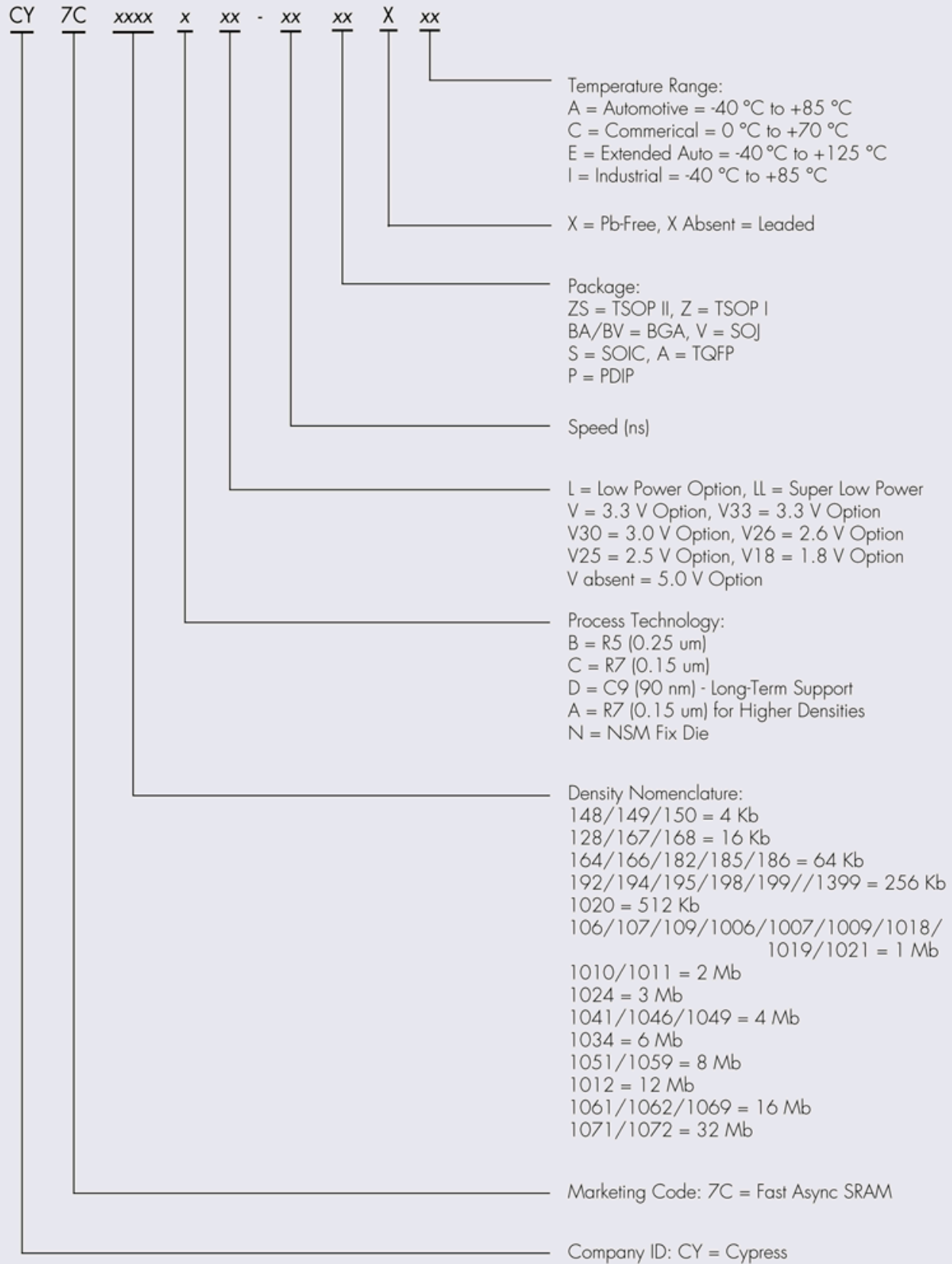
Async Fast SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C106BN-15VCT	NRND	1024	256K x 4	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C106BN-1XW14	In Production	1024	256K x 4	N/A	4.50	5.50	Wafer	Industrial	-40	85	N
CY7C106D-10VXI	In Production	1024	256K x 4	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C106D-10VXIT	In Production	1024	256K x 4	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C1071DV33-12BAXI	In Production	32768	2M x 16	12	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1071DV33-12BAXIT	In Production	32768	2M x 16	12	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1079DV33-12BAXI	In Production	32768	4M x 8	12	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C1079DV33-12BAXIT	In Production	32768	4M x 8	12	3.00	3.60	FBGA	Industrial	-40	85	N
CY7C107BN-15VC	NRND	1024	1M x 1	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C107BN-15VCT	NRND	1024	1M x 1	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C107D-10VXI	In Production	1024	1M x 1	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C107D-10VXIT	In Production	1024	1M x 1	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C109B-1XW14	In Production	1024	128K x 8	N/A	4.50	5.50	Wafer	Industrial	-40	85	N
CY7C109D-10VXI	In Production	1024	128K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C109D-10VXIT	In Production	1024	128K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C109D-10ZXI	In Production	1024	128K x 8	10	4.50	5.50	TSOP I	Industrial	-40	85	N
CY7C109D-10ZXIT	In Production	1024	128K x 8	10	4.50	5.50	TSOP I	Industrial	-40	85	N
CY7C1399BN-12VXC	In Production	256	32K x 8	12	3.00	3.60	SOJ	Commercial	0	70	N
CY7C1399BN-12VXCT	In Production	256	32K x 8	12	3.00	3.60	SOJ	Commercial	0	70	N
CY7C1399BN-12VXI	In Production	256	32K x 8	12	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1399BN-12VXIT	In Production	256	32K x 8	12	3.00	3.60	SOJ	Industrial	-40	85	N
CY7C1399BN-12ZXC	In Production	256	32K x 8	12	3.00	3.60	TSOP I	Commercial	0	70	N
CY7C1399BN-12ZXCT	In Production	256	32K x 8	12	3.00	3.60	TSOP I	Commercial	0	70	N
CY7C1399BN-15ZXI	In Production	256	32K x 8	15	3.00	3.60	TSOP I	Industrial	-40	85	N
CY7C1399BN-15ZXIT	In Production	256	32K x 8	15	3.00	3.60	TSOP I	Industrial	-40	85	N
CY7C1399BNL-12ZXC	In Production	256	32K x 8	12	3.00	3.60	TSOP I	Commercial	0	70	N
CY7C1399BNL-12ZXCT	In Production	256	32K x 8	12	3.00	3.60	TSOP I	Commercial	0	70	N
CY7C168A-20PXC	NRND	16	4K x 4	20	4.50	5.50	PDIP	Commercial	0	70	N
CY7C185-15VI	In Production	64	8K x 8	15	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C185-15VIT	In Production	64	8K x 8	15	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C185-20PXC	In Production	64	8K x 8	20	4.50	5.50	PDIP	Commercial	0	70	N
CY7C185-35SC	In Production	64	8K x 8	35	4.50	5.50	SOIC	Commercial	0	70	N
CY7C185-35SCT	In Production	64	8K x 8	35	4.50	5.50	SOIC	Commercial	0	70	N
CY7C188-20VC	NRND	256	32K x 9	20	4.50	5.50	SOJ	Commercial	0	70	N
CY7C188-20VCT	NRND	256	32K x 9	20	4.50	5.50	SOJ	Commercial	0	70	N
CY7C192-15VXC	In Production	256	64K x 4	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C192-15VXCT	In Production	256	64K x 4	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C194BN-15PC	In Production	256	64K x 4	15	4.50	5.50	PDIP	Commercial	0	70	N
CY7C194BN-15VC	In Production	256	64K x 4	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C194BN-15VCT	In Production	256	64K x 4	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C197BN-15VC	In Production	256	256K x 1	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C197BN-15VCT	In Production	256	256K x 1	15	4.50	5.50	SOJ	Commercial	0	70	N
CY7C197BN-25PC	NRND	256	256K x 1	25	4.50	5.50	PDIP	Commercial	0	70	N
CY7C197N-25PXC	In Production	256	256K x 1	25	4.50	5.50	PDIP	Commercial	0	70	N
CY7C199-1XW14	In Production	256	32K x 8	N/A	4.50	5.50	Wafer	Industrial	-40	85	N
CY7C199CN-12VXA	In Production	256	32K x 8	12	4.50	5.50	SOJ	Automotive(A)	-40	85	Y
CY7C199CN-12VXAT	In Production	256	32K x 8	12	4.50	5.50	SOJ	Automotive(A)	-40	85	Y
CY7C199CN-15PXC	In Production	256	32K x 8	15	4.50	5.50	PDIP	Commercial	0	70	N
CY7C199CN-20ZXI	NRND	256	32K x 8	20	4.50	5.50	TSOP I	Industrial	-40	85	N

Async Fast SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C199CN420ZXIT	NRND	256	32K x 8	20	4.50	5.50	TSOP I	Industrial	-40	85	N
CY7C199CNL15VXI	In Production	256	32K x 8	15	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C199CNL15VXIT	In Production	256	32K x 8	15	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C199D10VXI	In Production	256	32K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C199D10VXIT	In Production	256	32K x 8	10	4.50	5.50	SOJ	Industrial	-40	85	N
CY7C199D10ZXI	In Production	256	32K x 8	10	4.50	5.50	TSOP I	Industrial	-40	85	N
CY7C199D10ZXIT	In Production	256	32K x 8	10	4.50	5.50	TSOP I	Industrial	-40	85	N
CY7C199NL15ZXC	In Production	256	32K x 8	15	4.50	5.50	TSOP I	Commercial	0	70	N
CY7C199NL15ZXCT	In Production	256	32K x 8	15	4.50	5.50	TSOP I	Commercial	0	70	N
CYPT1049DV33-12CZSE	Contact Sales	4096	512K x 8	12	3.00	3.60	CERPAK	Military	-55	125	

Fast Asynchronous Part Number Decoder



Async Micropower (MoBL™) SRAMs

Cypress's micropower asynchronous SRAM product offerings range from 64 Kb to 64 Mb. Micropower SRAM devices are built on a high-efficiency 90 nm process technology, and offer industry-leading standby power dissipation (maximum) specifications. This makes them ideal for high-performance, battery powered and battery-backed solutions across a range of application segments.

CY62187EV30LL 64-Mbit MoBL™ SRAM The market's highest-density low-power SRAM

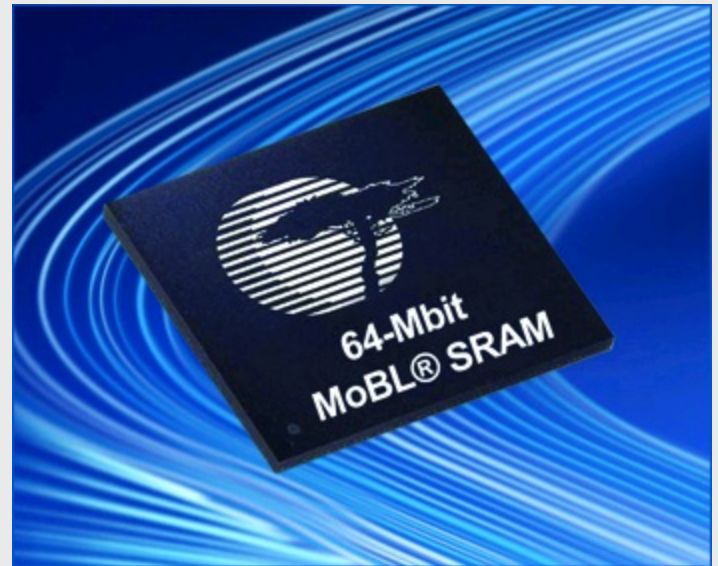
Features:

- 4 M x 16 configuration
- 8 μ A ultra-low standby current
- 55 ns access time (taa)
- RoHS-compliant 48-BGA package with a footprint of 8.0 x 9.5 x 1.4 mm, the smallest package option for a device of this density

The CY62187EV30LL-55BAXI, 64 Mb micropower asynchronous SRAM, is in production and available today.

Key Applications: Medical devices, PLC, consumer applications, and POS terminals

Learn more at www.cypress.com/go/64MoBL



Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY62125E-3XWI	In Production	1024	x8 / x16	N/A	1.65	5.5	Wafer	Industrial	-40	85	N
CY62126ESL-45ZSXA	In Production	1024	64K x 16	45	2.2	5.5	TSOP II	Automotive(A)	-40	85	Y
CY62126ESL-45ZSXAT	In Production	1024	64K x 16	45	2.2	5.5	TSOP II	Automotive(A)	-40	85	Y
CY62126ESL-45ZSXI	In Production	1024	64K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62126ESL-45ZSXIT	In Production	1024	64K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62126EV30LL-45BVXI	In Production	1024	64K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62126EV30LL-45BVXIT	In Production	1024	64K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62126EV30LL-45ZSXA	In Production	1024	64K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62126EV30LL-45ZSXAT	In Production	1024	64K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62126EV30LL-45ZSXI	In Production	1024	64K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62126EV30LL-45ZSXIT	In Production	1024	64K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62126EV30LL-55BVXE	In Production	1024	64K x 16	55	2.2	3.6	VFBGA	Automotive(E)	-40	125	Y
CY62126EV30LL-55BVXET	In Production	1024	64K x 16	55	2.2	3.6	VFBGA	Automotive(E)	-40	125	Y
CY62126EV30LL-55ZSXE	In Production	1024	64K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62126EV30LL-55ZSXET	In Production	1024	64K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62127DV30LL-55BVXI	In Production	1024	64K x 16	55	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62127DV30LL-55BVXIT	In Production	1024	64K x 16	55	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62127DV30LL-55ZXI	NRND	1024	64K x 16	55	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62127DV30LL-55ZXIT	NRND	1024	64K x 16	55	2.2	3.6	TSOP II	Industrial	-40	85	N
CY621282BNLL-70SXET	In Production	1024	128K x 8	70	4.5	5.5	SOIC	Automotive(E)	-40	125	Y
CY621282BNLL-70SXET	In Production	1024	128K x 8	70	4.5	5.5	SOIC	Automotive(E)	-40	125	Y
CY62128BNLL-55SXIT	NRND	1024	128K x 8	55	4.5	5.5	SOIC	Industrial	-40	85	N

Async Micropower (MoBL™) SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY62128BNLL-55ZXIT	NRND	1024	128K x 8	55	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62128ELL-45SXA	In Production	1024	128K x 8	45	4.5	5.5	SOIC	Automotive(A)	-40	85	Y
CY62128ELL-45SXAT	In Production	1024	128K x 8	45	4.5	5.5	SOIC	Automotive(A)	-40	85	Y
CY62128ELL-45SXI	In Production	1024	128K x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
CY62128ELL-45SXIT	In Production	1024	128K x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
CY62128ELL-45ZAXI	In Production	1024	128K x 8	45	4.5	5.5	STSOP	Industrial	-40	85	N
CY62128ELL-45ZAXIT	In Production	1024	128K x 8	45	4.5	5.5	STSOP	Industrial	-40	85	N
CY62128ELL-45ZXA	In Production	1024	128K x 8	45	4.5	5.5	TSOP I	Automotive(A)	-40	85	Y
CY62128ELL-45ZXAT	In Production	1024	128K x 8	45	4.5	5.5	TSOP I	Automotive(A)	-40	85	Y
CY62128ELL-45ZXI	In Production	1024	128K x 8	45	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62128ELL-45ZXIT	In Production	1024	128K x 8	45	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62128ELL-55SXE	In Production	1024	128K x 8	55	4.5	5.5	SOIC	Automotive(E)	-40	125	Y
CY62128ELL-55SXET	In Production	1024	128K x 8	55	4.5	5.5	SOIC	Automotive(E)	-40	125	Y
CY62128ELL-55ZAXE	In Production	1024	128K x 8	55	4.5	5.5	STSOP	Automotive(E)	-40	125	Y
CY62128ELL-55ZAXET	In Production	1024	128K x 8	55	4.5	5.5	STSOP	Automotive(E)	-40	125	Y
CY62128EV30LL-45SXA	In Production	1024	128K x 8	45	2.2	3.6	SOIC	Automotive(A)	-40	85	Y
CY62128EV30LL-45SXAT	In Production	1024	128K x 8	45	2.2	3.6	SOIC	Automotive(A)	-40	85	Y
CY62128EV30LL-45SXI	In Production	1024	128K x 8	45	2.2	3.6	SOIC	Industrial	-40	85	N
CY62128EV30LL-45SXIT	In Production	1024	128K x 8	45	2.2	3.6	SOIC	Industrial	-40	85	N
CY62128EV30LL-45ZAXA	In Production	1024	128K x 8	45	2.2	3.6	STSOP	Automotive(A)	-40	85	Y
CY62128EV30LL-45ZAXAT	In Production	1024	128K x 8	45	2.2	3.6	STSOP	Automotive(A)	-40	85	Y
CY62128EV30LL-45ZAXI	In Production	1024	128K x 8	45	2.2	3.6	STSOP	Industrial	-40	85	N
CY62128EV30LL-45ZAXIT	In Production	1024	128K x 8	45	2.2	3.6	STSOP	Industrial	-40	85	N
CY62128EV30LL-45ZXA	In Production	1024	128K x 8	45	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62128EV30LL-45ZXAT	In Production	1024	128K x 8	45	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62128EV30LL-45ZXI	In Production	1024	128K x 8	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62128EV30LL-45ZXIT	In Production	1024	128K x 8	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62128EV30LL-55SXE	In Production	1024	128K x 8	55	2.2	3.6	SOIC	Automotive(E)	-40	125	Y
CY62128EV30LL-55SXET	In Production	1024	128K x 8	55	2.2	3.6	SOIC	Automotive(E)	-40	125	Y
CY62128EV30LL-55ZXE	In Production	1024	128K x 8	55	2.2	3.6	TSOP I	Automotive(E)	-40	125	Y
CY62128EV30LL-55ZXET	In Production	1024	128K x 8	55	2.2	3.6	TSOP I	Automotive(E)	-40	125	Y
CY62135F-3XWI	In Production	2048	x8 / x16	N/A	1.65	5.5	Wafer	Industrial	-40	85	N
CY62135F-WAF	In Production	2048	x8 / x16	N/A	1.65	5.5	Wafer	Industrial	-40	85	N
CY62136ESL-45ZSXI	In Production	2048	128K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62136ESL-45ZSXIT	In Production	2048	128K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62136EV30LL-45BVXI	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62136EV30LL-45BVXIT	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62136EV30LL-45ZSXI	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62136EV30LL-45ZSXIT	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62136FV30LL-45BVXI	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62136FV30LL-45BVXIT	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62136FV30LL-45ZSXA	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62136FV30LL-45ZSXAT	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62136FV30LL-45ZSXI	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62136FV30LL-45ZSXIT	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62136FV30LL-55SXE	In Production	2048	128K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62136FV30LL-55SXET	In Production	2048	128K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62137EV30LL-45BVXI	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N

Async Micropower (MoBL™) SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY62137EV30LL-45BVXIT	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62137EV30LL-45ZSXI	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62137EV30LL-45ZSXIIT	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62137FV18LL-55BVXI	In Production	2048	128K x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62137FV18LL-55BVXIT	In Production	2048	128K x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62137FV30LL-45BVI	NRND	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62137FV30LL-45BVIT	NRND	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62137FV30LL-45BVXI	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62137FV30LL-45BVXIT	In Production	2048	128K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62137FV30LL-45ZSXA	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62137FV30LL-45ZSXAT	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62137FV30LL-45ZSXI	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62137FV30LL-45ZSXIIT	In Production	2048	128K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62137FV30LL-55ZSXE	In Production	2048	128K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62137FV30LL-55ZSXET	In Production	2048	128K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62138EV30LL-45BVXI	In Production	2048	256K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62138EV30LL-45BVXIT	In Production	2048	256K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62138FLL-45SXI	In Production	2048	256K x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
CY62138FLL-45SXIT	In Production	2048	256K x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
CY62138FLL-45ZSXI	NRND	2048	256K x 8	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62138FLL-45ZSXIT	NRND	2048	256K x 8	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62138FV30LL-45BVXI	In Production	2048	256K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62138FV30LL-45BVXIT	In Production	2048	256K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62138FV30LL-45SXI	In Production	2048	256K x 8	45	2.2	3.6	SOIC	Industrial	-40	85	N
CY62138FV30LL-45SXIT	In Production	2048	256K x 8	45	2.2	3.6	SOIC	Industrial	-40	85	N
CY62138FV30LL-45ZAXA	In Production	2048	256K x 8	45	2.2	3.6	STSOP	Automotive(A)	-40	85	Y
CY62138FV30LL-45ZAXAT	In Production	2048	256K x 8	45	2.2	3.6	STSOP	Automotive(A)	-40	85	Y
CY62138FV30LL-45ZAXI	In Production	2048	256K x 8	45	2.2	3.6	STSOP	Industrial	-40	85	N
CY62138FV30LL-45ZAXIT	In Production	2048	256K x 8	45	2.2	3.6	STSOP	Industrial	-40	85	N
CY62138FV30LL-45ZSXI	NRND	2048	256K x 8	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62138FV30LL-45ZSXIIT	NRND	2048	256K x 8	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62138FV30LL-45ZXI	In Production	2048	256K x 8	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62138FV30LL-45ZXIT	In Production	2048	256K x 8	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62145E-3XWI	In Production	4096	x8 / x16	N/A	1.65	5.5	Wafer	Industrial	-40	85	N
CY62146ELL-45ZSXA	In Production	4096	256K x 16	45	4.5	5.5	TSOP II	Automotive(A)	-40	85	Y
CY62146ELL-45ZSXAT	In Production	4096	256K x 16	45	4.5	5.5	TSOP II	Automotive(A)	-40	85	Y
CY62146ELL-45ZSXI	In Production	4096	256K x 16	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62146ELL-45ZSXIT	In Production	4096	256K x 16	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62146ESL-45ZSXI	In Production	4096	256K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62146ESL-45ZSXIT	In Production	4096	256K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62146EV30LL-45BVXI	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62146EV30LL-45BVXIT	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62146EV30LL-45ZSXA	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62146EV30LL-45ZSXAT	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62146EV30LL-45ZSXI	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62146EV30LL-45ZSXIIT	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY621472E30LL-45ZSXI	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY621472E30LL-45ZSXIIT	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N

Async Micropower (MoBL™) SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY62147EV18LL-55BVXI	In Production	4096	256K x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62147EV18LL-55BVXIT	In Production	4096	256K x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62147EV30LL-45B2XA	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Automotive(A)	-40	85	Y
CY62147EV30LL-45B2XAT	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Automotive(A)	-40	85	Y
CY62147EV30LL-45B2XI	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62147EV30LL-45B2XIT	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62147EV30LL-45BVI	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62147EV30LL-45BVIT	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62147EV30LL-45BVXA	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Automotive(A)	-40	85	Y
CY62147EV30LL-45BVXAT	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Automotive(A)	-40	85	Y
CY62147EV30LL-45BVXI	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62147EV30LL-45BVXIT	In Production	4096	256K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62147EV30LL-45ZSXA	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62147EV30LL-45ZSXAT	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62147EV30LL-45ZSXI	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62147EV30LL-45ZSXIT	In Production	4096	256K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62147EV30LL-55ZSXE	In Production	4096	256K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62147EV30LL-55ZSXET	In Production	4096	256K x 16	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62148DV30LL-55SXI	In Production	4096	512K x 8	55	2.2	3.6	SOIC	Industrial	-40	85	N
CY62148DV30LL-55SXIT	In Production	4096	512K x 8	55	2.2	3.6	SOIC	Industrial	-40	85	N
CY62148ELL-45ZSXA	In Production	4096	512K x 8	45	4.5	5.5	TSOP II	Automotive(A)	-40	85	Y
CY62148ELL-45ZSXAT	In Production	4096	512K x 8	45	4.5	5.5	TSOP II	Automotive(A)	-40	85	Y
CY62148ELL-45ZSXI	In Production	4096	512K x 8	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62148ELL-45ZSXIT	In Production	4096	512K x 8	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62148ELL-55SXA	In Production	4096	512K x 8	55	4.5	5.5	SOIC	Automotive(A)	-40	85	Y
CY62148ELL-55SXAT	In Production	4096	512K x 8	55	4.5	5.5	SOIC	Automotive(A)	-40	85	Y
CY62148ELL-55SXI	In Production	4096	512K x 8	55	4.5	5.5	SOIC	Industrial	-40	85	N
CY62148ELL-55SXIT	In Production	4096	512K x 8	55	4.5	5.5	SOIC	Industrial	-40	85	N
CY62148ESL-55ZAXA	In Production	4096	512K x 8	55	2.2	5.5	STSOP	Automotive(A)	-40	85	Y
CY62148ESL-55ZAXAT	In Production	4096	512K x 8	55	2.2	5.5	STSOP	Automotive(A)	-40	85	Y
CY62148ESL-55ZAXI	In Production	4096	512K x 8	55	2.2	5.5	STSOP	Industrial	-40	85	N
CY62148ESL-55ZAXIT	In Production	4096	512K x 8	55	2.2	5.5	STSOP	Industrial	-40	85	N
CY62148EV30LL-45BVI	In Production	4096	512K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62148EV30LL-45BVIT	In Production	4096	512K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62148EV30LL-45BVXI	In Production	4096	512K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62148EV30LL-45BVXIT	In Production	4096	512K x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62148EV30LL-45ZSXA	In Production	4096	512K x 8	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62148EV30LL-45ZSXAT	In Production	4096	512K x 8	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62148EV30LL-45ZSXI	In Production	4096	512K x 8	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62148EV30LL-45ZSXIT	In Production	4096	512K x 8	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62148EV30LL-55SXI	In Production	4096	512K x 8	55	2.2	3.6	SOIC	Industrial	-40	85	N
CY62148EV30LL-55SXIT	In Production	4096	512K x 8	55	2.2	3.6	SOIC	Industrial	-40	85	N
CY62148EV30LL-55ZSXE	In Production	4096	512K x 8	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62148EV30LL-55ZSXET	In Production	4096	512K x 8	55	2.2	3.6	TSOP II	Automotive(E)	-40	125	Y
CY62155E-3XWI	In Production	8192	x8 / x16	N/A	1.65	5.5	Wafer	Industrial	-40	85	N
CY62157DV30LL-55BVIT	NRND	8192	512K x 16	55	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62157ELL-45ZSXI	In Production	8192	512K x 16	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62157ELL-45ZSXIT	In Production	8192	512K x 16	45	4.5	5.5	TSOP II	Industrial	-40	85	N

Async Micropower (MoBL™) SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY62157ELL-55BVXE	In Production	8192	512K x 16	55	4.5	5.5	VFBGA	Automotive[E]	-40	125	Y
CY62157ELL-55BVXET	In Production	8192	512K x 16	55	4.5	5.5	VFBGA	Automotive[E]	-40	125	Y
CY62157ELL-55ZSXE	In Production	8192	512K x 16	55	4.5	5.5	TSOP II	Automotive[E]	-40	125	Y
CY62157ELL-55ZSXET	In Production	8192	512K x 16	55	4.5	5.5	TSOP II	Automotive[E]	-40	125	Y
CY62157ESL-45ZSXI	In Production	8192	512K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62157ESL-45ZSXIT	In Production	8192	512K x 16	45	2.2	5.5	TSOP II	Industrial	-40	85	N
CY62157EV18LL-55BVXI	In Production	8192	512K x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62157EV18LL-55BVXIT	In Production	8192	512K x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62157EV30LL-45BVI	In Production	8192	512K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62157EV30LL-45BVIT	In Production	8192	512K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62157EV30LL-45BVXA	In Production	8192	512K x 16	45	2.2	3.6	VFBGA	Automotive(A)	-40	85	Y
CY62157EV30LL-45BVXAT	In Production	8192	512K x 16	45	2.2	3.6	VFBGA	Automotive(A)	-40	85	Y
CY62157EV30LL-45BVXI	In Production	8192	512K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62157EV30LL-45BVXIT	In Production	8192	512K x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62157EV30LL-45ZSXA	In Production	8192	512K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62157EV30LL-45ZSXAT	In Production	8192	512K x 16	45	2.2	3.6	TSOP II	Automotive(A)	-40	85	Y
CY62157EV30LL-45ZSXI	In Production	8192	512K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62157EV30LL-45ZSXIT	In Production	8192	512K x 16	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62157EV30LL-45ZXAX	In Production	8192	512K x 16	45	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62157EV30LL-45ZXAT	In Production	8192	512K x 16	45	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62157EV30LL-45ZXI	In Production	8192	512K x 16	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62157EV30LL-45ZXIT	In Production	8192	512K x 16	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62157EV30LL-55ZSXE	In Production	8192	512K x 16	55	2.2	3.6	TSOP II	Automotive[E]	-40	125	Y
CY62157EV30LL-55ZSXET	In Production	8192	512K x 16	55	2.2	3.6	TSOP II	Automotive[E]	-40	125	Y
CY62157EV30LL-55ZSXE	In Production	8192	512K x 16	55	2.2	3.6	TSOP I	Automotive[E]	-40	125	Y
CY62157EV30LL-55ZSXET	In Production	8192	512K x 16	55	2.2	3.6	TSOP I	Automotive[E]	-40	125	Y
CY62158ELL-45ZSXI	In Production	8192	1M x 8	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62158ELL-45ZSXIT	In Production	8192	1M x 8	45	4.5	5.5	TSOP II	Industrial	-40	85	N
CY62158EV30LL-45BVXI	In Production	8192	1M x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62158EV30LL-45BVXIT	In Production	8192	1M x 8	45	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62158EV30LL-45ZSXI	In Production	8192	1M x 8	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62158EV30LL-45ZSXIT	In Production	8192	1M x 8	45	2.2	3.6	TSOP II	Industrial	-40	85	N
CY62165E-3XWI	In Production	16384	x8 / x16	N/A	1.65	5.5	Wafer	Industrial	-40	85	N
CY62167DV30LL-55BVI	In Production	16384	1M x 16	55	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62167DV30LL-55BVIT	In Production	16384	1M x 16	55	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62167DV30LL-55BVXI	In Production	16384	1M x 16	55	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62167DV30LL-55BVXIT	In Production	16384	1M x 16	55	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62167DV30LL-55ZXI	In Production	16384	x8 / x16	55	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62167DV30LL-55ZXIT	In Production	16384	x8 / x16	55	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62167DV30LL-70BVI	In Production	16384	1M x 16	70	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62167DV30LL-70BVIT	In Production	16384	1M x 16	70	2.2	3.6	VFBGA	Industrial	-40	85	N
CY62167ELL-45ZXI	In Production	16384	x8 / x16	45	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62167ELL-45ZXIT	In Production	16384	x8 / x16	45	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62167EV18LL-55BVI	In Production	16384	1M x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62167EV18LL-55BVIT	In Production	16384	1M x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62167EV18LL-55BVXI	In Production	16384	1M x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62167EV18LL-55BVXIT	In Production	16384	1M x 16	55	1.65	2.25	VFBGA	Industrial	-40	85	N
CY62167EV30LL-45BVI	In Production	16384	1M x 16	45	2.2	3.6	VFBGA	Industrial	-40	85	N

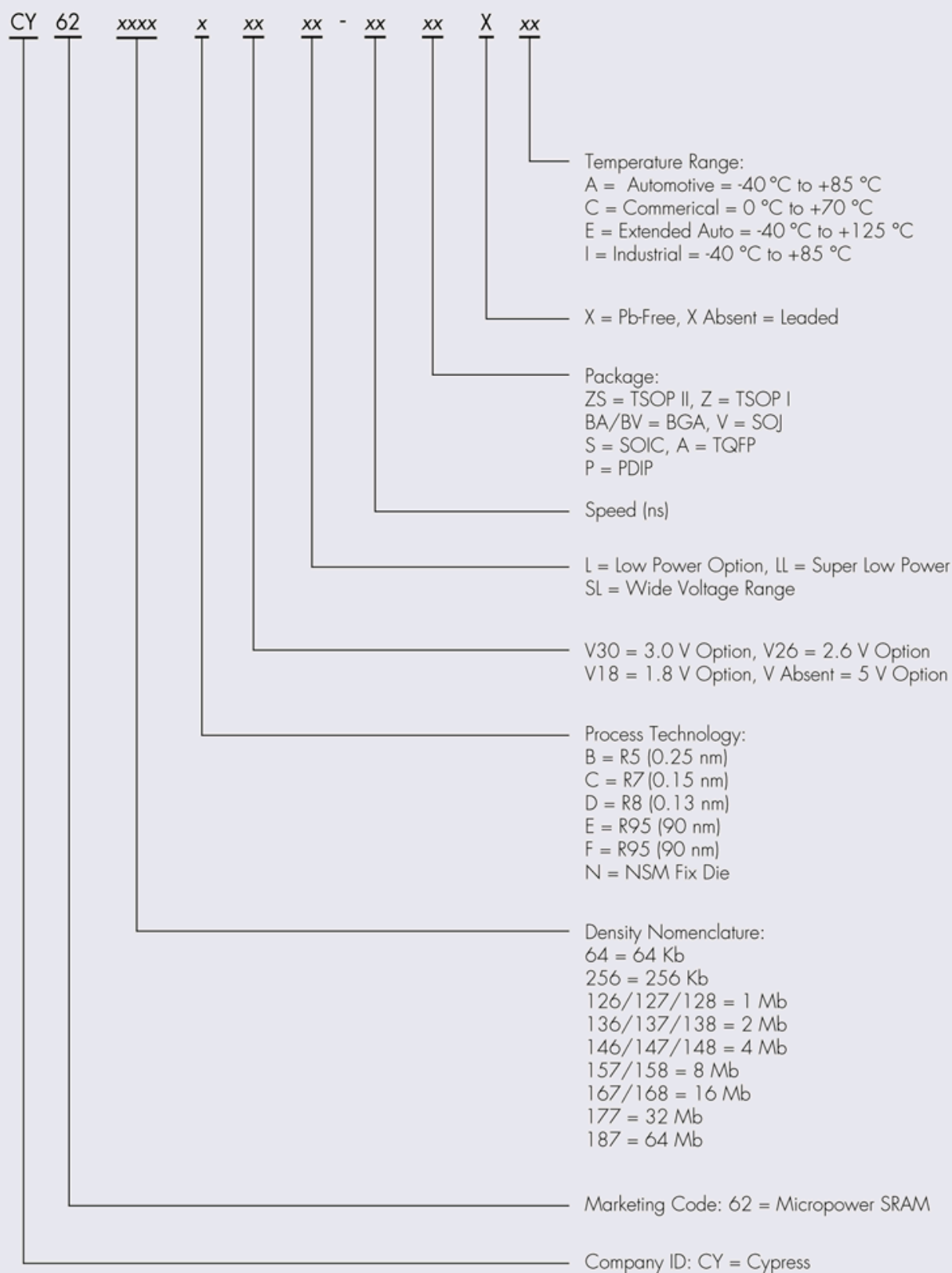
Async Micropower (MoBL™) SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY62167EV30LL-45BVIT	In Production	16384	1M x 16	45	2.2	3.6	VFPGA	Industrial	-40	85	N
CY62167EV30LL-45BVXA	In Production	16384	1M x 16	45	2.2	3.6	VFPGA	Automotive(A)	-40	85	Y
CY62167EV30LL-45BVXAT	In Production	16384	1M x 16	45	2.2	3.6	VFPGA	Automotive(A)	-40	85	Y
CY62167EV30LL-45BVXI	In Production	16384	1M x 16	45	2.2	3.6	VFPGA	Industrial	-40	85	N
CY62167EV30LL-45BVXIT	In Production	16384	1M x 16	45	2.2	3.6	VFPGA	Industrial	-40	85	N
CY62167EV30LL-45ZXAX	In Production	16384	1M x 16	45	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62167EV30LL-45ZXAT	In Production	16384	1M x 16	45	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62167EV30LL-45ZXI	In Production	16384	x8 / x16	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62167EV30LL-45ZXIT	In Production	16384	x8 / x16	45	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62168DV30LL-55BVI	In Production	16384	2M x 8	55	2.2	3.6	VFPGA	Industrial	-40	85	N
CY62168DV30LL-55BVIT	In Production	16384	2M x 8	55	2.2	3.6	VFPGA	Industrial	-40	85	N
CY62168EV30LL-45BVXI	In Production	16384	2M x 8	45	2.2	3.6	VFPGA	Industrial	-40	85	N
CY62168EV30LL-45BVXIT	In Production	16384	2M x 8	45	2.2	3.6	VFPGA	Industrial	-40	85	N
CY62177DV30LL-55BAXI	NRND	32768	2M x 16	55	2.2	3.6	FBGA	Industrial	-40	85	N
CY62177DV30LL-55BAXIT	NRND	32768	2M x 16	55	2.2	3.6	FBGA	Industrial	-40	85	N
CY62177ESL-55ZXI	In Production	32768	x8 / x16	55	2.2	5.5	TSOP I	Industrial	-40	85	N
CY62177ESL-55ZXIT	In Production	32768	x8 / x16	55	2.2	5.5	TSOP I	Industrial	-40	85	N
CY62177EV30LL-55BAXI	In Production	32768	2M x 16	55	2.2	3.6	FBGA	Industrial	-40	85	N
CY62177EV30LL-55BAXIT	In Production	32768	2M x 16	55	2.2	3.6	FBGA	Industrial	-40	85	N
CY62177EV30LL-55ZXI	In Production	32768	x8 / x16	55	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62177EV30LL-55ZXIT	In Production	32768	x8 / x16	55	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62187EV30LL-55BAXI	In Production	65536	4M x 16	55	2.2	3.6	FBGA	Industrial	-40	85	N
CY62187EV30LL-55BAXIT	In Production	65536	4M x 16	55	2.2	3.6	FBGA	Industrial	-40	85	N
CY62256EV18LL-70SNXI	In Production	256	32K x 8	70	1.65	2.25	SNC	Industrial	-40	85	N
CY62256EV18LL-70SNXIT	In Production	256	32K x 8	70	1.65	2.25	SNC	Industrial	-40	85	N
CY62256NLL-55SNXE	In Production	256	32K x 8	55	4.5	5.5	SNC	Automotive(E)	-40	125	Y
CY62256NLL-55SNXET	In Production	256	32K x 8	55	4.5	5.5	SNC	Automotive(E)	-40	125	Y
CY62256NLL-55SNXI	In Production	256	32K x 8	55	4.5	5.5	SNC	Industrial	-40	85	N
CY62256NLL-55SNXIT	In Production	256	32K x 8	55	4.5	5.5	SNC	Industrial	-40	85	N
CY62256NLL-55ZXAX	In Production	256	32K x 8	55	4.5	5.5	TSOP I	Automotive(A)	-40	85	Y
CY62256NLL-55ZXAT	In Production	256	32K x 8	55	4.5	5.5	TSOP I	Automotive(A)	-40	85	Y
CY62256NLL-55ZXEX	In Production	256	32K x 8	55	4.5	5.5	TSOP I	Automotive(E)	-40	125	Y
CY62256NLL-55ZXET	In Production	256	32K x 8	55	4.5	5.5	TSOP I	Automotive(E)	-40	125	Y
CY62256NLL-55ZXI	In Production	256	32K x 8	55	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62256NLL-55ZXIT	In Production	256	32K x 8	55	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62256NLL-70PXC	In Production	256	32K x 8	70	4.5	5.5	PDIP	Commercial	0	70	N
CY62256NLL-70SNXA	In Production	256	32K x 8	70	4.5	5.5	SOIC	Automotive(A)	-40	85	Y
CY62256NLL-70SNXAT	In Production	256	32K x 8	70	4.5	5.5	SOIC	Automotive(A)	-40	85	Y
CY62256NLL-70SNXC	In Production	256	32K x 8	70	4.5	5.5	SOIC	Commercial	0	70	N
CY62256NLL-70SNXCT	In Production	256	32K x 8	70	4.5	5.5	SOIC	Commercial	0	70	N
CY62256NLL-70ZRXI	In Production	256	32K x 8	70	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62256NLL-70ZRXIT	In Production	256	32K x 8	70	4.5	5.5	TSOP I	Industrial	-40	85	N
CY62256VNL-70SNXE	In Production	256	32K x 8	70	2.2	3.6	SNC	Automotive(E)	-40	125	Y
CY62256VNL-70SNXET	In Production	256	32K x 8	70	2.2	3.6	SNC	Automotive(E)	-40	125	Y
CY62256VNL-70SNXI	In Production	256	32K x 8	70	2.2	3.6	SNC	Industrial	-40	85	N
CY62256VNL-70SNXIT	In Production	256	32K x 8	70	2.2	3.6	SNC	Industrial	-40	85	N
CY62256VNL-70ZRXI	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62256VNL-70ZRXIT	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Industrial	-40	85	N

Async Micropower (MoBL™) SRAMs

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY62256VNLL-70ZXC	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Commercial	0	70	N
CY62256VNLL-70ZXT	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Commercial	0	70	N
CY62256VNLL-70ZXE	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62256VNLL-70ZXT	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Automotive(A)	-40	85	Y
CY62256VNLL-70ZXI	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Industrial	-40	85	N
CY62256VNLL-70ZXIT	In Production	256	32K x 8	70	2.2	3.6	TSOP I	Industrial	-40	85	N
CY6264-55SNXI	In Production	64	8K x 8	55	4.5	5.5	SNC	Industrial	-40	85	N
CY6264-55SNXIT	In Production	64	8K x 8	55	4.5	5.5	SNC	Industrial	-40	85	N
CY6264-70SNXA	NRND	64	8K x 8	70	4.5	5.5	SNC	Automotive(A)	-40	85	Y
CY6264-70SNXAT	NRND	64	8K x 8	N/A	4.5	5.5	SNC	Automotive(A)	-40	85	Y
CY6264-70SNXC	In Production	64	8K x 8	70	4.5	5.5	SNC	Commercial	0	70	N
CY6264-70SNXCT	In Production	64	8K x 8	70	4.5	5.5	SNC	Commercial	0	70	N

MicroPower SRAM Part Number Decoder



DUAL-PORT SRAMS

Cypress's high-density dual-ports are the ideal solutions for interprocessor communication in a wide range of industrial applications ranging from cellular base stations to image processing equipment.

- Densities: 8 Kb up to 36 Mb
- Voltage options: 5, 3.3, 1.8, and 1.5 V
- Operation: Synchronous and Asynchronous architectures
- Bus width: x8, x9, x16, x18, x36, and x72 configurations
- Distinguishing features: Variable Impedance Matching (VIM), Deterministic Access Control (DAC), Single Data Rate (SDR) mode, echo clocks, selectable I/O standards, and up to 200 MHz speeds

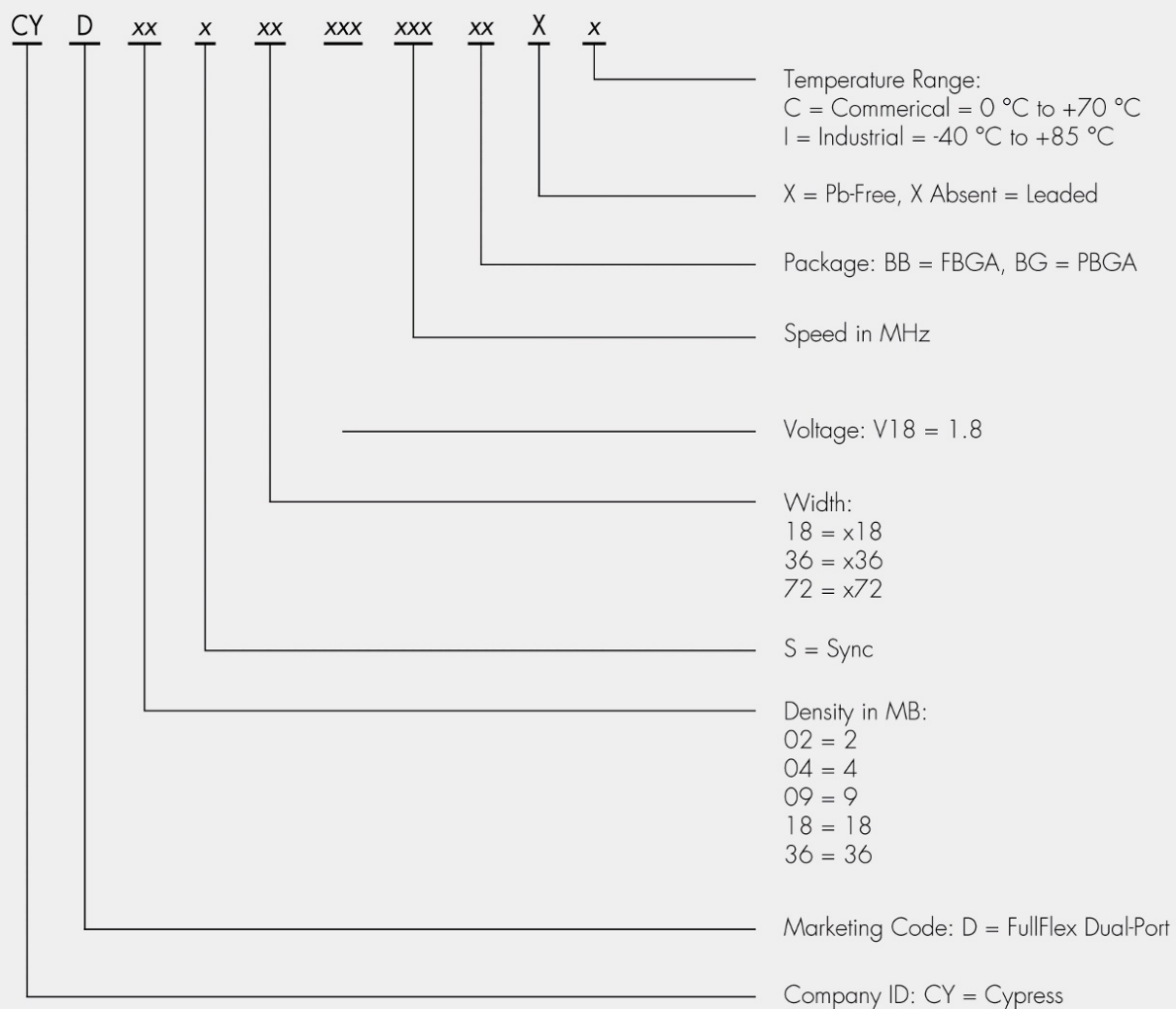
Download the Multiport's Cross Reference Guide at www.cypress.com/go/MultiPortCRG

Key Applications: Communication, industrial, military, avionics, medical imaging, and consumer

FullFlex Synchronous Dual Ports

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYD02S36V18-200BBC	In Production	2048	64Kb x 36	N/A	1.7	1.9	FBGA	Commercial	0	70	N
CYD09S18V18-167BBXI	In Production	9216	512Kb x 18	N/A	1.7	1.9	FBGA	Industrial	-40	85	N
CYD09S18V18-200BBXC	NRND	9216	512Kb x 18	N/A	1.7	1.9	FBGA	Commercial	0	70	N
CYD09S18V18-200BBXI	NRND	9216	512Kb x 18	N/A	1.7	1.9	FBGA	Industrial	-40	85	N
CYD09S36V18-167BBXC	In Production	9216	256Kb x 36	N/A	1.7	1.9	FBGA	Commercial	0	70	N
CYD09S36V18-200BBXC	NRND	9216	256Kb x 36	N/A	1.7	1.9	FBGA	Commercial	0	70	N
CYD09S36V18-200BBXI	In Production	9216	256Kb x 36	N/A	1.7	1.9	FBGA	Industrial	-40	85	N
CYD09S36V18-VWW14	In Production	9216	256Kb x 36	N/A	1.7	1.9	Wafer	Commercial	0	70	N
CYD09S72V18-167BBXC	In Production	9216	128Kb x 72	N/A	1.7	1.9	PBGA	Commercial	0	70	N
CYD09S72V18-200BGXI	NRND	9216	128Kb x 72	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD18S18V18-167BBAXI	In Production	18432	1Mb x 18	N/A	1.7	1.9	FBGA	Industrial	-40	85	N
CYD18S18V18-200BBAXC	In Production	18432	1Mb x 18	N/A	1.7	1.9	FBGA	Commercial	0	70	N
CYD18S18V18-200BBAXI	In Production	18432	1Mb x 18	N/A	1.7	1.9	FBGA	Industrial	-40	85	N
CYD18S36V18-167BBAXI	In Production	18432	512Kb x 36	N/A	1.7	1.9	FBGA	Industrial	-40	85	N
CYD18S36V18-200BBAXI	In Production	18432	512Kb x 36	N/A	1.7	1.9	FBGA	Industrial	-40	85	N
CYD18S72V18-167BGC	NRND	18432	256Kb x 72	N/A	1.7	1.9	PBGA	Commercial	0	70	N
CYD18S72V18-167BGI	In Production	18432	256Kb x 72	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD18S72V18-167BGXC	NRND	18432	256Kb x 72	N/A	1.7	1.9	PBGA	Commercial	0	70	N
CYD18S72V18-200BGI	In Production	18432	256Kb x 72	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD18S72V18-200BGXI	In Production	18432	256Kb x 72	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD36S18V18-167BGXC	NRND	36864	2Mb x 18	N/A	1.7	1.9	PBGA	Commercial	0	70	N
CYD36S18V18-167BGXI	In Production	36864	2Mb x 18	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD36S18V18-200BGXC	NRND	36864	2Mb x 18	N/A	1.7	1.9	PBGA	Commercial	0	70	N
CYD36S36V18-167BGXC	NRND	36864	1Mb x 36	N/A	1.7	1.9	PBGA	Commercial	0	70	N
CYD36S36V18-167BGXI	In Production	36864	1Mb x 36	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD36S36V18-200BGXC	NRND	36864	1Mb x 36	N/A	1.7	1.9	PBGA	Commercial	0	70	N
CYD36S72V18-167BGI	Contact Sales	36864	512Kb x 72	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD36S72V18-167BGXI	In Production	36864	512Kb x 72	N/A	1.7	1.9	PBGA	Industrial	-40	85	N
CYD36S72V18-200BGXC	In Production	36864	512Kb x 72	N/A	1.7	1.9	PBGA	Commercial	0	70	N

FullFlex Synchronous Dual-Port Part Number Decoder



Standard Asynchronous Dual Ports

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C006A-20AXC	In Production	128	16Kb x 8	20	4.5	5.5	TQFP	Commercial	0	70	N
CY7C006A-20AXCT	In Production	128	16Kb x 8	20	4.5	5.5	TQFP	Commercial	0	70	N
CY7C006A-20AXI	In Production	128	16Kb x 8	20	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C006A-20JXC	In Production	128	16Kb x 8	20	4.5	5.5	PLCC	Commercial	0	70	N
CY7C006A-20JXCT	In Production	128	16Kb x 8	20	4.5	5.5	PLCC	Commercial	0	70	N
CY7C006A-VW14	In Production	128	16Kb x 8	20	4.5	5.5	Wafer	Commercial	0	70	N
CY7C006AV-25AXC	In Production	128	16Kb x 8	25	3	3.6	TQFP	Commercial	0	70	N
CY7C009V-15AXC	In Production	1024	128Kb x 8	15	3	3.6	TQFP	Commercial	0	70	N
CY7C009V-20AXI	In Production	1024	128Kb x 8	20	3	3.6	TQFP	Industrial	-40	85	N
CY7C009V-25AXC	In Production	1024	128Kb x 8	25	3	3.6	TQFP	Commercial	0	70	N
CY7C0241E-15AXC	NRND	64	4Kb x 18	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C0241E-15AXCT	NRND	64	4Kb x 18	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C0241E-15AXI	NRND	64	4Kb x 18	15	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C0241E-25AXC	In Production	64	4Kb x 18	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C0241E-25AXCT	In Production	64	4Kb x 18	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C024AV-20AXC	In Production	64	4Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C024AV-20AXI	In Production	64	4Kb x 16	20	3	3.6	TQFP	Industrial	-40	85	N
CY7C024AV-25AXC	In Production	64	4Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C024AV-25AXCT	In Production	64	4Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C024AV-25AXI	In Production	64	4Kb x 16	25	3	3.6	TQFP	Industrial	-40	85	N
CY7C024E-15AXC	In Production	64	4Kb x 16	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C024E-15AXCT	In Production	64	4Kb x 16	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C024E-25AXC	In Production	64	4Kb x 16	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C024E-25AXCT	In Production	64	4Kb x 16	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C024E-25AXI	In Production	64	4Kb x 16	25	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C024E-55AXC	In Production	64	4Kb x 16	55	4.5	5.5	TQFP	Commercial	0	70	N
CY7C024E-55AXCT	In Production	64	4Kb x 16	55	4.5	5.5	TQFP	Commercial	0	70	N
CY7C0251E-15AXC	In Production	128	8Kb x 18	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C025AV-20AXC	In Production	128	8Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C025AV-25AXC	In Production	128	8Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C025AV-25AXCT	In Production	128	8Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C025AV-25AXI	In Production	128	8Kb x 16	25	3	3.6	TQFP	Industrial	-40	85	N
CY7C025E-25AXC	In Production	128	8Kb x 16	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C025E-25AXCT	In Production	128	8Kb x 16	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C025E-25AXI	In Production	128	8Kb x 16	25	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C025E-55AXC	In Production	128	8Kb x 16	55	4.5	5.5	TQFP	Commercial	0	70	N
CY7C026A-15AXI	In Production	256	16Kb x 16	15	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C026A-20AXC	In Production	256	16Kb x 16	20	4.5	5.5	TQFP	Commercial	0	70	N
CY7C026A-20AXCT	In Production	256	16Kb x 16	20	4.5	5.5	TQFP	Commercial	0	70	N
CY7C026AV-20AXC	In Production	256	16Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C026AV-25AC	NRND	256	16Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C026AV-25AI	In Production	256	16Kb x 16	25	3	3.6	TQFP	Industrial	-40	85	N
CY7C026AV-25AXC	In Production	256	16Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C026AV-25AXI	In Production	256	16Kb x 16	25	3	3.6	TQFP	Industrial	-40	85	N
CY7C027-20AXC	In Production	512	32Kb x 16	20	4.5	5.5	TQFP	Commercial	0	70	N
CY7C027-20AXCT	In Production	512	32Kb x 16	20	4.5	5.5	TQFP	Commercial	0	70	N
CY7C027-20AXIT	In Production	512	32Kb x 16	20	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C027AV-25AXI	In Production	512	32Kb x 16	25	3	3.6	TQFP	Industrial	-40	85	N
CY7C027V-15AXC	In Production	512	32Kb x 16	15	3	3.6	TQFP	Commercial	0	70	N
CY7C027V-15AXCT	In Production	512	32Kb x 16	15	3	3.6	TQFP	Commercial	0	70	N

Standard Asynchronous Dual Ports

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C027V15AXI	In Production	512	32Kb x 16	15	3	3.6	TQFP	Industrial	-40	85	N
CY7C027V15AXIT	In Production	512	32Kb x 16	15	3	3.6	TQFP	Industrial	-40	85	N
CY7C027V20AC	In Production	512	32Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C027V20AXC	In Production	512	32Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C027V25AC	In Production	512	32Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C027V25AXC	In Production	512	32Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C028-15AI	In Production	1024	64Kb x 16	15	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C028-15AXC	In Production	1024	64Kb x 16	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C028-15AXI	In Production	1024	64Kb x 16	15	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C028V15AXC	In Production	1024	64Kb x 16	15	3	3.6	TQFP	Commercial	0	70	N
CY7C028V15AXI	In Production	1024	64Kb x 16	15	3	3.6	TQFP	Industrial	-40	85	N
CY7C028V15AXIT	In Production	1024	64Kb x 16	15	3	3.6	TQFP	Industrial	-40	85	N
CY7C028V20AC	NRND	1024	64Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C028V20ACT	NRND	1024	64Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C028V20AI	In Production	1024	64Kb x 16	20	3	3.6	TQFP	Industrial	-40	85	N
CY7C028V20AXC	In Production	1024	64Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C028V20AXCT	In Production	1024	64Kb x 16	20	3	3.6	TQFP	Commercial	0	70	N
CY7C028V20AXI	In Production	1024	64Kb x 16	20	3	3.6	TQFP	Industrial	-40	85	N
CY7C028V25AC	In Production	1024	64Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C028V25AXC	In Production	1024	64Kb x 16	25	3	3.6	TQFP	Commercial	0	70	N
CY7C037AV20AXC	In Production	512	32Kb x 18	20	3	3.6	TQFP	Commercial	0	70	N
CY7C038V20AXI	In Production	1024	64Kb x 18	20	3	3.6	TQFP	Industrial	-40	85	N
CY7C056V15AXC	In Production	512	16Kb x 36	15	3	3.6	TQFP	Commercial	0	70	N
CY7C057V12AXC	In Production	1024	32Kb x 36	12	3	3.6	TQFP	Commercial	0	70	N
CY7C057V15AXC	In Production	1024	32Kb x 36	15	3	3.6	TQFP	Commercial	0	70	N
CY7C057V15AXCT	In Production	1024	32Kb x 36	15	3	3.6	TQFP	Commercial	0	70	N
CY7C057V15AXI	In Production	1024	32Kb x 36	15	3	3.6	TQFP	Industrial	-40	85	N
CY7C057V15BBI	In Production	1024	32Kb x 36	15	3	3.6	BGA	Industrial	-40	85	N
CY7C057V15BBXC	In Production	1024	32Kb x 36	15	3	3.6	BGA	Commercial	0	70	N
CY7C130-55PC	In Production	8	1Kb x 8	55	4.5	5.5	DIP	Commercial	0	70	N
CY7C131AE-15JXI	In Production	8	1Kb x 8	15	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C131E-15NXI	In Production	8	1Kb x 8	15	4.5	5.5	PQFP	Industrial	-40	85	N
CY7C131E-25JXC	In Production	8	1Kb x 8	25	4.5	5.5	PLCC	Commercial	0	70	N
CY7C131E-25JXCT	In Production	8	1Kb x 8	25	4.5	5.5	PLCC	Commercial	0	70	N
CY7C131E-25NXC	In Production	8	1Kb x 8	25	4.5	5.5	PQFP	Commercial	0	70	N
CY7C131E-25NXCT	In Production	8	1Kb x 8	25	4.5	5.5	PQFP	Commercial	0	70	N
CY7C131E-55JXC	In Production	8	1Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N
CY7C131E-55JXCT	In Production	8	1Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N
CY7C131E-55JXI	In Production	8	1Kb x 8	55	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C131E-55JXIT	In Production	8	1Kb x 8	55	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C131E-55NXC	In Production	8	1Kb x 8	55	4.5	5.5	PQFP	Commercial	0	70	N
CY7C131E-55NXCT	In Production	8	1Kb x 8	55	4.5	5.5	PQFP	Commercial	0	70	N
CY7C131E-55NXI	In Production	8	1Kb x 8	55	4.5	5.5	PQFP	Industrial	-40	85	N
CY7C135-15JXC	In Production	32	4Kb x 8	15	4.5	5.5	PLCC	Commercial	0	70	N
CY7C135-25JXI	NRND	32	4Kb x 8	25	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C136-25NC	NRND	16	2Kb x 8	25	4.5	5.5	PQFP	Commercial	0	70	N
CY7C136AE-55JXI	In Production	16	2Kb x 8	55	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C136AE-55NXI	In Production	16	2Kb x 8	55	4.5	5.5	PQFP	Industrial	-40	85	N
CY7C136AE-55NXIT	In Production	16	2Kb x 8	55	4.5	5.5	PQFP	Industrial	-40	85	N
CY7C136E-25JXC	In Production	16	2Kb x 8	25	4.5	5.5	PLCC	Commercial	0	70	N

Standard Asynchronous Dual Ports

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C136E-25JXCT	In Production	16	2Kb x 8	25	4.5	5.5	PLCC	Commercial	0	70	N
CY7C136E-25JXI	In Production	16	2Kb x 8	25	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C136E-25NXC	In Production	16	2Kb x 8	25	4.5	5.5	PQFP	Commercial	0	70	N
CY7C136E-55JXC	In Production	16	2Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N
CY7C136E-55JXCT	In Production	16	2Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N
CY7C136E-55NXC	In Production	16	2Kb x 8	55	4.5	5.5	PQFP	Commercial	0	70	N
CY7C136E-55NXCT	In Production	16	2Kb x 8	55	4.5	5.5	PQFP	Commercial	0	70	N
CY7C144AV-25AXC	In Production	64	8Kb x 8	25	3	3.6	TQFP	Commercial	0	70	N
CY7C144AV-25AXCT	In Production	64	8Kb x 8	25	3	3.6	TQFP	Commercial	0	70	N
CY7C144E-15AXC	In Production	64	8Kb x 8	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C144E-15AXCT	In Production	64	8Kb x 8	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C144E-15AXI	In Production	64	8Kb x 8	15	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C144E-15AXIT	In Production	64	8Kb x 8	15	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C144E-15JXI	In Production	64	8Kb x 8	15	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C144E-25AXC	In Production	64	8Kb x 8	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C144E-55AXC	In Production	64	8Kb x 8	25	4.5	5.5	TQFP	Commercial	0	70	N
CY7C144E-55JXC	In Production	64	8Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N
CY7C144E-55JXCT	In Production	64	8Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N
CY7C146-55JXC	NRND	16	2Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N
CY7C146-55JXCT	NRND	16	2Kb x 8	55	4.5	5.5	PLCC	Commercial	0	70	N

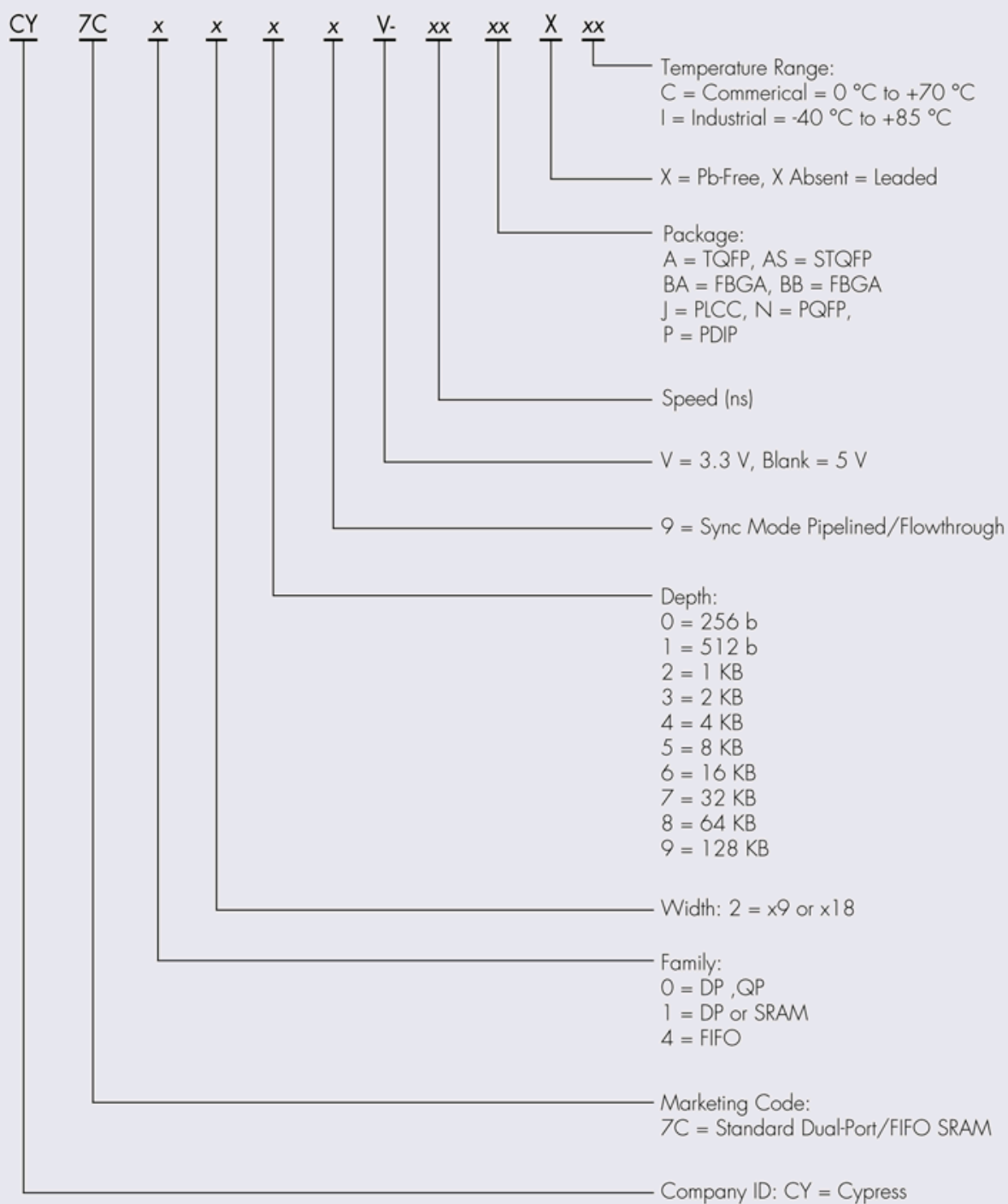
Standard Synchronous Dual Ports

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C0831AV-133AXI	In Production	2048	128Kb x 18	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C0832AV-133AXI	In Production	4096	256Kb x 18	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C0832AV-167AXC	In Production	4096	256Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C0832BV-133AI	In Production	4096	256Kb x 18	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C0833V-100BBI	In Production	9216	512Kb x 18	N/A	3	3.6	FBGA	Industrial	-40	85	N
CY7C0851AV-133AXI	In Production	2048	64Kb x 36	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C0851AV-133BBI	In Production	2048	64Kb x 36	N/A	3	3.6	FBGA	Industrial	-40	85	N
CY7C0851AV-167BBXC	In Production	2048	64Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C0851V-167BBC	In Production	2048	64Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C0852AV-133AXC	In Production	4096	128Kb x 36	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C0852AV-133AXI	In Production	4096	128Kb x 36	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C0852AV-133BBI	In Production	4096	128Kb x 36	N/A	3	3.6	FBGA	Industrial	-40	85	N
CY7C0852AV-167AXC	In Production	4096	128Kb x 36	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C0852V-133BBC	In Production	4096	128Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C0852V-133BBCT	In Production	4096	128Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C0852V-133BBI	In Production	4096	128Kb x 36	N/A	3	3.6	FBGA	Industrial	-40	85	N
CY7C0852V-167BBC	In Production	4096	128Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C0852VWW14	In Production	4096	128Kb x 36	N/A	3	3.6	Wafer	Commercial	0	70	N
CY7C0853AV-100BBI	In Production	9216	256Kb x 36	N/A	3	3.6	FBGA	Industrial	-40	85	N
CY7C0853V-100BBC	In Production	9216	256Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N

Standard Synchronous Dual Ports

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C0853V133BBC	In Production	9216	256Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C0853V133BBI	In Production	9216	256Kb x 36	N/A	3	3.6	FBGA	Industrial	-40	85	N
CY7C0853V133BBXI	In Production	9216	256Kb x 36	N/A	3	3.6	FBGA	Industrial	-40	85	N
CY7C09089V12AXI	NRND	512	64Kb x 8	12	3	3.6	TQFP	Industrial	-40	85	N
CY7C09099V12AXC	In Production	1024	128Kb x 8	12	3	3.6	TQFP	Commercial	0	70	N
CY7C09099V7AXI	In Production	1024	128Kb x 8	7	3	3.6	TQFP	Industrial	-40	85	N
CY7C09159AV9AXC	In Production	64	8Kb x 9	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09179V12AXC	In Production	256	32Kb x 9	12	3	3.6	TQFP	Commercial	0	70	N
CY7C09179V6AXC	NRND	256	32Kb x 9	6	3	3.6	TQFP	Commercial	0	70	N
CY7C09199V9AXC	NRND	1024	128Kb x 9	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09269V12AXC	In Production	256	16Kb x 16	12	3	3.6	TQFP	Commercial	0	70	N
CY7C09269V7AXC	NRND	256	16Kb x 16	7	3	3.6	TQFP	Commercial	0	70	N
CY7C09269V9AXC	In Production	256	16Kb x 16	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09279V12AXC	In Production	512	32Kb x 16	12	3	3.6	TQFP	Commercial	0	70	N
CY7C09279V7AXC	In Production	512	32Kb x 16	7	3	3.6	TQFP	Commercial	0	70	N
CY7C09289V12AXC	In Production	1024	64Kb x 16	12	3	3.6	TQFP	Commercial	0	70	N
CY7C09289V9AC	NRND	1024	64Kb x 16	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09289V9AXC	In Production	1024	64Kb x 16	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09289V9AXI	In Production	1024	64Kb x 16	9	3	3.6	TQFP	Industrial	-40	85	N
CY7C09349AV12AXC	In Production	64	4Kb x 18	12	3	3.6	TQFP	Commercial	0	70	N
CY7C09349AV9AXC	In Production	64	4Kb x 18	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09359AV9AXC	NRND	128	8Kb x 18	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09369V12AXC	In Production	256	16Kb x 18	12	3	3.6	TQFP	Commercial	0	70	N
CY7C09369V9AXC	In Production	256	16Kb x 18	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09369V9AXCT	In Production	256	16Kb x 18	9	3	3.6	TQFP	Commercial	0	70	N
CY7C09389V7AXC	NRND	1024	64Kb x 18	7	3	3.6	TQFP	Commercial	0	70	N
CY7C09389V9AI	In Production	1024	64Kb x 18	9	3	3.6	TQFP	Industrial	-40	85	N
CY7C09569V100AXC	In Production	512	16Kb x 36	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C09569V100BBC	NRND	512	16Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C09579V100AC	NRND	1024	32Kb x 36	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C09579V100AXC	In Production	1024	32Kb x 36	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C09579V100BBC	In Production	1024	32Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CY7C09579V83AC	NRND	1024	32Kb x 36	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C09579V83AXC	In Production	1024	32Kb x 36	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C09579V83BBC	In Production	1024	32Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CYD02S36VA-167BBC	In Production	2048	64Kb x 36	N/A	3	3.6	FBGA	Commercial	0	70	N
CYD04S72V-167BBC	NRND	4096	64Kb x 72	N/A	3	3.6	FBGA	Commercial	0	70	N
CYD09S72V133BBC	In Production	9216	128Kb x 72	N/A	3	3.6	FBGA	Commercial	0	70	N
CYD18S72V100BBC	In Production	18432	256Kb x 72	N/A	3	3.6	FBGA	Commercial	0	70	N
CYD18S72V100BBI	In Production	18432	256Kb x 72	N/A	3	3.6	FBGA	Industrial	-40	85	N
CYD18S72V133BBI	In Production	18432	256Kb x 72	N/A	3	3.6	FBGA	Industrial	-40	85	N

Standard Synchronous Dual-Port Interconnect Part Number Decoder



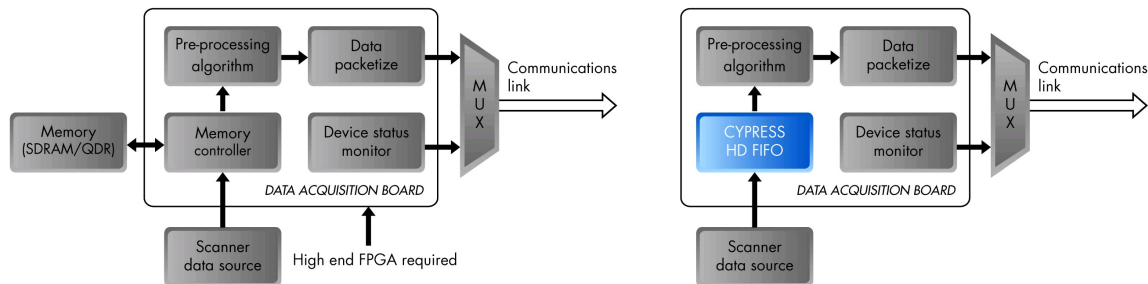
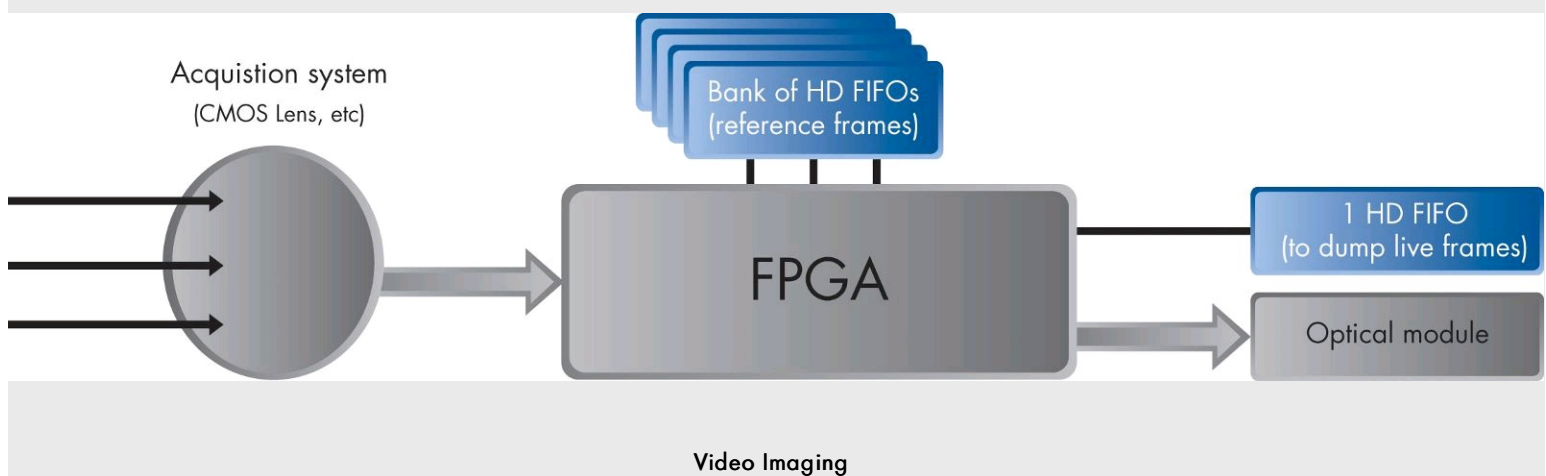
FIFOS

Cypress's high performance First In First Out (FIFO) products provide the ideal solution to interconnect problems such as flow control, rate matching, and bus matching for various markets such as video, data, telecommunications, and network switching/routing.

HIGH DENSITY FIFOS WITH PROGRAMMABLE FEATURES

High density FIFO solutions have programmable features that address varied segments such as video broadcasting, military, medical imaging, and base stations. The industry's largest offered HD FIFO memory densities are 18 Mb, 36 Mb, 72 Mb, and 144 Mb. Selectable memory organizations come with x9, x18, x36 (networking), x12, x16, x20, x24, and x32. The solutions come with up to 133-MHz clock and unidirectional operation. They possess user selectable parts for queue operating mode and user selectable LVCMOS/HSTL/LVTTL input and output. Various combinations for part offering are possible depending on customer requirements and feature priorities. Cypress's high-performance FIFO products provide the ideal solution to interconnect problems such as flow control, rate matching, and bus matching.

Key Applications: Frame buffer for common HD formats (720p, 1080i, and 1080p), HDTV/SDTV frame synchronization: switcher or format converter box, video buffering for security systems, military radar for large buffering, and medical imaging.



Medical Imaging

Asynchronous

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C421-15AXC	In Production	4	512b x 9	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C421-15AXCT	In Production	4	512b x 9	15	4.5	5.5	TQFP	Commercial	0	70	N
CY7C421-20JXC	In Production	4	512b x 9	20	4.5	5.5	PLCC	Commercial	0	70	N
CY7C421-20JXCT	In Production	4	512b x 9	20	4.5	5.5	PLCC	Commercial	0	70	N
CY7C421-20JXI	NRND	4	512b x 9	20	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C421-20VXC	In Production	4	512b x 9	20	4.5	5.5	SOJ	Commercial	0	70	N
CY7C421-20VXCT	In Production	4	512b x 9	20	4.5	5.5	SOJ	Commercial	0	70	N

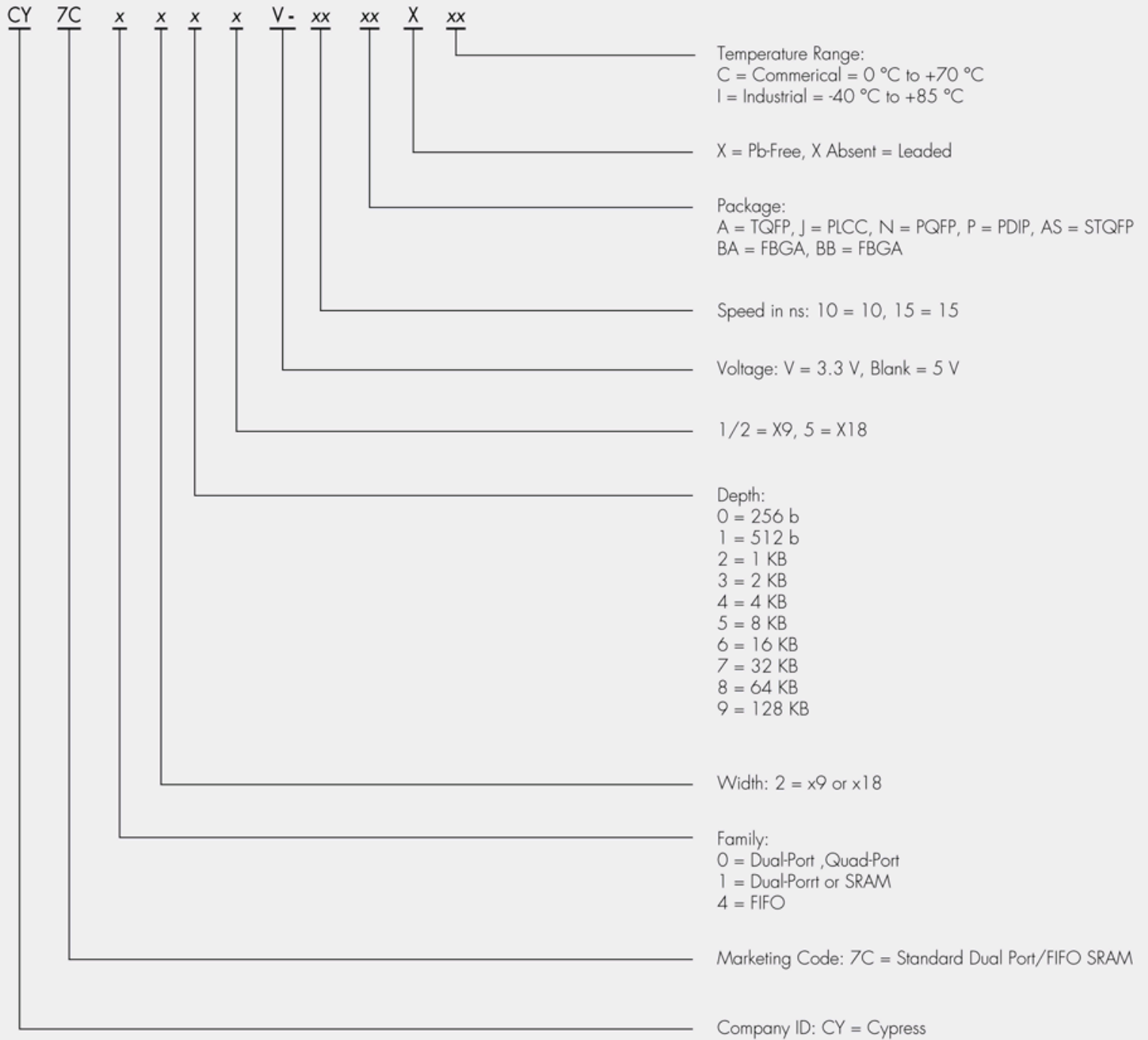
Synchronous

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C4201V-15AXC	In Production	2	256b x 9	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4201V-15AXCT	In Production	2	256b x 9	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4211V-15AI	NRND	4	512b x 9	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C4211V-15AIT	NRND	4	512b x 9	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C4211V-15AXI	In Production	4	512b x 9	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C4215-15AXI	NRND	8	512b x 18	N/A	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C4215-15AXIT	NRND	8	512b x 18	N/A	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C4221-15AXC	NRND	8	1Kb x 9	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4221-15AXCT	NRND	8	1Kb x 9	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4221-15JXC	NRND	8	1Kb x 9	N/A	4.5	5.5	PLCC	Commercial	0	70	N
CY7C4221-15JXCT	NRND	8	1Kb x 9	N/A	4.5	5.5	PLCC	Commercial	0	70	N
CY7C4225-10AXI	In Production	16	1Kb x 18	N/A	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C4225-15ASXC	In Production	16	1Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4225-15AXC	In Production	16	1Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4225-15AXCT	In Production	16	1Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4231-15AXC	NRND	16	2Kb x 9	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4231-15JXC	NRND	16	2Kb x 9	N/A	4.5	5.5	PLCC	Commercial	0	70	N
CY7C4231-15JXCT	NRND	16	2Kb x 9	N/A	4.5	5.5	PLCC	Commercial	0	70	N
CY7C4245-10AXI	In Production	64	4Kb x 18	N/A	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C4245-15ASXC	In Production	64	4Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4245-15AXC	NRND	64	4Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4245-15AXCT	NRND	64	4Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4255V-10ASC	NRND	128	8Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4255V-10ASXC	In Production	128	8Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4255V-15ASC	NRND	128	8Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4255V-15ASI	In Production	128	8Kb x 18	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C4255V-15ASXC	In Production	128	8Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4255V-15ASXI	NRND	128	8Kb x 18	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C4261-10JXI	In Production	128	16Kb x 9	N/A	4.5	5.5	PLCC	Industrial	-40	85	N
CY7C4261V-10JXC	In Production	128	16Kb x 9	N/A	3	3.6	PLCC	Commercial	0	70	N

Synchronous

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C4261V15JXC	In Production	128	16Kb x 9	N/A	3	3.6	PLCC	Commercial	0	70	N
CY7C4265-10AI	NRND	256	16Kb x 18	N/A	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C4265-10ASXC	In Production	256	16Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4265-10AXI	In Production	256	16Kb x 18	N/A	4.5	5.5	TQFP	Industrial	-40	85	N
CY7C4265-15AXC	In Production	256	16Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4265-15AXCT	In Production	256	16Kb x 18	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4265V15ASC	NRND	256	16Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4265V15ASCT	NRND	256	16Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4271-15AXC	In Production	256	32Kb x 9	N/A	4.5	5.5	TQFP	Commercial	0	70	N
CY7C4271V10JXC	NRND	256	32Kb x 9	N/A	3	3.6	PLCC	Commercial	0	70	N
CY7C4275V15ASC	NRND	512	32Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4275V15ASXC	In Production	512	32Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4281V10JXC	In Production	512	64Kb x 9	N/A	3	3.6	PLCC	Commercial	0	70	N
CY7C4285V10ASC	In Production	1024	64Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4285V10ASXC	In Production	1024	64Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4285V15ASC	In Production	1024	64Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4285V15ASI	NRND	1024	64Kb x 18	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C4285V15ASXC	In Production	1024	64Kb x 18	N/A	3	3.6	TQFP	Commercial	0	70	N
CY7C4285V15ASXI	In Production	1024	64Kb x 18	N/A	3	3.6	TQFP	Industrial	-40	85	N
CY7C4291V10JXC	NRND	1024	128Kb x 9	N/A	3	3.6	PLCC	Commercial	0	70	N
CY7C4291V15JXC	In Production	1024	128Kb x 9	N/A	3	3.6	PLCC	Commercial	0	70	N
CYF0018V18L-133BGXI	In Production	18432	512Kb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF0018V33L-133BGXI	In Production	18432	512Kb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF0036V18L-133BGXI	Contact Sales	36864	1Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF0036V33L-133BGXI	In Production	36864	1Mb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF0072V18L-133BGXI	In Production	73728	2Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF0072V33L-133BGXI	In Production	73728	2Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF0144V33L-133BGXI	Contact Sales	147456	4Mb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF1018V18L-100BGXI	Contact Sales	18432	512Kb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF1018V33L-100BGXI	Contact Sales	18432	512Kb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF1036V18L-100BGXI	Contact Sales	36864	1Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF1036V33L-100BGXI	Contact Sales	36864	1Mb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF1072V18L-100BGXI	Contact Sales	73728	2Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF1072V33L-100BGXI	Contact Sales	73728	2Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF2018V18L-100BGXI	Contact Sales	18432	512Kb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF2018V33L-100BGXI	Contact Sales	18432	512Kb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF2036V18L-100BGXI	Contact Sales	36864	1Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF2036V33L-100BGXI	Contact Sales	36864	1Mb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF2072V18L-100BGXI	Contact Sales	73728	2Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF2072V33L-100BGXI	In Production	73728	2Mb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N
CYF2144V18L-100BGXI	Contact Sales	147456	4Mb x 36	N/A	1.7	1.9	BGA	Industrial	-40	85	N
CYF2144V33L-100BGXI	Contact Sales	147456	4Mb x 36	N/A	3	3.6	BGA	Industrial	-40	85	N

Synchronous FIFO Part Number Decoder



MOBL DUAL-PORTS

Cypress offers a variety of high performance and low power Inter-Processor Communication (IPC) solutions. These interconnects allow IPC between multiple processors in various applications. Our MoBL family of Dual-Ports is specially optimized for consumer and handheld devices.

ConsuMoBL Dual-Port

High-performance, low power, small package, optimized price are the 4Ps for consumer market. Today's consumer electronics market is challenged to provide new services such as DVR, triple play, and on-demand video. This increase in features and functions has led to systems with different application-specific processing units that have to share data. The ConsuMoBL Dual-Ports provide a simplified IPC and allow architects to create a modular platform that provides quick design turnaround.

Part Number	Status	Bus Width (bits)	Depth (K)	Interface Type	Type	Density (Kb)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)
CYDC128B16-55AXI	In Production	16	8	SRAM only	Asynchronous	128	55	1.8	3.3	TQFP	-40

MoBL™ ADM Dual-Port

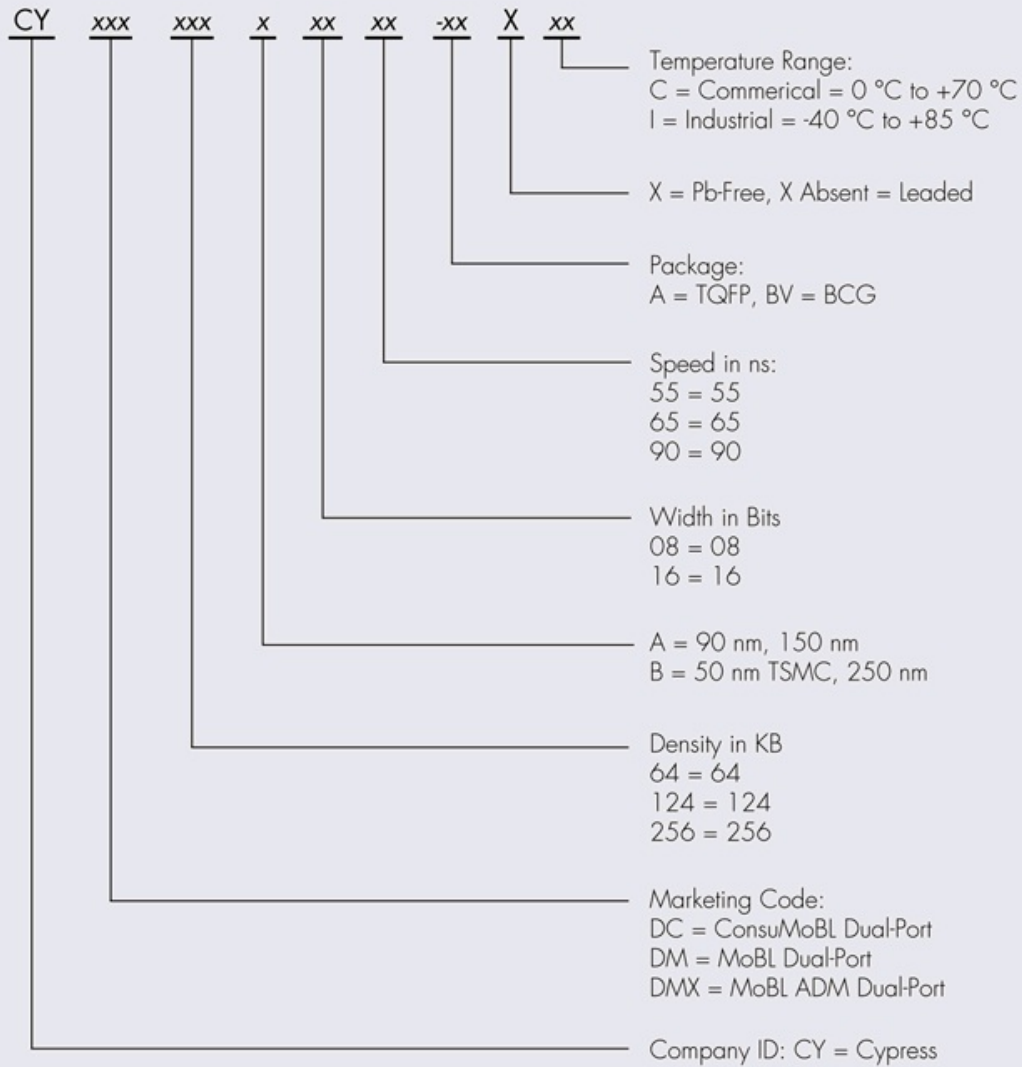
MoBL Dual-Port™ and MoBL ADM Dual-Port™ are small, low power and flexible — perfect for mobile handsets. The newer and faster wireless standards (WCDMA, TD-SCDMA, LTE, WiMax, etc.) and the increasing use of multi-media (apps, music, video etc.) require dual processor architecture in mobile handsets, especially smartphones. Cypress's MoBL Dual-Port family offers the industry's lowest power, fastest throughput, and optimal size to enable IPC between the baseband and applications processor.

Part Number	Status	Bus Width (bits)	Depth (K)	Interface Type	Type	Density (Kb)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)
CYDMX128A16-65BVXI	In Production	16	8	SRAM and ADMux	Asynchronous	128	65	1.8	3.3	BGA	-40
CYDMX128A16-65BVXIT	In Production	16	8	SRAM and ADMux	Asynchronous	128	65	1.8	3.3	BGA	-40
CYDMX128B16-65BVXI	In Production	16	8	SRAM and ADMux	Asynchronous	128	65	1.8	3.3	BGA	-40
CYDMX256A16-65BVXI	In Production	16	16	SRAM and ADMux	Asynchronous	256	65	1.8	3.3	BGA	-40
CYDMX256A16-90BVXI	In Production	16	16	SRAM and ADMux	Asynchronous	256	90	1.8	3.3	BGA	-40
CYDMX256B16-65BVXI	Sampling	16	16	SRAM and ADMux	Asynchronous	256	65	1.8	3.3	BGA	-40

MoBL™ Dual-Port

Part Number	Status	Bus Width (bits)	Depth (K)	Interface Type	Type	Density (Kb)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)
CYDM064B16-55BVXI	In Production	16	4	SRAM only	Asynchronous	64	55	1.8	3.3	BGA	-40
CYDM064B16-55BVXIT	In Production	16	4	SRAM only	Asynchronous	64	55	1.8	3.3	BGA	-40
CYDM128B16-55BVXI	In Production	16	8	SRAM only	Asynchronous	128	55	1.8	3.3	BGA	-40
CYDM128B16-55BVXIT	In Production	16	8	SRAM only	Asynchronous	128	55	1.8	3.3	BGA	-40
CYDM256B16-55BVXI	In Production	16	16	SRAM only	Asynchronous	256	55	1.8	3.3	BGA	-40
CYDM256B16-55BVXIT	In Production	16	16	SRAM only	Asynchronous	256	55	1.8	3.3	BGA	-40

MoBL Dual-Port Part Number Decoder



NON-VOLATILE PRODUCTS

Cypress's nvSRAMs use time-tested technology to produce the world's fastest nonvolatile SRAMs. Cleverly architected, the devices use a one-to-one pairing of a nonvolatile bit and a fast SRAM bit in each memory cell. In standard operation, the devices behave exactly like standard fast SRAM and can be easily interfaced to existing microprocessors and microcontrollers. When power is disrupted or lost, the event is detected, and in one quick array write, every SRAM bit is saved into a nonvolatile bit (in under 13 ms) using the saved energy in a small capacitor. Data is automatically recalled from nonvolatile bit to SRAM bit in every cell on power restore, providing seamless nonvolatility through power cycles.

Cypress offers two families of nvSRAM devices. For customers needing high access speed, and parallel interfaces, Parallel nvSRAM devices ranging from 64 K- 8 M density are an option. For designs that need low I/O serial interface, our Serial nvSRAM devices featuring high-speed SPI and I²C interface are an ideal option. RTC options are available on both device types.

Key Applications: Storage/networking, metering, industrial controls, automotive, military, and data communication

F-RAM Parallel

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Package	Temp. Classification	Automotive Qualified
FM1608B-PG	In Production				PDIP		N
FM1608B-SG	In Production	64	8Kb x 8	70	SOIC	Industrial	N
FM1608B-SGTR	In Production	64	8Kb x 8	70	SOIC	Industrial	N
FM16W08-PG	In Production				PDIP		N
FM16W08-SG	In Production	64	8Kb x 8	70	SOIC	Industrial	N
FM16W08-SGTR	In Production	64	8Kb x 8	70	SOIC	Industrial	N
FM1808B-PG	In Production				PDIP		N
FM1808B-SG	In Production	256	32Kb x 8	70	SOIC	Industrial	N
FM1808B-SGTR	In Production	256	32Kb x 8	70	SOIC	Industrial	N
FM18W08-PG	In Production				PDIP		N
FM18W08-SG	In Production	256	32Kb x 8	70	SOIC	Industrial	N
FM18W08-SGTR	In Production	256	32Kb x 8	70	SOIC	Industrial	N
FM21L16-60-TG	In Production	2048	128Kb x 16	60	TSOP II	Industrial	N
FM21L16-60-TGTR	In Production	2048	128Kb x 16	60	TSOP II	Industrial	N
FM21LD16-60-BG	In Production	2048	128Kb x 16	60	BGA	Industrial	N
FM21LD16-60-BGTR	In Production	2048	128Kb x 16	60	BGA	Industrial	N
FM22L16-55-TG	In Production	4096	256Kb x 16	55	TSOP II	Industrial	N
FM22L16-55-TGTR	In Production	4096	256Kb x 16	55	TSOP II	Industrial	N
FM22LD16-55-BG	In Production	4096	256Kb x 16	55	BGA	Industrial	N
FM22LD16-55-BGTR	In Production	4096	256Kb x 16	55	BGA	Industrial	N
FM23MLD16-60-BG	In Production	8192	512Kb x 16	60	BGA	Industrial	N
FM23MLD16-60-BGTR	In Production	8192	512Kb x 16	60	BGA	Industrial	N
FM28V020-SG	In Production	256	32Kb x 8	70	SOIC	Industrial	N
FM28V020-SGTR	In Production	256	32Kb x 8	70	SOIC	Industrial	N
FM28V020-T28G	In Production	256	32Kb x 8	70	TSOP I	Industrial	N
FM28V020-TG	In Production	256	32Kb x 8	70	TSOP I	Industrial	N
FM28V020-TGTR	In Production	256	32Kb x 8	70	TSOP I	Industrial	N
FM28V100-TG	In Production	1024	128Kb x 8	60	TSOP I	Industrial	N
FM28V100-TGTR	In Production	1024	128Kb x 8	60	TSOP I	Industrial	N
FM28V102-TG	Sampling				TSOP		N
FM28V202-BG	Sampling				BGA		N
FM28V202-BGTR	Sampling				BGA		N
FM28V202-TG	Sampling				TSOP		N
FM28V202-TGTR	Sampling				TSOP		N
FM28V402-BGC	Sampling				BGA		N
FM28V402-BGCTR	Contact Sales				BGA		N
FM28V402-TGC	Sampling				TSOP		N
FM28V402-TGCTR	Contact Sales				TSOP		N
MAXREADERKIT-CN	In Production				N/A		N
MAXREADERKITEUR	In Production				N/A		N

F-RAM Parallel

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Package	Temp. Classification	Automotive Qualified
MAXREADERKITID	Contact Sales				N/A		N
MAXREADERKITIN	Contact Sales				N/A		N
MAXREADERKITJPN	In Production				N/A		N
MAXREADERKITNA	In Production				N/A		N
MAXREADERKIT-TWN	In Production				N/A		N
TWRFRAM	In Production				N/A		N
WM72016-6-EVAL-915ANT	Contact Sales				N/A		N
WM72016-DATALOGGER	Contact Sales						N

F-RAM Processor Companion

Part Number	Status	Density (Kb)	Package	Automotive Qualified
FM31256-G	In Production	256	SOIC	N
FM31256-GTR	In Production	256	SOIC	N
FM31276-G	In Production	64	SOIC	N
FM31276-GTR	In Production	64	SOIC	N
FM31278-G	In Production	256	SOIC	N
FM31278-GTR	In Production	256	SOIC	N
FM3164-G	In Production	64	SOIC	N
FM3164-GTR	In Production	64	SOIC	N
FM31L276-G	In Production	64	SOIC	N
FM31L276-GTR	In Production	64	SOIC	N
FM31L278-G	In Production	256	SOIC	N
FM31L278-GTR	In Production	256	SOIC	N
FM31T378-G	Sampling	256	SOIC	N
FM31T378-GTR	Contact Sales	256	SOIC	N
FM33256B-G	In Production	256	SOIC	N
FM33256B-GTR	In Production	256	SOIC	N

F-RAM Serial

Part Number	Status	Density (Kb)	Speed (ns)	Package	Temp. Classification	Automotive Qualified
FM24C04B-G	In Production	4	N/A	SOIC	Industrial	N
FM24C04B-GTR	In Production	4	N/A	SOIC	Industrial	N
FM24C16B-G	In Production	16	N/A	SOIC	Industrial	N
FM24C16B-GTR	In Production	16	N/A	SOIC	Industrial	N
FM24C64B-G	In Production	64	N/A	SOIC	Industrial	N
FM24C64B-GTR	In Production	64	N/A	SOIC	Industrial	N
FM24CL04B-G	In Production	4	N/A	SOIC	Industrial	N
FM24CL04B-GTR	In Production	4	N/A	SOIC	Industrial	N
FM24CL16B-DG	In Production	16	N/A	DFN	Industrial	N
FM24CL16B-DGTR	In Production	16	N/A	DFN	Industrial	N
FM24CL16B-G	In Production	16	N/A	SOIC	Industrial	N
FM24CL16B-GTR	In Production	16	N/A	SOIC	Industrial	N
FM24CL64B-DG	In Production	64	N/A	DFN	Industrial	N
FM24CL64B-DGTR	In Production	64	N/A	DFN	Industrial	N
FM24CL64B-G	In Production	64	N/A	SOIC	Industrial	N
FM24CL64B-GA	In Production	64	N/A	SOIC	Industrial	N
FM24CL64B-GATR	In Production	64	N/A	SOIC	Industrial	N
FM24CL64B-GTR	In Production	64	N/A	SOIC	Industrial	N
FM24V01-G	In Production	128	N/A	SOIC	Industrial	N
FM24V01-GTR	In Production	128	N/A	SOIC	Industrial	N
FM24V01B-G	Contact Sales			SOIC		N
FM24V02-G	In Production	256	N/A	SOIC	Industrial	N

F-RAM Serial

Part Number	Status	Density (Kb)	Speed (ns)	Package	Temp. Classification	Automotive Qualified
FM24V02-GTR	In Production	256	N/A	SOIC	Industrial	N
FM24V05-G	In Production	512	N/A	SOIC	Industrial	N
FM24V05-GTR	In Production	512	N/A	SOIC	Industrial	N
FM24V10-G	In Production	1024	N/A	SOIC	Industrial	N
FM24V10-GTR	In Production	1024	N/A	SOIC	Industrial	N
FM24VN10-G	In Production	1024	N/A	SOIC	Industrial	N
FM24VN10-GTR	In Production	1024	N/A	SOIC	Industrial	N
FM24W256-G	In Production	256	N/A	SOIC	Industrial	N
FM24W256-GTR	In Production	256	N/A	SOIC	Industrial	N
FM25040B-G	In Production	4	N/A	SOIC	Industrial	N
FM25040B-GA	In Production	4	N/A	SOIC	Industrial	N
FM25040B-GATR	In Production	4	N/A	SOIC	Industrial	N
FM25040B-GTR	In Production	4	N/A	SOIC	Industrial	N
FM25640B-G	In Production	64	N/A	SOIC	Industrial	N
FM25640B-GA	In Production	64	N/A	SOIC	Industrial	N
FM25640B-GATR	In Production	64	N/A	SOIC	Industrial	N
FM25640B-GTR	In Production	64	N/A	SOIC	Industrial	N
FM25C160B-G	In Production	16	N/A	SOIC	Industrial	N
FM25C160B-GA	In Production	16	N/A	SOIC	Industrial	N
FM25C160B-GATR	In Production	16	N/A	SOIC	Industrial	N
FM25C160B-GTR	In Production	16	N/A	SOIC	Industrial	N
FM25CL64B-DG	In Production	64	N/A	DFN	Industrial	N
FM25CL64B-DGTR	In Production	64	N/A	DFN	Industrial	N
FM25CL64B-G	In Production	64	N/A	SOIC	Industrial	N
FM25CL64B-GA	In Production	64	N/A	SOIC	Industrial	N
FM25CL64B-GATR	In Production	64	N/A	SOIC	Industrial	N
FM25CL64B-GTR	In Production	64	N/A	SOIC	Industrial	N
FM25H20-DG	In Production	2048	N/A	DFN	Industrial	N
FM25H20-DGTR	In Production	2048	N/A	DFN	Industrial	N
FM25H20-G	In Production	2048	N/A	SOIC	Industrial	N
FM25H20-GTR	In Production	2048	N/A	SOIC	Industrial	N
FM25L04B-DG	In Production	4	N/A	DFN	Industrial	N
FM25L04B-DGTR	In Production	4	N/A	DFN	Industrial	N
FM25L04B-G	In Production	4	N/A	SOIC	Industrial	N
FM25L04B-GA	In Production	4	N/A	SOIC	Industrial	N
FM25L04B-GATR	In Production	4	N/A	SOIC	Industrial	N
FM25L04B-GTR	In Production	4	N/A	SOIC	Industrial	N
FM25L16B-DG	In Production	16	N/A	DFN	Industrial	N
FM25L16B-DGTR	In Production	16	N/A	DFN	Industrial	N
FM25L16B-G	In Production	16	N/A	SOIC	Industrial	N
FM25L16B-GA	Contact Sales	16	N/A	SOIC	Industrial	N
FM25L16B-GATR	Contact Sales	16	N/A	SOIC	Industrial	N
FM25L16B-GTR	In Production	16	N/A	SOIC	Industrial	N
FM25V01-G	In Production	128	N/A	SOIC	Industrial	N
FM25V01-GTR	In Production	128	N/A	SOIC	Industrial	N
FM25V01B-G	Contact Sales			SOIC		N
FM25V02-DG	In Production	256	N/A	DFN	Industrial	N
FM25V02-DGTR	In Production	256	N/A	DFN	Industrial	N
FM25V02-G	In Production	256	N/A	SOIC	Industrial	N
FM25V02-GTR	In Production	256	N/A	SOIC	Industrial	N
FM25V05-G	In Production	512	N/A	SOIC	Industrial	N
FM25V05-GTR	In Production	512	N/A	SOIC	Industrial	N
FM25V10-G	In Production	1024	N/A	SOIC	Industrial	N
FM25V10-GTR	In Production	1024	N/A	SOIC	Industrial	N
FM25V20-DG	In Production			DFN		N

F-RAM Serial

Part Number	Status	Density (Kb)	Speed (ns)	Package	Temp. Classification	Automotive Qualified
FM25V20-DGTR	In Production			DFN		N
FM25V20-G	In Production			EIAJ		N
FM25V20-GTR	In Production			EIAJ		N
FM25V20-PG	In Production			PDIP		N
FM25V40-DGC	Sampling			DFN		N
FM25V40-DGCTR	Sampling			DFN		N
FM25V40-GC	Sampling			EIAJ		N
FM25V40-GCTR	Sampling			EIAJ		N
FM25V40-PGC	Sampling			PDIP		N
FM25VN10-G	In Production	1024	N/A	SOIC	Industrial	N
FM25VN10-GTR	In Production	1024	N/A	SOIC	Industrial	N
FM25W256-G	In Production	256	N/A	SOIC	Industrial	N
FM25W256-GTR	In Production	256	N/A	SOIC	Industrial	N

F-RAM Wireless

Part Number	Status	Density (Kb)	Package	Temp. Classification	Automotive Qualified
WM71016-6NF	Sampling		(None)		N
WM72016-12-DGTR	Sampling		DFN		N
WM72016-6-DG	Contact Sales		DFN		N
WM72016-6-DGTR	Contact Sales	16	DFN	Industrial	N

nvSRAM Parallel

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY14B101KA-SP25XIT	In Production	1024	128Kb x 8	25	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B101KA-SP45XI	In Production	1024	128Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B101KA-SP45XIT	In Production	1024	128Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B101KA-ZS25XI	In Production	1024	128Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101KA-ZS25XIT	In Production	1024	128Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101KA-ZS45XI	In Production	1024	128Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101KA-ZS45XIT	In Production	1024	128Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101LA-BA25XI	In Production	1024	128Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B101LA-BA25XIT	In Production	1024	128Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B101LA-BA45XI	In Production	1024	128Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B101LA-BA45XIT	In Production	1024	128Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B101LA-SP25XI	In Production	1024	128Kb x 8	25	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B101LA-SP25XIT	In Production	1024	128Kb x 8	25	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B101LA-SP45XI	In Production	1024	128Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B101LA-SP45XIT	In Production	1024	128Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B101LA-SZ25XI	In Production	1024	128Kb x 8	25	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101LA-SZ25XIT	In Production	1024	128Kb x 8	25	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101LA-SZ45XI	In Production	1024	128Kb x 8	45	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101LA-SZ45XIT	In Production	1024	128Kb x 8	45	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101LA-ZS20XI	In Production	1024	128Kb x 8	20	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101LA-ZS20XIT	In Production	1024	128Kb x 8	20	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101LA-ZS25XI	In Production	1024	128Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101LA-ZS25XIT	In Production	1024	128Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101LA-ZS45XI	In Production	1024	128Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101LA-ZS45XIT	In Production	1024	128Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N

nvSRAM Parallel

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY14B101MA-ZSP25XI	Contact Sales	1024	64Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101MA-ZSP25XIT	Contact Sales	1024	64Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101MA-ZSP45XI	Contact Sales	1024	64Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101MA-ZSP45XIT	Contact Sales	1024	64Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101NA-ZS25XI	In Production	1024	64Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101NA-ZS25XIT	In Production	1024	64Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101NA-ZS45XI	In Production	1024	64Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B101NA-ZS45XIT	In Production	1024	64Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104K-ZS25XI	In Production	4096	512Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104K-ZS25XIT	In Production	4096	512Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104K-ZS45XI	In Production	4096	512Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104K-ZS45XIT	In Production	4096	512Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104LA-BA25XI	In Production	4096	512Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104LA-BA25XIT	In Production	4096	512Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104LA-BA45XI	In Production	4096	512Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104LA-BA45XIT	In Production	4096	512Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104LA-ZS20XI	In Production	4096	512Kb x 8	20	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104LA-ZS20XIT	In Production	4096	512Kb x 8	20	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104LA-ZS25XI	In Production	4096	512Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104LA-ZS25XIT	In Production	4096	512Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104LA-ZS45XI	In Production	4096	512Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104LA-ZS45XIT	In Production	4096	512Kb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104M-ZSP25XI	In Production	4096	256Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104M-ZSP25XIT	In Production	4096	256Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104M-ZSP45XI	In Production	4096	256Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104M-ZSP45XIT	In Production	4096	256Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-BA25XI	In Production	4096	256Kb x 16	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104NA-BA25XIT	In Production	4096	256Kb x 16	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104NA-BA45XI	In Production	4096	256Kb x 16	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104NA-BA45XIT	In Production	4096	256Kb x 16	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B104NA-ZS20XI	In Production	4096	256Kb x 16	20	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZS20XIT	In Production	4096	256Kb x 16	20	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZS25XI	In Production	4096	256Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZS25XIT	In Production	4096	256Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZS45XI	In Production	4096	256Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZS45XIT	In Production	4096	256Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZSP25XI	In Production	4096	256Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZSP25XIT	In Production	4096	256Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZSP45XI	In Production	4096	256Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B104NA-ZSP45XIT	In Production	4096	256Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108K-ZS25XI	In Production	8192	1Mb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108K-ZS25XIT	In Production	8192	1Mb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108K-ZS45XI	In Production	8192	1Mb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108K-ZS45XIT	In Production	8192	1Mb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108L-BA25XI	In Production	8192	1Mb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108L-BA25XIT	In Production	8192	1Mb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108L-BA45XI	In Production	8192	1Mb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108L-BA45XIT	In Production	8192	1Mb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108L-ZS25XI	In Production	8192	1Mb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108L-ZS25XIT	In Production	8192	1Mb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N

nvSRAM Parallel

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY14B108L-ZS45XI	In Production	8192	1Mb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108L-ZS45XIT	In Production	8192	1Mb x 8	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108M-ZSP25XI	In Production	8192	512Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108M-ZSP25XIT	In Production	8192	512Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108M-ZSP45XI	In Production	8192	512Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108M-ZSP45XIT	In Production	8192	512Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108NBA25XI	In Production	8192	512Kb x 16	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108NBA25XIT	In Production	8192	512Kb x 16	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108NBA45XI	In Production	8192	512Kb x 16	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108NBA45XIT	In Production	8192	512Kb x 16	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14B108N-ZSP25XI	In Production	8192	512Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108N-ZSP25XIT	In Production	8192	512Kb x 16	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108N-ZSP45XI	In Production	8192	512Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B108N-ZSP45XIT	In Production	8192	512Kb x 16	45	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B256KA-SP25XI	In Production	256	32Kb x 8	25	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256KA-SP25XIT	In Production	256	32Kb x 8	25	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256KA-SP45XI	In Production	256	32Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256KA-SP45XIT	In Production	256	32Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256LA-SP25XI	In Production	256	32Kb x 8	25	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256LA-SP25XIT	In Production	256	32Kb x 8	25	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256LA-SP45XI	In Production	256	32Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256LA-SP45XIT	In Production	256	32Kb x 8	45	2.7	3.6	SSOP	Industrial	-40	85	N
CY14B256LA-SZ25XI	In Production	256	32Kb x 8	25	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256LA-SZ25XIT	In Production	256	32Kb x 8	25	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256LA-SZ45XI	In Production	256	32Kb x 8	45	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256LA-SZ45XIT	In Production	256	32Kb x 8	45	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256LA-ZS25XI	In Production	256	32Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14B256LA-ZS25XIT	In Production	256	32Kb x 8	25	2.7	3.6	TSOP	Industrial	-40	85	N
CY14E256LA-SZ25XI	In Production	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
CY14E256LA-SZ25XIT	In Production	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
CY14E256LA-SZ45XI	In Production	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
CY14E256LA-SZ45XIT	In Production	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
CY14V101LA-BA25XI	In Production	1024	128Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V101LA-BA25XIT	In Production	1024	128Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V101LA-BA45XI	In Production	1024	128Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V101LA-BA45XIT	In Production	1024	128Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V101NA-BA25XI	In Production	1024	64Kb x 16	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V101NA-BA25XIT	In Production	1024	64Kb x 16	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V101NA-BA45XI	In Production	1024	64Kb x 16	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V101NA-BA45XIT	In Production	1024	64Kb x 16	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V104LA-BA25XI	In Production	4096	512Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V104LA-BA25XIT	In Production	4096	512Kb x 8	25	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V104LA-BA45XI	In Production	4096	512Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V104LA-BA45XIT	In Production	4096	512Kb x 8	45	2.7	3.6	FBGA	Industrial	-40	85	N
CY14V256LA-BA35XI	In Production	256	32Kb x 8	35	2.7	3.6	FBGA	Industrial	-40	85	N

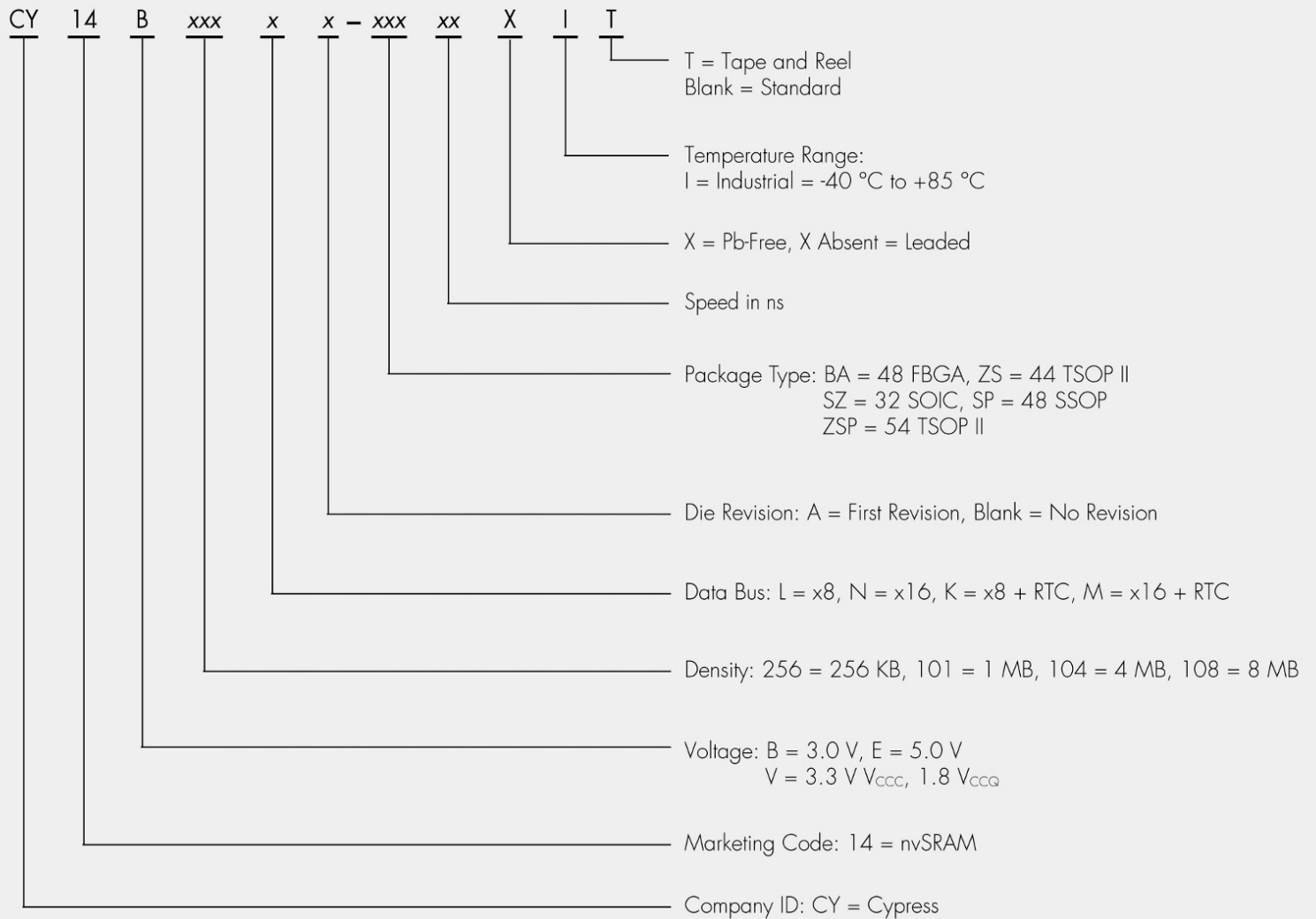
nvSRAM Parallel

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY14V256LA-BA35XIT	In Production	256	32Kb x 8	35	2.7	3.6	FBGA	Industrial	-40	85	N
STK11C68-5C55M	In Production	64	8Kb x 8	55	4.5	5.5	CERDIP	Military	-55	125	N
STK11C68-5K55M	In Production	64	8Kb x 8	55	4.5	5.5	CERDIP	Military	-55	125	N
STK11C68-5L35M	In Production	64	8Kb x 8	35	4.5	5.5	LCC	Military	-55	125	N
STK11C68-5L55M	In Production	64	8Kb x 8	55	4.5	5.5	LCC	Military	-55	125	N
STK11C68-C35I	NRND	64	8Kb x 8	35	4.5	5.5	CERDIP	Industrial	-40	85	N
STK11C68-SF25I	NRND	64	8Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C68-SF25ITR	NRND	64	8Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C68-SF45	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK11C68-SF45I	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C68-SF45ITR	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C68-SF45TR	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK11C88-NF25	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Commercial	0	70	N
STK11C88-NF25I	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-NF25ITR	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-NF25TR	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Commercial	0	70	N
STK11C88-NF45I	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-NF45ITR	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-SF25I	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-SF25ITR	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-SF45	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK11C88-SF45I	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-SF45ITR	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK11C88-SF45TR	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK12C68-5C35M	In Production	64	8Kb x 8	35	4.5	5.5	CERDIP	Military	-55	125	N
STK12C68-5C55M	In Production	64	8Kb x 8	55	4.5	5.5	CERDIP	Military	-55	125	N
STK12C68-5K35M	In Production	64	8Kb x 8	35	4.5	5.5	CERDIP	Military	-55	125	N
STK12C68-5K55M	In Production	64	8Kb x 8	55	4.5	5.5	CERDIP	Military	-55	125	N
STK12C68-5L35M	In Production	64	8Kb x 8	35	4.5	5.5	LCC	Military	-55	125	N
STK12C68-5L55M	In Production	64	8Kb x 8	55	4.5	5.5	LCC	Military	-55	125	N
STK12C68-C45I	NRND	64	8Kb x 8	45	4.5	5.5	CERDIP	Industrial	-40	85	N
STK12C68-PF25	NRND	64	8Kb x 8	25	4.5	5.5	PDIP	Commercial	0	70	N
STK12C68-PF25I	NRND	64	8Kb x 8	25	4.5	5.5	PDIP	Industrial	-40	85	N
STK12C68-PF45	NRND	64	8Kb x 8	45	4.5	5.5	PDIP	Commercial	0	70	N
STK12C68-PF45I	NRND	64	8Kb x 8	45	4.5	5.5	PDIP	Industrial	-40	85	N
STK12C68-SF25	NRND	64	8Kb x 8	25	4.5	5.5	SOIC	Commercial	0	70	N
STK12C68-SF25I	NRND	64	8Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK12C68-SF25ITR	NRND	64	8Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK12C68-SF25TR	NRND	64	8Kb x 8	25	4.5	5.5	SOIC	Commercial	0	70	N
STK12C68-SF45	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK12C68-SF45I	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK12C68-SF45ITR	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK12C68-SF45TR	NRND	64	8Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK12C68-WF45	NRND	64	8Kb x 8	45	4.5	5.5	PDIP	Commercial	0	70	N
STK12C68-WF45I	NRND	64	8Kb x 8	45	4.5	5.5	PDIP	Industrial	-40	85	N

nvSRAM Parallel

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
STK14C88-5C45M	In Production	256	32Kb x 8	45	4.5	5.5	CERDIP	Military	-55	125	N
STK14C88-5K35M	In Production	256	32Kb x 8	35	4.5	5.5	CERDIP	Military	-55	125	N
STK14C88-5K45M	In Production	256	32Kb x 8	45	4.5	5.5	CERDIP	Military	-55	125	N
STK14C88-5L35M	In Production	256	32Kb x 8	35	4.5	5.5	LCC	Military	-55	125	N
STK14C88-5L45M	In Production	256	32Kb x 8	45	4.5	5.5	LCC	Military	-55	125	N
STK14C88-C45I	NRND	256	32Kb x 8	45	4.5	5.5	CERDIP	Industrial	-40	85	N
STK15C88-NF25I	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK15C88-NF25ITR	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK15C88-NF45	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK15C88-NF45I	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK15C88-NF45ITR	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK15C88-NF45TR	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK15C88-SF25	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Commercial	0	70	N
STK15C88-SF25I	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK15C88-SF25ITR	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK15C88-SF25TR	NRND	256	32Kb x 8	25	4.5	5.5	SOIC	Commercial	0	70	N
STK15C88-SF45I	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK15C88-SF45ITR	NRND	256	32Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK16C88-3WF35I	NRND	256	32Kb x 8	35	3	3.6	PDIP	Industrial	-40	85	N
STK16C88-WF25	NRND	256	32Kb x 8	25	4.5	5.5	PDIP	Commercial	0	70	N
STK16C88-WF25I	NRND	256	32Kb x 8	25	4.5	5.5	PDIP	Industrial	-40	85	N
STK16C88-WF45	NRND	256	32Kb x 8	45	4.5	5.5	PDIP	Commercial	0	70	N
STK16C88-WF45I	NRND	256	32Kb x 8	45	4.5	5.5	PDIP	Industrial	-40	85	N
STK22C48-NF25I	NRND	16	2Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-NF25ITR	NRND	16	2Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-NF45	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK22C48-NF45I	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-NF45ITR	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-NF45TR	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK22C48-SF25I	NRND	16	2Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-SF25ITR	NRND	16	2Kb x 8	25	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-SF45	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N
STK22C48-SF45I	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-SF45ITR	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Industrial	-40	85	N
STK22C48-SF45TR	NRND	16	2Kb x 8	45	4.5	5.5	SOIC	Commercial	0	70	N

Parallel nvSRAM Part Number Decoder



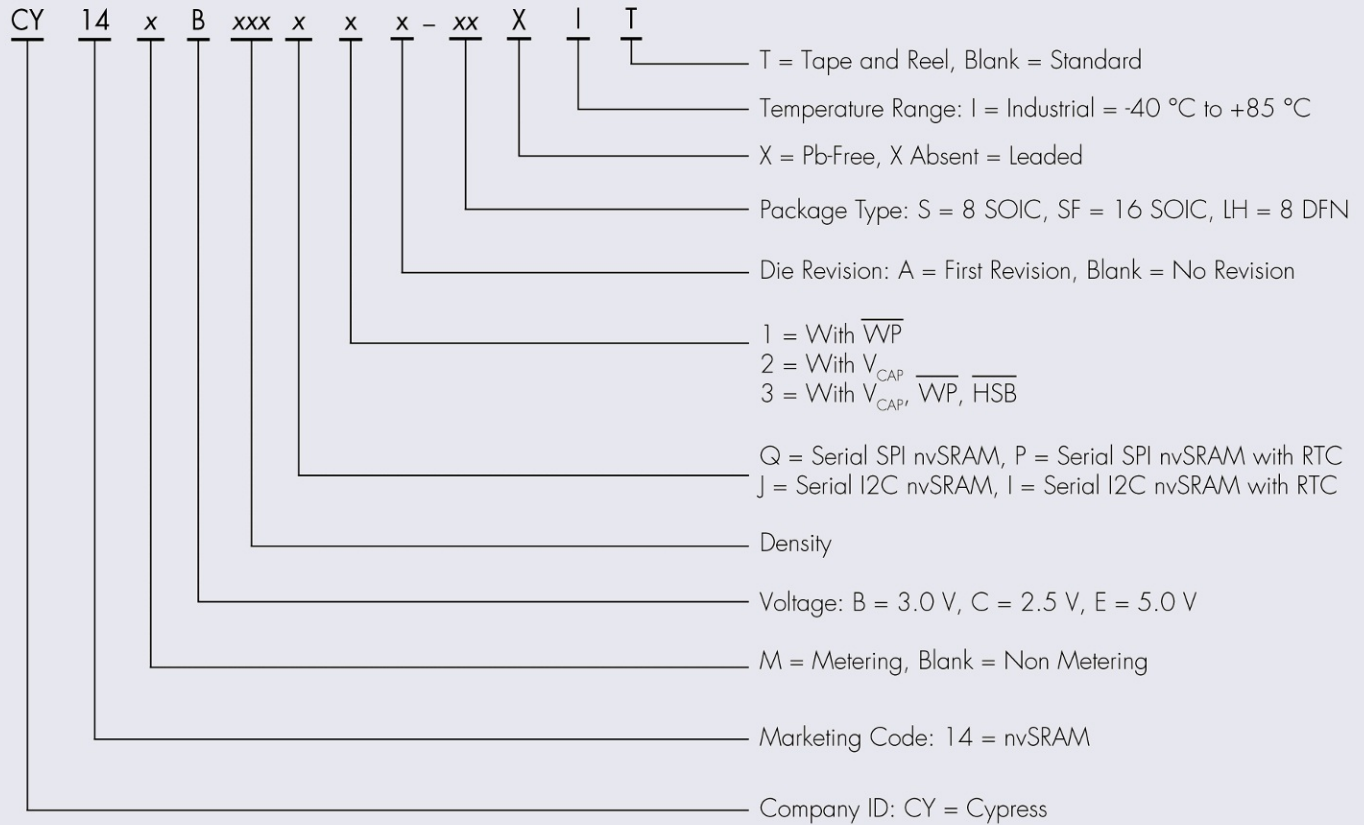
nvSRAM Serial

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY14B064I-SFXI	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B064I-SFXIT	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B064PA-SFXI	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B064PA-SFXIT	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101I-SFXI	In Production	1024	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101I-SFXIT	In Production	1024	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101J2-SXI	In Production	1024	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101J2-SXIT	In Production	1024	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101P-SFXI	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101P-SFXIT	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101PA-SF104XIT	Contact Sales	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101PA-SFXI	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101PA-SFXIT	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101Q1A-SXI	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101Q1A-SXIT	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101Q2-LHXI	In Production	1024	SPI	N/A	2.7	3.6	DFN	Industrial	-40	85	N
CY14B101Q2A-S104XI	Contact Sales	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101Q2A-S104XIT	Contact Sales	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101Q2A-SXI	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B101Q2A-SXIT	In Production	1024	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256I-SFXI	In Production	256	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256I-SFXIT	In Production	256	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256P-SFXI	Sampling	256	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256PA-SFXI	In Production	256	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256PA-SFXIT	In Production	256	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256Q1A-SXI	In Production	256	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256Q1A-SXIT	In Production	256	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256Q2-LHXI	Sampling	256	SPI	N/A	2.7	3.6	DFN	Industrial	-40	85	N
CY14B256Q2A-SXI	In Production	256	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B256Q2A-SXIT	In Production	256	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512I-SFXI	In Production	512	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512I-SFXIT	In Production	512	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512J2-SXIT	In Production	512	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512P-SFXI	Sampling	512	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512PA-SFXI	In Production	512	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512PA-SFXIT	In Production	512	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512Q2-LHXI	Sampling	512	SPI	N/A	2.7	3.6	DFN	Industrial	-40	85	N
CY14B512Q2A-SXI	In Production	512	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14B512Q2A-SXIT	In Production	512	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14E256Q2A-SXI	Contact Sales	256	SPI	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14MB064J1-SXI	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064J1-SXIT	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064J1A-SXI	Sampling	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064J1A-SXIT	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064J2-SXI	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N

nvSRAM Serial

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY14MB064J2-SXIT	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064J2A-SXI	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064J2A-SXIT	In Production	64	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q1A-SXI	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q1A-SXIT	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q1B-SXI	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q1B-SXIT	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q2A-SXI	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q2A-SXIT	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q2B-SXI	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB064Q2B-SXIT	In Production	64	SPI	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB256J1-SXI	In Production	256	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB256J1-SXIT	In Production	256	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB256J2-SXI	In Production	256	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14MB256J2-SXIT	In Production	256	I2C	N/A	2.7	3.6	SOIC	Industrial	-40	85	N
CY14ME064J1A-SXI	In Production	64	I2C	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064J1A-SXIT	In Production	64	I2C	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064J2-SXI	Contact Sales	64	I2C	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064J2A-SXI	In Production	64	I2C	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064J2A-SXIT	In Production	64	I2C	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064Q1B-SXI	In Production	64	SPI	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064Q1B-SXIT	In Production	64	SPI	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064Q2A-SXI	Contact Sales	64	SPI	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064Q2B-SXI	In Production	64	SPI	N/A	4.5	5.5	SOIC	Industrial	-40	85	N
CY14ME064Q2B-SXIT	In Production	64	SPI	N/A	4.5	5.5	SOIC	Industrial	-40	85	N

Serial nvSRAM Part Number Decoder



QUADPORT™ DSE SRAMS

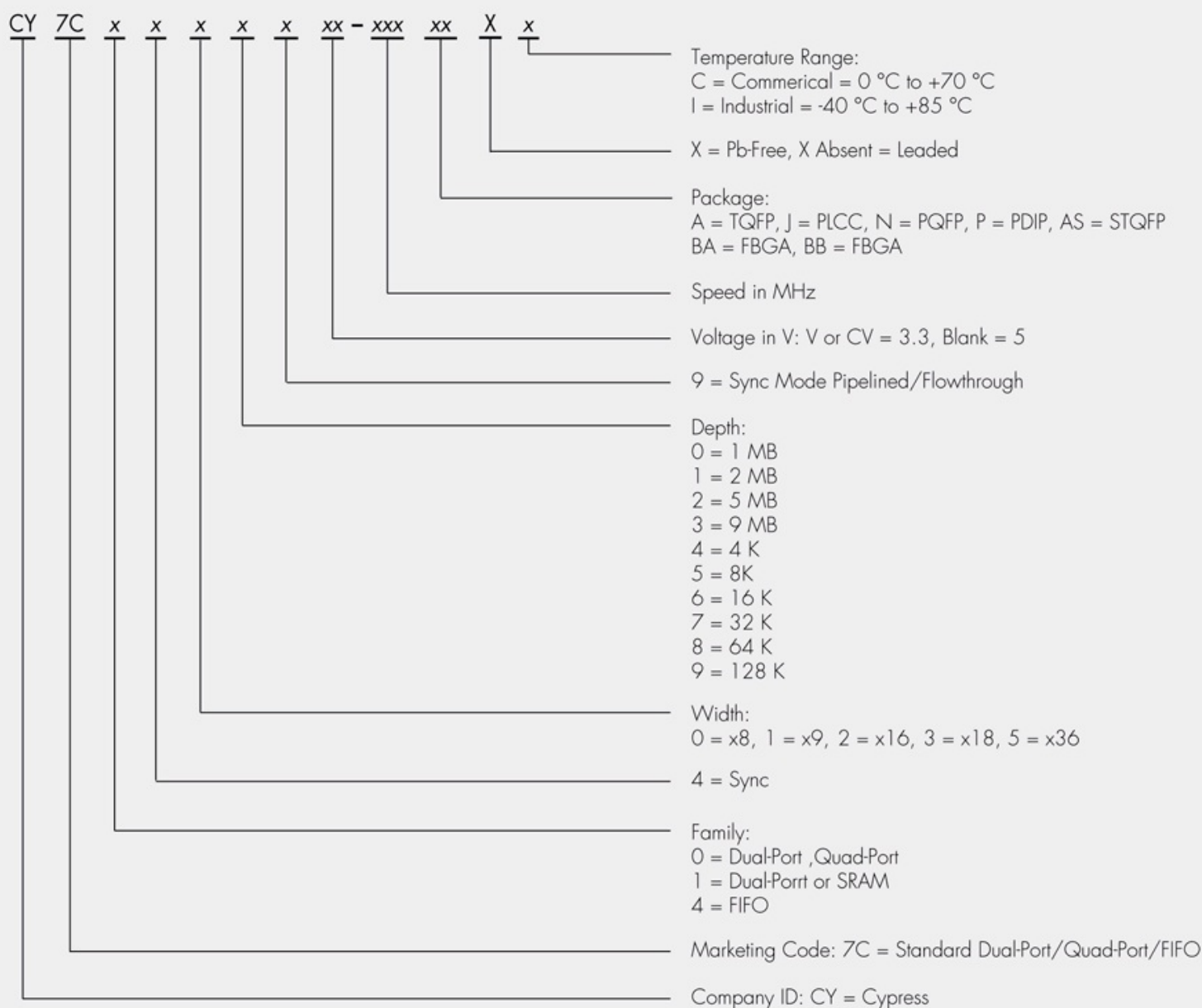
The QuadPort™ Datapath Switching Element (DSE) family offers four completely independent ports that can simultaneously access the 64K x 18-bit data storage array and operate in different frequency domains. Each port can read or write data at 133 MHz, giving the device up to 10 Gbps of data throughput (bandwidth).

QuadPort DSE Applications: The QuadPort DSE can be used for various applications such as:

- 2 x 2 switch buffer
- Data aggregation, Data redundancy
- Packet header manipulation to help remove costly field programmable gate arrays (FPGAs) out of the datapath

Part Number	Status	Density (Kb)	Organization (X x Y)	Speed (ns)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C0430CV133BG	In Production	1024	64Kb x 18	N/A	3.15	3.45	BGA	Industrial	-40	85	N

QuadPort DSE SRAM Part Number Decoder



SYNCRAMs

Cypress is a leader in legacy as well as contemporary high speed SRAMs. We offer a complete portfolio of standard Synchronous Burst SRAMs, NoBL (No Bus Latency) SRAMs, and the QDR (Quad Data Rate) consortium defined QDR/DDR SRAMs. The densities in our portfolio range from 1 Mb to 144 Mb and the adoption of these SRAMs span across networking, communications, computation, industrial, high speed video, instrumentation, and military applications. Cypress offers the widest portfolio and it is comprised of hundreds of memories in a variety of speeds, bus widths, and JEDEC standard packages. Using industry standard pin outs, Cypress high speed SRAMs are easily integrated into existing designs.

DDR-II CIO

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1318KV18-250BZC	In Production	DDR-II CIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1318KV18-250BZCT	In Production	DDR-II CIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1318KV18-250BZI	In Production	DDR-II CIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1318KV18-250BZXC	In Production	DDR-II CIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1318KV18-250BZXI	In Production	DDR-II CIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1318KV18-300BZXC	In Production	DDR-II CIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1318KV18-333BZC	In Production	DDR-II CIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1320KV18-250BZC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1320KV18-250BZCT	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1320KV18-250BZI	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1320KV18-250BZXC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1320KV18-250BZXI	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1320KV18-300BZC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1320KV18-300BZXC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1320KV18-333BZC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1320KV18-333BZXC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1321KV18-250BZC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1321KV18-250BZCT	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1321KV18-250BZXC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1321KV18-250BZXCT	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1321KV18-333BZC	In Production	DDR-II CIO	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1418KV18-250BZC	In Production	DDR-II CIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1418KV18-250BZCT	In Production	DDR-II CIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1418KV18-250BZI	In Production	DDR-II CIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1418KV18-250BZXC	In Production	DDR-II CIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1418KV18-300BZC	In Production	DDR-II CIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1418KV18-300BZXC	In Production	DDR-II CIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1418KV18-333BZC	In Production	DDR-II CIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1420KV18-250BZC	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1420KV18-250BZCT	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1420KV18-250BZI	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1420KV18-250BZXC	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1420KV18-250BZXI	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85

DDR-II CIO

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1420KV18-300BZXC	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1420KV18-333BZC	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1420KV18-333BZI	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1420KV18-333BZXI	In Production	DDR-II CIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1518KV18-250BZC	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1518KV18-250BZI	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1518KV18-250BZXC	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1518KV18-250BZXI	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1518KV18-300BZC	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1518KV18-300BZI	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1518KV18-300BZXC	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1518KV18-300BZXI	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1518KV18-333BZC	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1518KV18-333BZI	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1518KV18-333BZXC	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1518KV18-333BZXI	In Production	DDR-II CIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1520KV18-250BZC	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1520KV18-250BZCT	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1520KV18-250BZI	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1520KV18-250BZIT	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1520KV18-250BZXC	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1520KV18-250BZXI	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1520KV18-300BZC	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1520KV18-300BZXC	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1520KV18-300BZXI	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1520KV18-333BZC	NRND	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1520KV18-333BZI	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1520KV18-333BZXC	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1520KV18-333BZXI	In Production	DDR-II CIO	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1618KV18-300BZXC	In Production	DDR-II CIO	147456	8Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1618KV18-333BZXC	In Production	DDR-II CIO	147456	8Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70

DDR-II SIO

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1392KV18-250BZXC	In Production	DDR-II SIO	18432	2Mb x 8	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1393KV18-250BZI	In Production	DDR-II SIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1393KV18-300BZXC	In Production	DDR-II SIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1393KV18-333BZI	In Production	DDR-II SIO	18432	1Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1423KV18-250BZC	In Production	DDR-II SIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1423KV18-250BZXC	In Production	DDR-II SIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1423KV18-300BZC	In Production	DDR-II SIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1423KV18-300BZXC	In Production	DDR-II SIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1423KV18-300BZXCT	In Production	DDR-II SIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1423KV18-333BZXC	In Production	DDR-II SIO	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1424KV18-250BZC	In Production	DDR-II SIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1424KV18-250BZCT	In Production	DDR-II SIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1424KV18-333BZC	In Production	DDR-II SIO	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1523KV18-250BZXC	In Production	DDR-II SIO	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70

DDR-II+ CIO

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1148KV18-400BZXC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1148KV18-450BZXC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1150KV18-400BZC	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1150KV18-400BZXC	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1150KV18-400BZXI	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C1150KV18-450BZC	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1168KV18-400BZC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1168KV18-400BZXC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1168KV18-450BZC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1168KV18-450BZXC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1168KV18-550BZXC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1170KV18-400BZC	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1170KV18-400BZXC	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1170KV18-450BZXC	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1170KV18-550BZC	In Production	DDR-II+ CIO	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1248KV18-400BZC	In Production	DDR-II+ CIO	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1248KV18-400BZXC	In Production	DDR-II+ CIO	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1248KV18-450BZXC	In Production	DDR-II+ CIO	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1250KV18-400BZC	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1250KV18-400BZI	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C1250KV18-400BZXC	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1250KV18-450BZXC	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1268KV18-400BZC	In Production	DDR-II+ CIO	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1268KV18-400BZXC	In Production	DDR-II+ CIO	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1268KV18-450BZXC	In Production	DDR-II+ CIO	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1268KV18-550BZXC	In Production	DDR-II+ CIO	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1270KV18-400BZC	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1270KV18-400BZXC	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1270KV18-400BZXI	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C1270KV18-550BZC	In Production	DDR-II+ CIO	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1548KV18-400BZC	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1548KV18-400BZXC	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1548KV18-450BZI	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Industrial	-40
CY7C1550KV18-400BZC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1550KV18-400BZXC	NRND	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1550KV18-450BZXI	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	0
CY7C1568KV18-400BZC	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1568KV18-400BZXC	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1568KV18-400BZXCT	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1568KV18-400BZXI	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Industrial	-40
CY7C1568KV18-450BZXC	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1568KV18-450BZXI	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Industrial	-40
CY7C1568KV18-500BZXC	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1568KV18-550BZXC	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1568KV18-550BZXI	In Production	DDR-II+ CIO	73728	4Mb x 18	1.7	1.9	2		FBGA	Industrial	-40
CY7C1570KV18-400BZC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1570KV18-400BZXC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1570KV18-400BZXI	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	-40

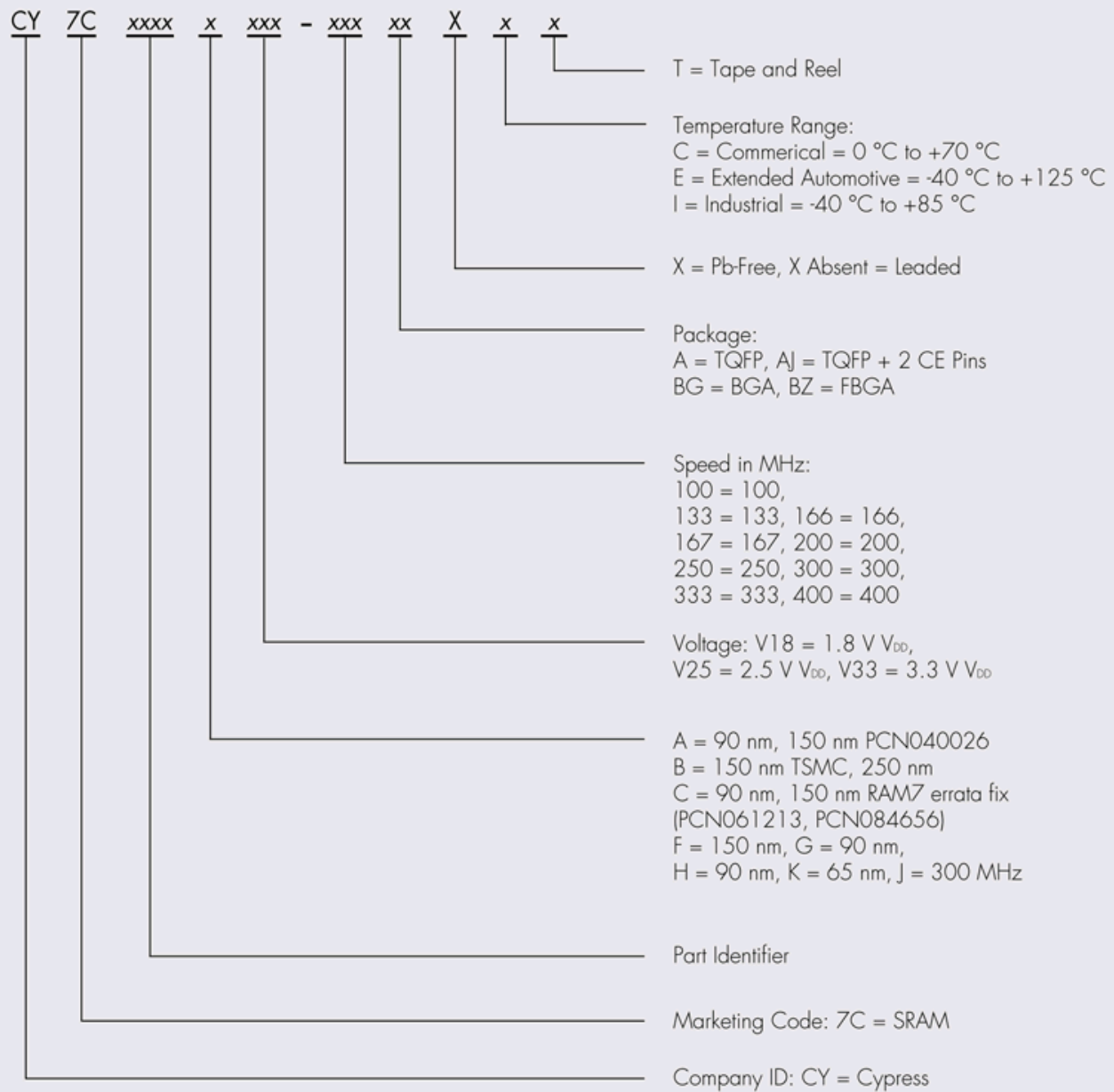
DDR-II+ CIO

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1570KV18-450BZC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1570KV18-450BZXC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1570KV18-450BZXI	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C1570KV18-500BZC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1570KV18-500BZXC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1570KV18-500BZXI	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C1570KV18-550BZXC	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1570KV18-550BZXI	In Production	DDR-II+ CIO	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C1648KV18-400BZXC	In Production	DDR-II+ CIO	147456	8Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1650KV18-400BZC	In Production	DDR-II+ CIO	147456	4Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1668KV18-450BZXC	In Production	DDR-II+ CIO	147456	8Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1668KV18-550BZXC	In Production	DDR-II+ CIO	147456	8Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1670KV18-450BZXC	In Production	DDR-II+ CIO	147456	4Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C1670KV18-550BZXC	In Production	DDR-II+ CIO	147456	4Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C2168KV18-450BZC	In Production	DDR-II+ CIO, ODT	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C2168KV18-550BZC	In Production	DDR-II+ CIO, ODT	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C2170KV18-400BZC	In Production	DDR-II+ CIO, ODT	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C2170KV18-400BZXC	In Production	DDR-II+ CIO, ODT	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C2170KV18-550BZXC	In Production	DDR-II+ CIO, ODT	18432	512Kb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C2268KV18-450BZC	In Production	DDR-II+ CIO, ODT	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C2268KV18-550BZC	In Production	DDR-II+ CIO, ODT	36864	2Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C2270KV18-400BZXC	In Production	DDR-II+ CIO, ODT	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C2270KV18-550BZXC	In Production	DDR-II+ CIO, ODT	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C2270KV18-550BZXI	In Production	DDR-II+ CIO, ODT	36864	1Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C25682KV18-400BZC	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C25682KV18-400BZXC	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C25682KV18-450BZC	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C25682KV18-500BZC	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C25682KV18-550BZXC	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C25682KV18-550BZXI	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	2		FBGA	Industrial	-40
CY7C2568XV18-600BZXC	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C2568XV18-633BZXC	In Production	DDR-II+ CIO, ODT	73728	4Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C25702KV18-400BZC	In Production	DDR-II+ CIO, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C25702KV18-450BZC	In Production	DDR-II+ CIO, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0

DDR-II+ CIO

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C25702KV18-500BZC	In Production	DDR-II+ CIO, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C25702KV18-500BZXC	In Production	DDR-II+ CIO, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C25702KV18-550BZXC	In Production	DDR-II+ CIO, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0
CY7C25702KV18-550BZXI	In Production	DDR-II+ CIO, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C2570XV18-600BZXC	In Production	DDR-II+ CIO, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Commercial	0

DDR Part Number Decoder



DDR-II+ Xtreme

DDRTMII+ SRAMs - Xtreme Networking

The DDRTMII+ Xtreme SRAMs are similar to DDR II+ SRAMs in operation, however, offer vast performance improvements in both speed and random transaction rate. The DDR-II+ XtremeSRAMs are fit-, form-, and function-compatible with previous DDR-II+ SRAMs allowing manufacturers of network switches, routers and aggregation platforms to boost performance by simply increasing clock speeds within the system without any board design changes. They are available in the industry standard 165 FBGA package and customers have the choice of DDR-II+ Xtreme products with programmable ODT (On Die Termination).

FEATURES

- 633 MHz clock for high bandwidth (900 million transactions per second)
- 2-word burst for reducing address bus frequency
- Double data rate (DDR) interfaces (data transferred at 1266 MHz) at 633 MHz
- Bus widths of x18 and x36
- 2.5 clock cycle latency
- On-Die Termination (ODT) available
- Core VDD = 1.8 V $\pm$ 0.1 V; VDDQ = 1.4 V to 1.6 V
- Supports 1.5 V I/O supply
- HSTL inputs and variable drive HSTL output buffers
- Pb-free package options
- JTAG 1149.1 compatible test access port
- Data valid pin (QVLD) to indicate valid data on the output

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1268XV18-600BZXC	In Production	DDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1268XV18-633BZXC	In Production	DDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1270XV18-600BZXC	In Production	DDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1270XV18-633BZXC	In Production	DDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1568XV18-600BZXC	In Production	DDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1568XV18-633BZXC	In Production	DDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1570XV18-600BZXC	In Production	DDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1570XV18-633BZXC	In Production	DDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2268XV18-600BZXC	In Production	DDR-II+ Xtreme, ODT	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2268XV18-633BZXC	In Production	DDR-II+ Xtreme, ODT	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2270XV18-600BZXC	In Production	DDR-II+ Xtreme, ODT	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2270XV18-633BZXC	In Production	DDR-II+ Xtreme, ODT	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70

NoBL

The performance of a Standard Synchronous SRAM in applications that have frequent WRITE to READ transitions is limited. NoBL™ was invented in order to increase bandwidth in applications, like networking, that make this transition frequently.

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1350G-133AXC	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1350G-133AXCT	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1350G-133AXI	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1350G-133AXIKG	Contact Sales	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1350G-133AXIT	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1350G-133BGXC	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1350G-200AXC	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1350G-200AXCT	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1350G-200AXI	In Production	NoBL, Pipeline	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1351G-100AXC	In Production	NoBL, Flow-through	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1351G-100AXCT	In Production	NoBL, Flow-through	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1351G-133AXC	In Production	NoBL, Flow-through	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1352G-133AXC	In Production	NoBL, Pipeline	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1353G-100AXC	In Production	NoBL, Flow-through	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1353G-100AXCT	In Production	NoBL, Flow-through	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1354C-166AXC	In Production	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1354C-166AXCT	In Production	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1354C-166AXI	In Production	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1354C-166AXIT	In Production	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1354C-166BGC	NRND	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1354C-166BGCT	NRND	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1354C-200AXC	In Production	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1354C-200AXCT	In Production	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1354C-200AXI	In Production	NoBL, Pipeline	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1354CV25-166AXC	In Production	NoBL, Pipeline	9216	256Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1354CV25-166AXCT	In Production	NoBL, Pipeline	9216	256Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1354CV25-166BZC	In Production	NoBL, Pipeline	9216	256Kb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1354CV25-166BZCT	In Production	NoBL, Pipeline	9216	256Kb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1354CV25-200AXC	In Production	NoBL, Pipeline	9216	256Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1355C-133AXC	In Production	NoBL, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1355C-133AXCT	In Production	NoBL, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1356C-166AXC	In Production	NoBL, Pipeline	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1356C-166AXCT	In Production	NoBL, Pipeline	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1356C-166AXI	In Production	NoBL, Pipeline	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1356C-166AXIT	In Production	NoBL, Pipeline	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1356C-166BGC	NRND	NoBL, Pipeline	9216	512Kb x 18	3.14	3.63	N/A		BGA	Commercial	0
CY7C1356C-250AXC	In Production	NoBL, Pipeline	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1356C-250AXCT	In Production	NoBL, Pipeline	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1356CV25-166AXC	In Production	NoBL, Pipeline	9216	512Kb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1356CV25-166AXCT	In Production	NoBL, Pipeline	9216	512Kb x 18	2.38	2.63	N/A		TQFP	Commercial	0

NoBL

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1357C-100BZC	In Production	NoBL, Flow-through	9216	512Kb x 18	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1357C-133AXC	In Production	NoBL, Flow-through	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1357C-133AXCT	In Production	NoBL, Flow-through	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1370D-167AXC	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1370D-167AXCT	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1370D-167AXI	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1370D-167AXIT	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1370D-167BZXC	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1370D-200AXC	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1370D-200AXCT	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1370D-200AXI	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1370D-200BZC	NRND	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1370D-200BZI	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1370D-200BZIT	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1370D-250AXC	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1370D-250AXCT	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1370D-250AXI	In Production	NoBL, Pipeline	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1370DV25-167AXC	In Production	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1370DV25-167AXCKG	Sampling	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1370DV25-167AXCT	In Production	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1370DV25-167BZC	In Production	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1370DV25-200AXC	In Production	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1370DV25-200AXCT	In Production	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1370DV25-200BZC	In Production	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1370DV25-200BZCT	In Production	NoBL, Pipeline	18432	512Kb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1371D-100AXC	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1371D-100AXCT	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1371D-100AXI	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1371D-133AXC	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1371D-133AXCT	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1371D-133BGC	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1371D-133BGCT	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1371DV33-133AXI	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1371DV33-133BZI	In Production	NoBL, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1372D-167AXC	In Production	NoBL, Pipeline	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1372D-167AXCT	In Production	NoBL, Pipeline	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1372D-167AXI	In Production	NoBL, Pipeline	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1372D-167AXIT	In Production	NoBL, Pipeline	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1372D-200AXC	In Production	NoBL, Pipeline	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1372DV25-167AXC	In Production	NoBL, Pipeline	18432	1Mb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1372DV25-167AXCT	In Production	NoBL, Pipeline	18432	1Mb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1373D-100AXC	In Production	NoBL, Flow-through	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1373D-133AXI	In Production	NoBL, Flow-through	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1373D-133BZI	In Production	NoBL, Flow-through	18432	1Mb x 18	3.14	3.63	N/A		FBGA	Industrial	-40

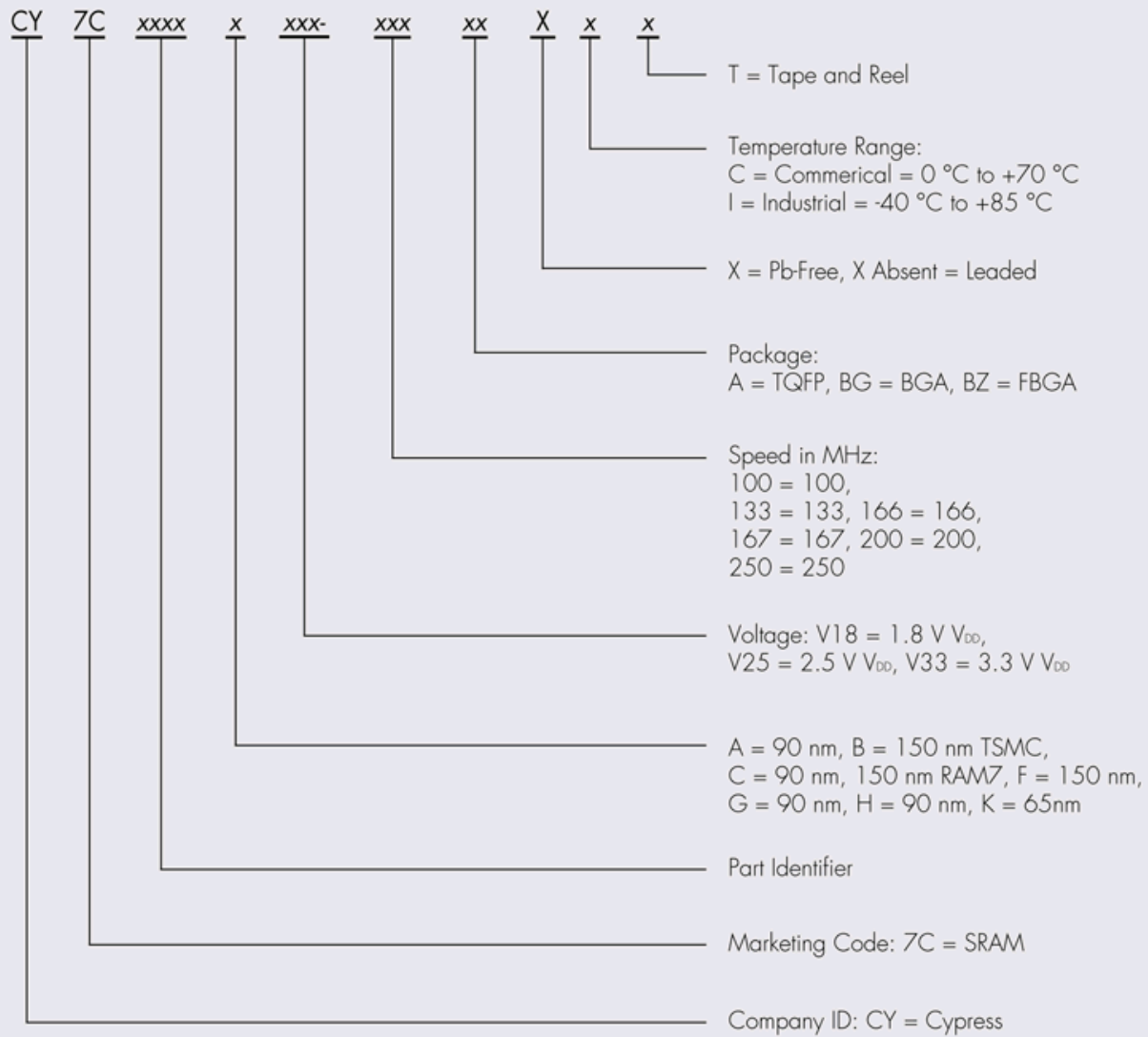
NoBL

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1460AV25-167AXC	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1460AV25-167AXCT	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1460AV25-167BZC	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1460AV25-167BZCT	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1460AV25-167BZXI	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1460AV25-200BZI	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1460AV25-200BZXC	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1460AV25-200BZXI	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1460AV25-250AXC	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1460AV33-167AXC	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1460AV33-167AXCT	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1460AV33-167AXI	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1460AV33-167BZC	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1460AV33-1XWI	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		Wafer	Industrial	-40
CY7C1460AV33-200AXC	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1460AV33-200AXCT	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1460AV33-250AXC	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1460AV33-250AXI	In Production	NoBL, Pipeline	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1460BV25-250BZXC	In Production	NoBL, Pipeline	36864	1Mb x 36	2.38	2.63	N/A	1.0	FBGA	Commercial	0
CY7C1461AV33-133AXC	In Production	NoBL, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1461AV33-133AXCT	In Production	NoBL, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1461AV33-133AXI	In Production	NoBL, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1462AV25-167BZI	In Production	NoBL, Pipeline	36864	2Mb x 18	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1462AV25-200AXC	In Production	NoBL, Pipeline	36864	2Mb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1462AV25-200AXCT	In Production	NoBL, Pipeline	36864	2Mb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1462AV33-167AXC	In Production	NoBL, Pipeline	36864	2Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1462AV33-167AXCT	In Production	NoBL, Pipeline	36864	2Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1462AV33-200AXI	In Production	NoBL, Pipeline	36864	2Mb x 18	3.14	3.63	N/A	1.0	TQFP	Industrial	0
CY7C1462BV25-250AXC	In Production	NoBL, Pipeline	36864	2Mb x 18	2.38	2.63	N/A	1.0	TQFP	Commercial	0
CY7C1462BV25-250BZXC	In Production	NoBL, Pipeline	36864	2Mb x 18	2.38	2.63	N/A	1.0	FBGA	Commercial	0
CY7C1463AV33-133AXC	In Production	NoBL, Flow-through	36864	2Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1463BV33-133AXI	In Production	NoBL, Flow-through	36864	2Mb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1470BV25-167AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1470BV25-167AXCT	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1470BV25-167BZXI	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1470BV25-200AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1470BV25-200AXI	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Industrial	-40
CY7C1470BV25-200BZXI	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1470BV25-250AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1470BV25-250BZXC	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1470BV33-167AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1470BV33-167AXCT	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1470BV33-167AXI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1470BV33-167BZI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1470BV33-167BZIT	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1470BV33-167BZXC	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0

NoBL

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1470BV33-1XVI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		Wafer	Industrial	-40
CY7C1470BV33-200AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1470BV33-200AXI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Industrial	0
CY7C1470BV33-200BZXI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1470BV33-250BZXC	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1470V25-167BZC	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1470V25-200AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1470V25-200BZI	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1470V25-200BZIT	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1470V25-200BZXC	In Production	NoBL, Pipeline	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1470V33-167AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1470V33-167AXI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1470V33-167BZC	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1470V33-167BZI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1470V33-200AXC	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1470V33-200BZI	In Production	NoBL, Pipeline	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1471BV25-133AXI	In Production	NoBL, Flow-through	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Industrial	-40
CY7C1471BV25-133BZXC	In Production	NoBL, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1471BV33-133AXC	In Production	NoBL, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1471BV33-133AXCT	In Production	NoBL, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1471BV33-133BZI	In Production	NoBL, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	0
CY7C1471BV33-133BZXC	In Production	NoBL, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1471V25-133AXC	In Production	NoBL, Flow-through	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1471V33-133AXC	In Production	NoBL, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1472BV25-200AXC	In Production	NoBL, Pipeline	73728	4Mb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1472BV25-200AXCT	In Production	NoBL, Pipeline	73728	4Mb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1472BV33-167AXI	In Production	NoBL, Pipeline	73728	4Mb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1472BV33-200BZXC	In Production	NoBL, Pipeline	73728	4Mb x 18	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1472V25-200AXC	In Production	NoBL, Pipeline	73728	4Mb x 18	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1472V33-200AXC	In Production	NoBL, Pipeline	73728	4Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1473BV33-133AXC	In Production	NoBL, Flow-through	73728	4Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1474BV33-200BGXC	In Production	NoBL, Pipeline	73728	1Mb x 72	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1474V25-200BGC	In Production	NoBL, Pipeline	73728	1Mb x 72	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1474V25-200BGI	In Production	NoBL, Pipeline	73728	1Mb x 72	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1474V25-200BGXI	In Production	NoBL, Pipeline	73728	1Mb x 72	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1474V33-167BGC	In Production	NoBL, Pipeline	73728	1Mb x 72	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1474V33-200BGC	In Production	NoBL, Pipeline	73728	1Mb x 72	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1475BV25-133BGXI	In Production	NoBL, Flow-through	73728	1Mb x 72	2.38	2.63	N/A		BGA	Industrial	-40

NoBL Part Number Decoder



QDR

QDR™ SRAMs are high-performance SRAM architectures targeted for high-speed wireless and networking applications requiring data rates of greater than 250 MHz.

QDR-II devices have an added source synchronous clocking technique to enable a higher frequency of operation. These higher frequencies are enabled by an on-chip Delay Lock Loop, or DLL. QDR-II+ offers speeds up to 50% faster than QDR-II and supports both 2 and 2.5 cycle read latencies.

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1302DV25-167BZC	In Production	QDR	9216	512Kb x 18	2.38	2.63	2	FBGA	Commercial	0	70
CY7C1302DV25-167BZXC	In Production	QDR	9216	512Kb x 18	2.38	2.63	2	FBGA	Commercial	0	70
CY7C1303BV25-167BZC	In Production	QDR	18432	1Mb x 18	2.38	2.63	2	FBGA	Commercial	0	70

QDR-II

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1143KV18-400BZC	In Production	QDR-II+	18432	1Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1143KV18-400BZI	In Production	QDR-II+	18432	1Mb x 18	1.7	1.9	4	FBGA	Industrial	0	70
CY7C1311KV18-250BZC	In Production	QDR-II	18432	2Mb x 8	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1312KV18-250BZC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1312KV18-250BZCT	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1312KV18-250BZI	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1312KV18-250BZXC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1312KV18-250BZXT	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1312KV18-250BZXI	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1312KV18-300BZC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1312KV18-300BZXC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1312KV18-300BZXT	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1312KV18-300BZXI	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1312KV18-333BZC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1313KV18-250BZC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1313KV18-250BZCT	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1313KV18-250BZI	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1313KV18-250BZXC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1313KV18-250BZXI	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1313KV18-333BZC	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1314KV18-250BZC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1314KV18-250BZCT	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1314KV18-250BZI	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1314KV18-250BZXC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1314KV18-250BZXT	In Production	QDR-II	18432	1Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1314KV18-250BZXI	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1314KV18-300BZXC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1314KV18-333BZC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1315KV18-250BZC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1315KV18-250BZCT	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70

QDR-II

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1315KV18-250BZI	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1315KV18-250BZXC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1315KV18-250BZXI	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1315KV18-300BZC	NRND	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1315KV18-300BZXC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1315KV18-333BZC	In Production	QDR-II	18432	512Kb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1411KV18-250BZC	In Production	QDR-II	36864	4Mb x 8	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1411KV18-300BZC	In Production	QDR-II	36864	4Mb x 8	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1412KV18-250BZC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1412KV18-250BZCT	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1412KV18-250BZI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1412KV18-250BZXC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1412KV18-250BZXI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1412KV18-300BZC	NRND	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1412KV18-300BZXC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1412KV18-300BZXI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1412KV18-333BZC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1412KV18-333BZXI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1413KV18-250BZC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1413KV18-250BZCT	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1413KV18-250BZI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1413KV18-250BZXC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1413KV18-250BZXI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1413KV18-300BZC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1413KV18-300BZCT	In Production	QDR-II	36864	512Kb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1413KV18-300BZXC	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1413KV18-333BZC	NRND	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1413KV18-333BZI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1413KV18-333BZXI	In Production	QDR-II	36864	2Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1414KV18-250BZC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1414KV18-250BZCT	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1414KV18-250BZI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1414KV18-250BZXC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1414KV18-250BZXCT	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1414KV18-250BZXI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1414KV18-250BZXIT	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1414KV18-300BZC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1414KV18-300BZI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1414KV18-300BZXC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1414KV18-300BZXI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1414KV18-333BZC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1414KV18-333BZXC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1415KV18-250BZC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1415KV18-250BZCT	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1415KV18-250BZI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85

QDR-II

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1415KV18-250BZXC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1415KV18-250BZXI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1415KV18-300BZI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1415KV18-300BZXC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1415KV18-300BZXI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1415KV18-333BZC	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1415KV18-333BZI	In Production	QDR-II	36864	1Mb x 36	1.7	1.9	4	FBGA	Industrial	0	70
CY7C1425KV18-250BZC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1425KV18-250BZCT	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1425KV18-250BZI	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1425KV18-250BZXC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1425KV18-250BZXI	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1425KV18-300BZC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1425KV18-300BZXC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1425KV18-333BZC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1426KV18-250BZC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1426KV18-250BZCT	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1426KV18-250BZXC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1426KV18-300BZC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1426KV18-300BZCT	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1426KV18-300BZXC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1426KV18-333BZC	In Production	QDR-II	36864	4Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1512KV18-250BZC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1512KV18-250BZCT	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1512KV18-250BZI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-250BZIT	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-250BZXC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1512KV18-250BZXI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-250BZXIT	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-300BZC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1512KV18-300BZI	NRND	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-300BZIT	NRND	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-300BZXC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1512KV18-300BZXI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-333BZC	NRND	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1512KV18-333BZI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1512KV18-333BZXC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1512KV18-333BZXI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1513KV18-250BZC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1513KV18-250BZI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1513KV18-250BZXC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1513KV18-250BZXI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1513KV18-300BZC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1513KV18-300BZI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1513KV18-300BZXC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70

QDR-II

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1513KV18-333BZC	NRND	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1513KV18-333BZI	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1513KV18-333BZXC	In Production	QDR-II	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1514KV18-250BZC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1514KV18-250BZI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1514KV18-250BZXC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1514KV18-250BZXI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1514KV18-300BZC	NRND	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1514KV18-300BZI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1514KV18-300BZXC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1514KV18-300BZXI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1514KV18-333BZC	NRND	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1514KV18-333BZI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1514KV18-333BZXC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1514KV18-333BZXI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1515KV18-250BZC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1515KV18-250BZI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1515KV18-250BZXC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1515KV18-250BZXI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1515KV18-300BZC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1515KV18-300BZCT	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1515KV18-300BZI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1515KV18-300BZXC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1515KV18-300BZXI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1515KV18-333BZC	NRND	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1515KV18-333BZXC	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1515KV18-333BZXI	In Production	QDR-II	73728	2Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1525KV18-250BZC	In Production	QDR-II	73728	8Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1525KV18-250BZXC	In Production	QDR-II	73728	8Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1525KV18-250BZXI	In Production	QDR-II	73728	8Mb x 9	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1525KV18-300BZC	In Production	QDR-II	73728	8Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1525KV18-300BZXC	In Production	QDR-II	73728	8Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1525KV18-333BZXC	In Production	QDR-II	73728	8Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1526KV18-250BZC	Sampling	QDR-II	73728	8Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1526KV18-300BZC	Sampling	QDR-II	73728	8Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1526KV18-300BZXC	In Production	QDR-II	73728	8Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1526KV18-333BZC	Sampling	QDR-II	73728	8Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1526KV18-333BZXC	Sampling	QDR-II	73728	8Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1612KV18-250BZXC	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1612KV18-250BZXI	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1612KV18-300BZXC	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1612KV18-300BZXI	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1612KV18-333BZXC	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1613KV18-300BZI	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1613KV18-300BZXC	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70

QDR-II

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1613KV18-333BZXC	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1614KV18-250BZI	In Production	QDR-II	147456	4Mb x 36	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1614KV18-300BZC	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1614KV18-333BZC	In Production	QDR-II	147456	8Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1615KV18-250BZXC	In Production	QDR-II	147456	4Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1615KV18-300BZXI	In Production	QDR-II	147456	4Mb x 36	1.7	1.9	4	FBGA	Industrial	-40	85
CY7C1615KV18-333BZXC	In Production	QDR-II	147456	4Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1625KV18-250BZXC	In Production	QDR-II	147456	16Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1625KV18-250BZXI	In Production	QDR-II	147456	16Mb x 9	1.7	1.9	2	FBGA	Industrial	-40	85
CY7C1625KV18-300BZXC	In Production	QDR-II	147456	16Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1625KV18-333BZXC	In Production	QDR-II	147456	16Mb x 9	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1911KV18-250BZC	In Production	QDR-II	18432	2Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1911KV18-250BZCT	In Production	QDR-II	18432	2Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1911KV18-250BZXC	In Production	QDR-II	18432	2Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1911KV18-300BZC	In Production	QDR-II	18432	2Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1911KV18-300BZCT	In Production	QDR-II	18432	2Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1911KV18-300BZXC	In Production	QDR-II	18432	2Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1911KV18-333BZC	In Production	QDR-II	18432	2Mb x 9	1.7	1.9	4	FBGA	Commercial	0	70

QDR-II+

QDR-II+

The QDR-II+ SRAMS are similar to QDR-II SRAMS in their operation but with additional performance improvements. The redundant data input clocks (C & /C) are not present in the QDR-II+ suite of products. Instead QDR-II+ SRAMS include a hand shake signal (Q_{VLD}) that indicates when the data will become valid thereby simplifying data capture. Customers also have the choice of QDR-II+ products with programmable ODT (On Die Termination). The QDR-II+ SRAMS have a maximum speed of 550 MHz with read latencies of either 2 cycles or 2.5 cycles, with a burst length of 2 and 4 and are available in an industry standard 165-ball BGA.

FEATURES

- Separate independent read and write data ports
- Supports concurrent transactions
- 450 MHz clock for high bandwidth
- Four-word burst for reducing address bus frequency
- Double data rate (DDR) Interfaces on both read and write ports (data transferred at 900 MHz) at 450 MHz
- Available in 2.0 clock cycle latency

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1143KV18-450BZC	In Production	QDR-II+	18432	1Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1145KV18-400BZXC	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1145KV18-400BZXCT	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1145KV18-400BZXI	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Industrial	0
CY7C1145KV18-450BZXC	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1148KV18-400BZC	In Production	DDR-II+ CIO	18432	1Mb x 18	1.7	1.9	2		FBGA	Commercial	0
CY7C1163KV18-400BZI	In Production	QDR-II+	18432	1Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C1163KV18-450BZC	In Production	QDR-II+	18432	1Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1163KV18-550BZC	In Production	QDR-II+	18432	1Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1165KV18-400BZC	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1165KV18-400BZXC	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1165KV18-550BZC	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1165KV18-550BZXC	In Production	QDR-II+	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1243KV18-400BZC	In Production	QDR-II+	36864	2Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1243KV18-450BZC	In Production	QDR-II+	36864	2Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1245KV18-400BZC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1245KV18-400BZXC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1245KV18-400BZXI	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1245KV18-450BZC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1263KV18-400BZC	In Production	QDR-II+	36864	2Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1263KV18-400BZI	In Production	QDR-II+	36864	2Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C1263KV18-500BZXC	In Production	QDR-II+	36864	2Mb x 18	1.7	1.9	4		FBGA	Commercial	0

QDR-II+

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1263KV18-550BZI	In Production	QDR-II+	36864	2Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C1263KV18-550BZXC	In Production	QDR-II+	36864	2Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1265KV18-400BZC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1265KV18-400BZXC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1265KV18-450BZXC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1265KV18-550BZC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1265KV18-550BZXC	In Production	QDR-II+	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1543KV18-400BZC	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1543KV18-400BZI	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C1543KV18-450BZI	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C1545KV18-400BZC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1545KV18-400BZXI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1545KV18-450BZXI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C15632KV18-400BZC	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C15632KV18-400BZXC	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C15632KV18-400BZXI	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C15632KV18-450BZC	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C15632KV18-450BZXC	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C15632KV18-450BZXI	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C15632KV18-500BZXC	NRND	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C15632KV18-500BZXI	In Production	QDR-II+	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C1565KV18-400BZC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1565KV18-400BZI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1565KV18-400BZXC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1565KV18-400BZXI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1565KV18-450BZC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1565KV18-450BZI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1565KV18-450BZXC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1565KV18-450BZXI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1565KV18-500BZC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1565KV18-500BZI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1565KV18-500BZXC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1565KV18-500BZXI	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1565KV18-550BZXC	In Production	QDR-II+	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1643KV18-400BZC	In Production	QDR-II+	147456	8Mb x 18	1.7	1.9	4		FBGA	Commercial	0

QDR-II+

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1643KV18-450BZC	In Production	QDR-II+	147456	8Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1643KV18-450BZI	In Production	QDR-II+	147456	8Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C1645KV18-400BZXI	In Production	QDR-II+	147456	4Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1645KV18-450BZXI	In Production	QDR-II+	147456	4Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C1663KV18-450BZXC	In Production	QDR-II+	147456	8Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1663KV18-550BZXC	In Production	QDR-II+	147456	8Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C1665KV18-450BZXC	In Production	QDR-II+	147456	4Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C1665KV18-550BZXC	In Production	QDR-II+	147456	4Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C2163KV18-450BZXI	In Production	QDR-II+, ODT	18432	1Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C2163KV18-550BZXI	In Production	QDR-II+, ODT	18432	1Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C2165KV18-450BZC	In Production	QDR-II+, ODT	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C2165KV18-550BZC	In Production	QDR-II+, ODT	18432	512Kb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C2263KV18-450BZXI	In Production	QDR-II+, ODT	36864	2Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C2263KV18-550BZXI	In Production	QDR-II+, ODT	36864	2Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C2265KV18-450BZC	In Production	QDR-II+, ODT	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C2265KV18-550BZC	In Production	QDR-II+, ODT	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C2265KV18-550BZXC	In Production	QDR-II+, ODT	36864	1Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25442KV18-300BZI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C25442KV18-333BZI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C25632KV18-400BZC	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C25632KV18-400BZXI	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C25632KV18-450BZC	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C25632KV18-450BZXI	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C25632KV18-500BZC	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C25632KV18-500BZXC	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C25632KV18-500BZXI	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C25632KV18-550BZC	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C25632KV18-550BZXI	In Production	QDR-II+, ODT	73728	4Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C25652KV18-400BZC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-400BZI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40

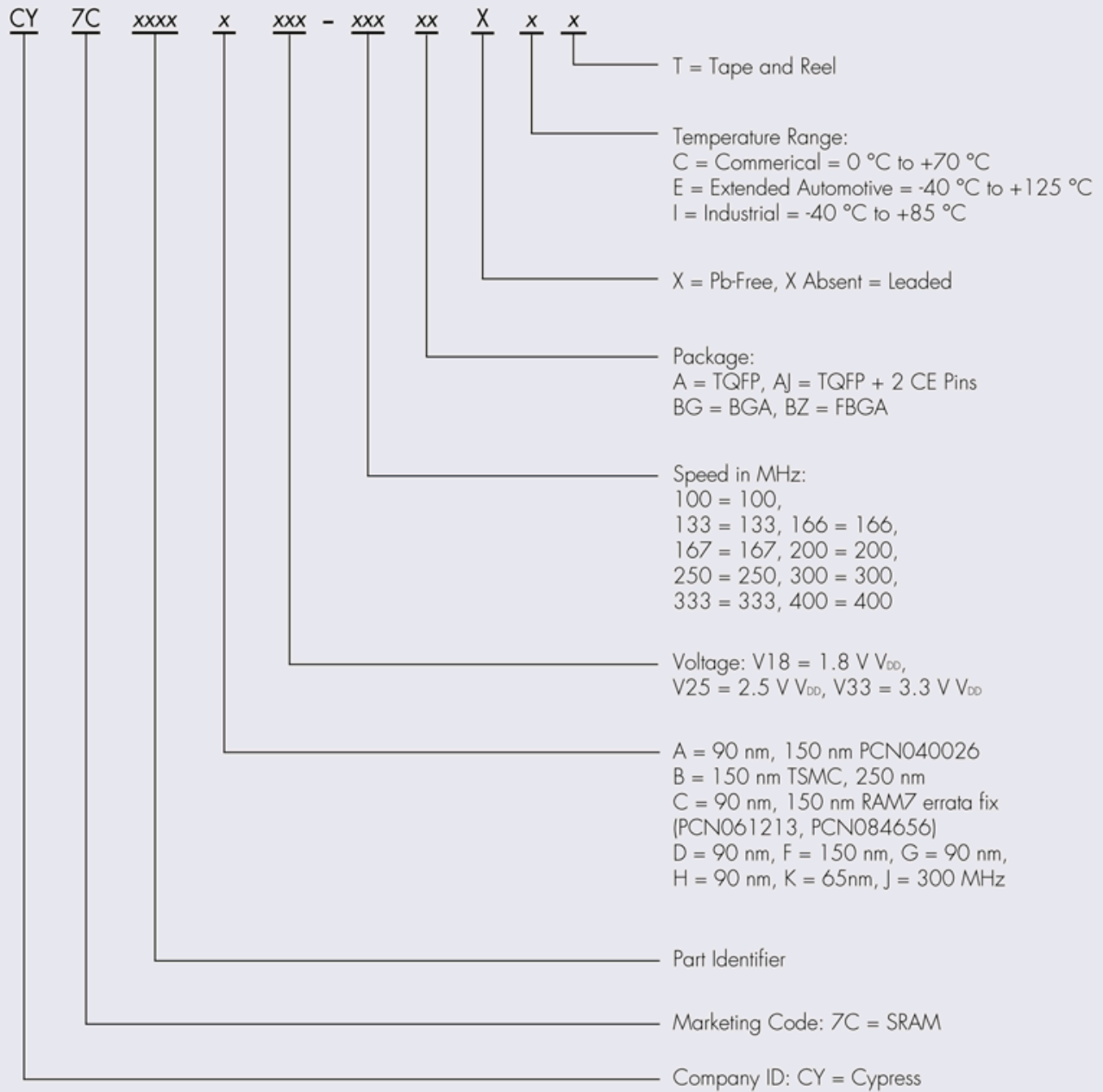
QDR-II+

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C25652KV18-400BZXC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-400BZXI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C25652KV18-450BZC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-450BZXI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C25652KV18-450BZXC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-500BZC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-500BZXI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C25652KV18-500BZXC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-500BZXI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	0
CY7C25652KV18-550BZC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-550BZXC	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C25652KV18-550BZXI	In Production	QDR-II+, ODT	73728	2Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C2644KV18-300BZI	In Production	QDR-II+, ODT	147456	4Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C2644KV18-333BZI	In Production	QDR-II+, ODT	147456	4Mb x 36	1.7	1.9	2		FBGA	Industrial	-40
CY7C2663KV18-450BZI	In Production	QDR-II+, ODT	147456	8Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C2663KV18-450BZXC	In Production	QDR-II+, ODT	147456	8Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C2663KV18-550BZI	In Production	QDR-II+, ODT	147456	8Mb x 18	1.7	1.9	4		FBGA	Industrial	-40
CY7C2663KV18-550BZXC	In Production	QDR-II+, ODT	147456	8Mb x 18	1.7	1.9	4		FBGA	Commercial	0
CY7C2665KV18-450BZI	In Production	QDR-II+, ODT	147456	4Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C2665KV18-450BZXI	In Production	QDR-II+, ODT	147456	4Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C2665KV18-550BZI	In Production	QDR-II+, ODT	147456	4Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CY7C2665KV18-550BZXC	In Production	QDR-II+, ODT	147456	4Mb x 36	1.7	1.9	4		FBGA	Commercial	0
CY7C2665KV18-550BZXI	In Production	QDR-II+, ODT	147456	4Mb x 36	1.7	1.9	4		FBGA	Industrial	-40
CYPT1542AV18-250GCMB	Contact Sales	QDR-II+	73728	4Mb x 18	1.7	1.9	2	2.0	CGA	Military	-55
CYPT1543AV18-250GCMB	Contact Sales	QDR-II+	73728	4Mb x 18	1.7	1.9	2	2.0	CGA	Military	-55
CYPT1544AV18-200GCMB	Contact Sales	QDR-II+	73728	4Mb x 18	1.7	1.9	2	2.0	CGA	Military	-55
CYPT1544AV18-250GCMB	Contact Sales	QDR-II+	73728	4Mb x 18	1.7	1.9	2	2.0	CGA	Military	-55
CYPT1545AV18-250GCMB	Contact Sales	QDR-II+	73728	4Mb x 18	1.7	1.9	2		CGA	Military	-55
CYRS1542AV18-250GCMB	Contact Sales	QDR-II+	73728	4Mb x 18	1.7	1.9	2	2.0	CGA	Military	-55
CYRS1543AV18-250GCMB	Contact Sales	QDR-II+	73728	4Mb x 18	1.7	1.9	4	2.0	CGA	Military	-55

QDR-II+

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CYRS1544AV18-200GCMB	Contact Sales	QDR-II+	73728	2Mb x 36	1.7	1.9	2		CGA	Military	-55
CYRS1544AV18-250GCMB	Contact Sales	QDR-II+	73728	2Mb x 36	1.7	1.9	2	2.0	CGA	Military	-55
CYRS1545AV18-250GCMB	Contact Sales	QDR-II+	73728	2Mb x 36	1.7	1.9	4	2.0	CGA	Military	-55

QDR Part Number Decoder



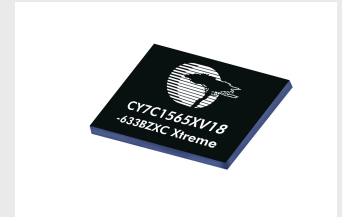
QDR-II+ Xtreme

QDR™ II+ SRAMs - Xtreme Networking

The worldwide leader in SRAMs now brings the fastest and most efficient QDR™ SRAM ever. Cypress's QDR II+ Xtreme SRAMs operate up to 633 MHz and enable the next generation of high-speed networking and telecommunication applications. Cypress's Xtreme line of QDR II+ and DDR II+ devices are fit-, form-, and function-compatible with existing QDR II+ family devices, allowing manufacturers of network switches, routers, and aggregation platforms to boost performance by simply increasing clock speeds within the system without any board design changes.

FEATURES

- 633 MHz clock for Burst of 4 operation (633 million transactions per second)
- 450 MHz clock for Burst of 2 operation (900 million transactions per second)
- 11.4 GB/s maximum bandwidth
- Bus widths of x18 and x36
- 2.5 clock cycle latency
- On-Die Termination (ODT) available
- Core $V_{DD} = 1.8 V \pm 0.1 V$; $V_{DDQ} = 1.4 V$ to $1.6 V$
- Supports 1.5 V I/O supply
- HSTL inputs and variable drive HSTL output buffers
- Pb-free package options
- JTAG 1149.1 compatible test access port

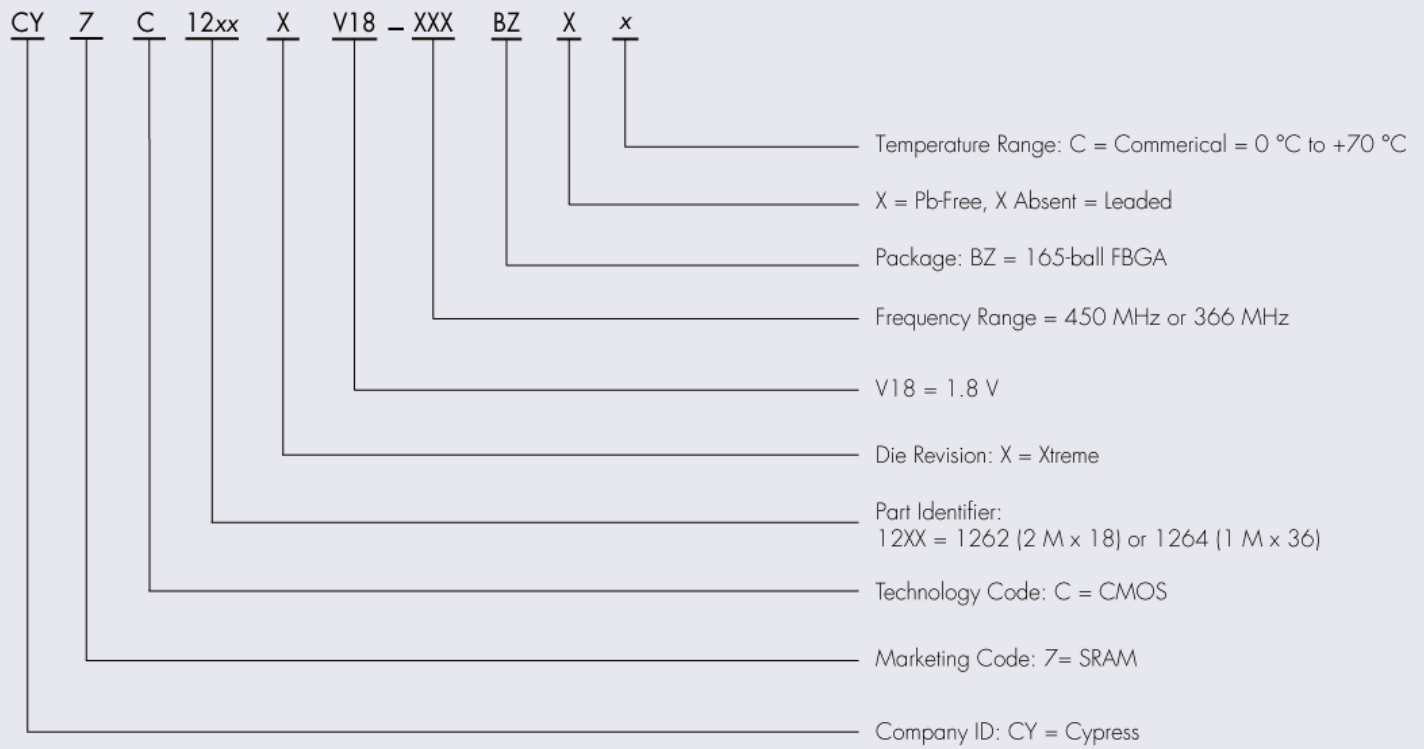


Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1262XV18-366BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1262XV18-450BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1263XV18-600BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1263XV18-633BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1264XV18-366BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1264XV18-450BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1265XV18-600BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1265XV18-633BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1562XV18-366BZC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1562XV18-366BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1562XV18-450BZC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1562XV18-450BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1563XV18-600BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1563XV18-633BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1564XV18-366BZC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70

QDR-II+ Xtreme

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Package	Temp. Classification	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY7C1564XV18-366BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1564XV18-450BZC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1564XV18-450BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C1565XV18-600BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C1565XV18-633BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2262XV18-366BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2262XV18-450BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2263XV18-600BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2263XV18-633BZXC	In Production	QDR-II+ Xtreme	36864	2Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2264XV18-366BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2264XV18-450BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2265XV18-600BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2265XV18-633BZXC	In Production	QDR-II+ Xtreme	36864	1Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2562XV18-366BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2562XV18-450BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2563XV18-600BZC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2563XV18-600BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2563XV18-633BZC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2563XV18-633BZXC	In Production	QDR-II+ Xtreme	73728	4Mb x 18	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2564XV18-366BZC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2564XV18-366BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2564XV18-450BZC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2564XV18-450BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	2	FBGA	Commercial	0	70
CY7C2565XV18-600BZC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2565XV18-600BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2565XV18-633BZC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70
CY7C2565XV18-633BZXC	In Production	QDR-II+ Xtreme	73728	2Mb x 36	1.7	1.9	4	FBGA	Commercial	0	70

QDR-II+ Xtreme Part Number Decoder



Standard Sync

Optimized for long series of Read and Write sequences. These SRAMs can double the performance of a typical Fast Asynchronous SRAM in the same application. Standard Synchronous SRAMs come in three different flavors: Pipelined Single-Cycle Deselect, Pipelined Double-Cycle Deselect, and Flow-Through.

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1325G-133AXC	In Production	Standard Sync, Flow-through	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1325G-133AXCT	In Production	Standard Sync, Flow-through	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1327G-133AXI	In Production	Standard Sync, Pipeline SCD	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1327G-133AXIT	In Production	Standard Sync, Pipeline SCD	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1327G-166AXC	In Production	Standard Sync, Pipeline SCD	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1327G-166AXCT	In Production	Standard Sync, Pipeline SCD	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1328G-133AXI	In Production	Standard Sync, Pipeline DCD	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1328G-133AXIT	In Production	Standard Sync, Pipeline DCD	4096	256Kb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1329H-133AXC	In Production	Standard Sync, Pipeline SCD	2048	64Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1329H-133AXCT	In Production	Standard Sync, Pipeline SCD	2048	64Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1338G-100AXC	In Production	Standard Sync, Flow-through	4096	128Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1338G-100AXCT	In Production	Standard Sync, Flow-through	4096	128Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1339G-133AXC	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1339G-133AXCT	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1345G-100AXC	In Production	Standard Sync, Flow-through	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1345G-100AXCT	In Production	Standard Sync, Flow-through	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1345G-100AXI	In Production	Standard Sync, Flow-through	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1345G-100AXIT	In Production	Standard Sync, Flow-through	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1347G-133AXC	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1347G-133AXCT	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1347G-133BGXC	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1347G-166AXC	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1347G-166AXCT	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1347G-200AXC	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1347G-200AXCT	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1347G-250AXC	In Production	Standard Sync, Pipeline SCD	4096	128Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360C-166AJXC	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360C-166AJXCT	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0

Standard Sync

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1360C-166AXC	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360C-166AXCT	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360C-166AXI	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1360C-166BZC	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1360C-200AJXC	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360C-200AXC	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360C-200AXCT	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360C-200BGC	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1360C-200BGCT	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1360C-250AXCB	Sampling	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1360D-1XWI	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		Wafer	Industrial	-40
CY7C1360S-200AXI	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1361C-100AXC	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1361C-100AXCT	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1361C-100AXE	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Automotive(E)	-40
CY7C1361C-100AXET	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Automotive(E)	-40
CY7C1361C-100BGC	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1361C-100BGCT	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1361C-133AJXC	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1361C-133AJXCT	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1361C-133AXC	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1361C-133AXCT	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1361C-133AXI	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1361C-133AXIT	In Production	Standard Sync, Flow-through	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1362C-166AJXC	In Production	Standard Sync, Pipeline SCD	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1362C-1XWI	In Production	Standard Sync, Pipeline SCD	9216	512Kb x 18	3.14	3.63	N/A		Wafer	Industrial	-40
CY7C1363C-133AJXC	In Production	Standard Sync, Flow-through	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1363C-133AXC	In Production	Standard Sync, Flow-through	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0

Standard Sync

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1363C-133AXCT	In Production	Standard Sync, Flow-through	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1364C-166BZI	In Production	Standard Sync, Flow-through	9216	256Kb x 32	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1364CV33-166AXC	In Production	Standard Sync, Flow-through	9216	256Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1365C-133BZI	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 32	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1365CV33-133AXC	In Production	Standard Sync, Pipeline SCD	9216	256Kb x 32	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1366C-166AXC	In Production	Standard Sync, Pipeline DCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1366C-166AXCT	In Production	Standard Sync, Pipeline DCD	9216	256Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1366C-166BGC	In Production	Standard Sync, Pipeline DCD	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1366C-166BGCT	In Production	Standard Sync, Pipeline DCD	9216	256Kb x 36	3.14	3.63	N/A		BGA	Commercial	0
CY7C1367C-166AXC	In Production	Standard Sync, Pipeline DCD	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1367C-166AXCT	In Production	Standard Sync, Pipeline DCD	9216	512Kb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1380D-167AXC	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1380D-167AXCT	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1380D-167AXI	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1380D-167AXIT	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1380D-200AXC	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1380D-250AXC	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1380DV33-200AXI	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	0
CY7C1380DV33-200BZI	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1380F-167BZI	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1380F-167BZIT	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1381D-100AXC	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1381D-100AXCT	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1381D-100BZI	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1381D-100BZIT	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1381D-100BZXI	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1381D-133AXC	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1381D-133AXCT	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0

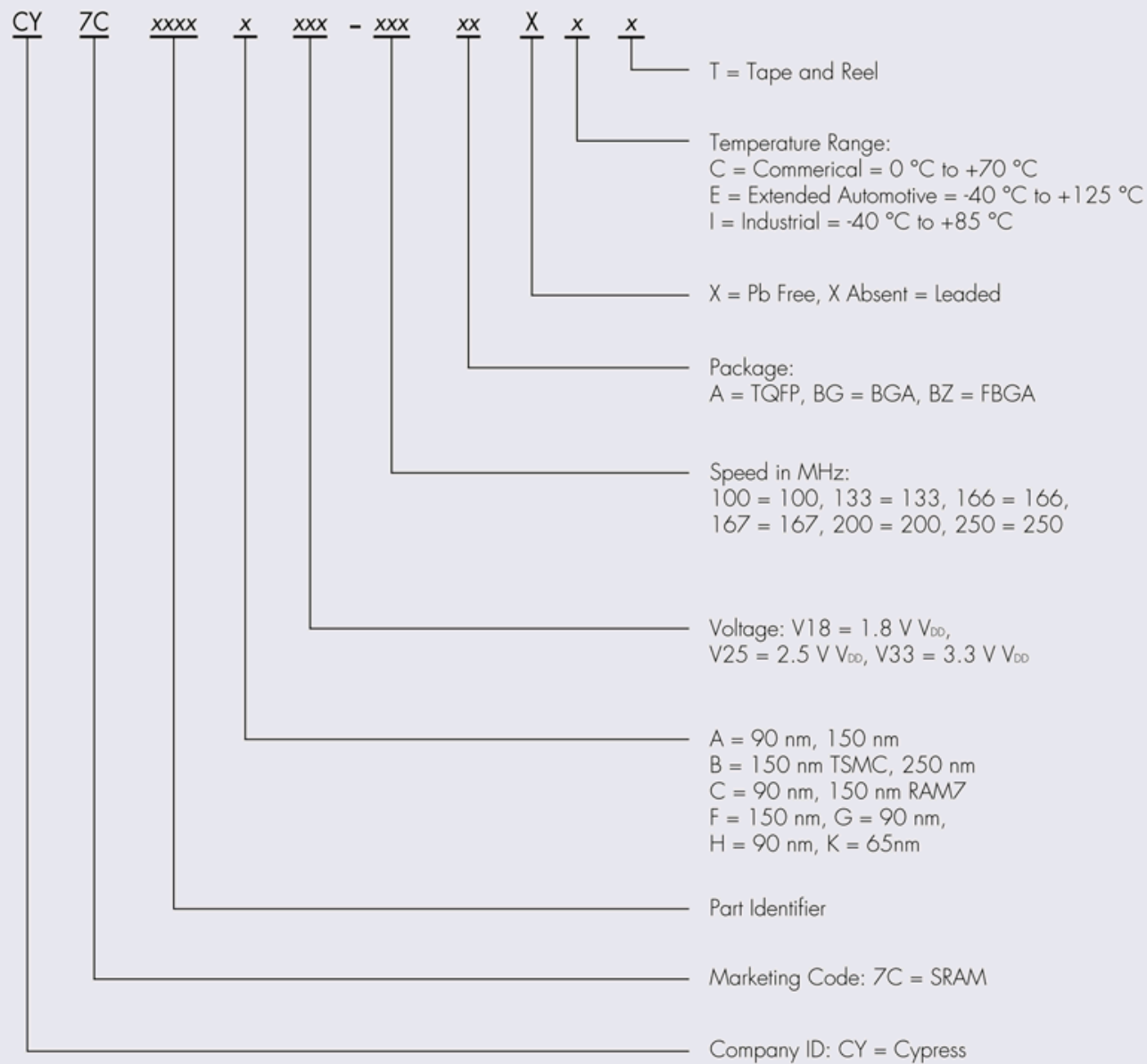
Standard Sync

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1381D-133AXI	In Production	Standard Sync, Flow-through	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1382D-167AXC	In Production	Standard Sync, Pipeline SCD	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1382D-200AXC	In Production	Standard Sync, Pipeline SCD	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1382DV33-167BZI	In Production	Standard Sync, Pipeline SCD	18432	1Mb x 18	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1382DV33-200BZI	In Production	Standard Sync, Pipeline SCD	18432	1Mb x 18	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1383D-133AXC	In Production	Standard Sync, Flow-through	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1383D-133AXCT	In Production	Standard Sync, Flow-through	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1383D-133AXI	In Production	Standard Sync, Flow-through	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1383F-133BZI	In Production	Standard Sync, Flow-through	18432	1Mb x 18	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1384D-166AXI	In Production	Standard Sync, Pipeline SCD	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1385D-133AXI	In Production	Standard Sync, Pipeline SCD	18432	512Kb x 32	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1386D-167AXC	In Production	Standard Sync, Pipeline DCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1386D-167AXCT	In Production	Standard Sync, Pipeline DCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1386D-200AXC	In Production	Standard Sync, Pipeline DCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1386D-200AXCT	In Production	Standard Sync, Pipeline DCD	18432	512Kb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1387D-167AXC	In Production	Standard Sync, Pipeline DCD	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1387D-167AXCT	In Production	Standard Sync, Pipeline DCD	18432	1Mb x 18	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1387D-167BZI	In Production	Standard Sync, Pipeline DCD	18432	1Mb x 18	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1440AV25-167BZXC	In Production	Standard Sync, Pipeline SCD	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1440AV25-250BZXI	In Production	Standard Sync, Pipeline SCD	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1440AV25-250BZXIT	In Production	Standard Sync, Pipeline SCD	36864	1Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1440AV33-167AXC	In Production	Standard Sync, Pipeline SCD	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1440AV33-250AXC	In Production	Standard Sync, Pipeline SCD	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1440AV33-250AXI	In Production	Standard Sync, Pipeline SCD	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1440AV33-250BZXI	In Production	Standard Sync, Pipeline SCD	36864	1Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1441AV25-133BZXI	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A	N/A	FBGA	Industrial	-40
CY7C1441AV25-133BZXIT	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A	N/A	FBGA	Industrial	-40
CY7C1441AV33-133AXC	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0

Standard Sync

Part Number	Status	Architecture	Density (Kb)	Organization (X x Y)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Burst Length (Words)	Latency (Cycles)	Package	Temp. Classification	Min. Operating Temp. (°C)
CY7C1441AV33-133AXI	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1441AV33-133AXIT	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1441AV33-133BZI	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1441AV33-133BZXI	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1444AV33-167AXC	In Production	Standard Sync, Pipeline DCD	36864	1Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1444AV33-1XWI	In Production	Standard Sync, Pipeline DCD	36864	1Mb x 36	3.14	3.63	N/A		Wafer	Industrial	-40
CY7C1444AV33-250AXI	In Production	Standard Sync, Pipeline DCD	36864	1Mb x 36	3.14	3.63	N/A	1.0	TQFP	Industrial	-40
CY7C1446AV25-250BGI	In Production	Standard Sync, Pipeline SCD	36864	512Kb x 72	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1447AV25-133BGI	In Production	Standard Sync, Flow-through	36864	1Mb x 36	3.14	3.63	N/A		BGA	Industrial	-40
CY7C1480BV25-167AXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Commercial	0
CY7C1480BV25-167BZXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1480BV25-200BZC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1480BV25-200BZXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Commercial	0
CY7C1480BV25-250BZI	Sampling	Standard Sync, Pipeline SCD	73728	2Mb x 36	2.38	2.63	N/A		FBGA	Industrial	-40
CY7C1480BV33-167AXI	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1480BV33-167BZXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1480BV33-200AXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1480BV33-250BZI	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1480BV33-250BZXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1480V33-167AXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1480V33-200AXC	In Production	Standard Sync, Pipeline SCD	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Commercial	0
CY7C1481BV25-133AXI	In Production	Standard Sync, Flow-through	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Industrial	-40
CY7C1481BV33-133AXI	In Production	Standard Sync, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		TQFP	Industrial	-40
CY7C1481BV33-133BZI	In Production	Standard Sync, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1481BV33-133BZXC	In Production	Standard Sync, Flow-through	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1482BV33-200BZI	In Production	Standard Sync, Pipeline SCD	73728	4Mb x 18	3.14	3.63	N/A		FBGA	Industrial	-40
CY7C1484BV25-250AXI	In Production	Standard Sync, Flow-through	73728	2Mb x 36	2.38	2.63	N/A		TQFP	Industrial	-40
CY7C1484BV33-250BZXC	In Production	Standard Sync, Pipeline DCD	73728	2Mb x 36	3.14	3.63	N/A		FBGA	Commercial	0
CY7C1612KV18-300BZC	In Production	QDR II	147456	8Mb x 18	1.7	1.9	2		FBGA	Commercial	0

Standard Synchronous SRAM Part Number Decoder



INTERFACE

CONTROL COMMUNICATIONS

Cypress offers a line of high-performance, low-cost communications and control processors that are compatible with legacy designs and provide double the maximum clock rate of earlier products and expanded internal memory configuration options.

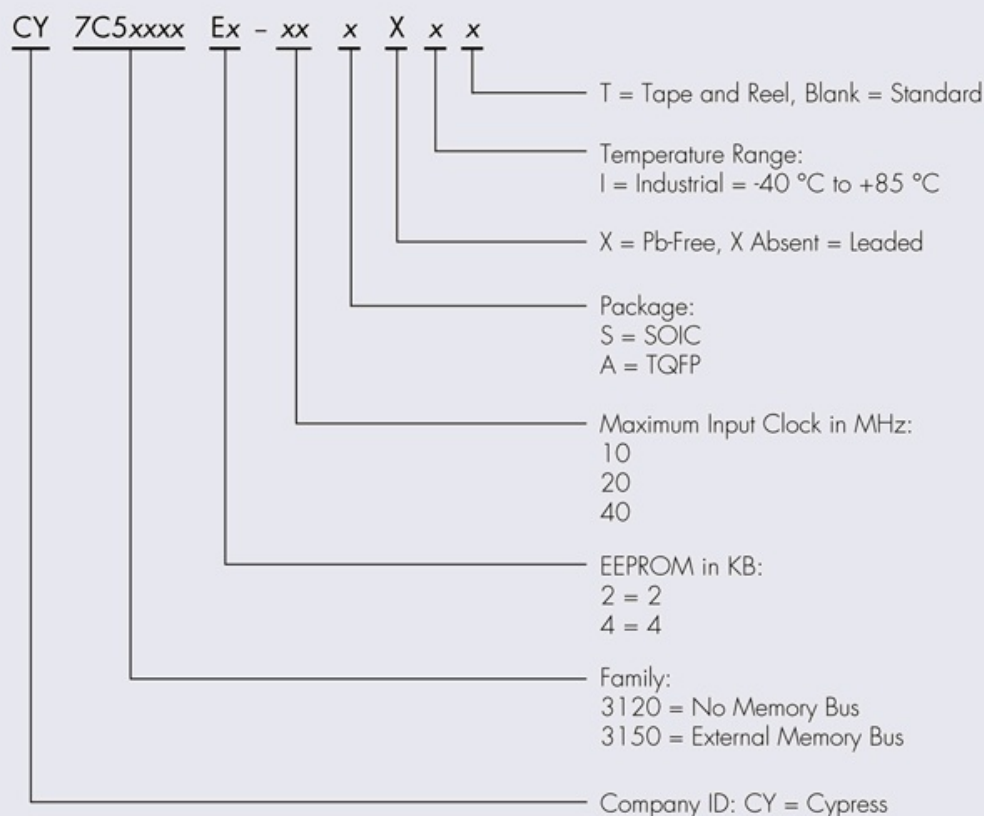
Neuron[®] chips are sophisticated devices that make it possible to implement low-cost control networking applications.

Control networks using Neuron chips are used in a wide variety of applications in building automation, industrial control, and transportation systems.

Key Applications: Heating, Ventilating, and Air-Conditioning (HVAC), lighting control, access control, fire and security monitoring, machine control, food industry applications, electrical metering, utility automation, home automation, domestic appliances, scientific and medical instrumentation, semiconductor processing, fuel monitoring and distribution, aircraft flight control, train braking and signage, and entertainment applications

Part Number	Status	Max. Input Clock (MHz)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	ROM (KB)	Flash (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C53120E2-10SXI	In Production	10	5	5	10	2	SOIC	-40	85	N
CY7C53120E4-40AXI	In Production	40	5	5	12	4	TQFP	-40	85	N
CY7C53120E4-40SXI	In Production	40	5	5	12	4	SOIC	-40	85	N
CY7C53120E4-40SXIT	In Production	40	5	5	12	4	SOIC	-40	85	N
CY7C53150-20AXI	In Production	20	5	5	0	0.5	TQFP	-40	85	N
CY7C53150-20AXIT	In Production	20	5	5	0	0.5	TQFP	-40	85	N

Control Communication Part Number Decoder



PHYS

Multi-Protocol PHYs

Cypress has a large portfolio of backplane physical layer (PHY) devices, covering data transmission rates of 50 Mbps to 1.5 Gbps. These flexible devices are ideal for proprietary serial backplane applications. They also comply with many industry standards such as:

- Gigabit Ethernet
- Fibre Channel
- Enterprise System Connection (ESCON)
- Digital Video Broadcast-Asynchronous Serial Interface (DVB-ASI)
- Society of Motion Picture & Television Engineers (SMPTE), SMPTE 292M, SMPTE 259M, SMPTE 344

Key Applications: Military aircraft, controls and accessories, industrial communications and controls, medical information transmission, wireless basestations, data communications/networking, storage, and broadcast

Part Number	Status	Standard	Min. Speed (Mbps)	Max. Speed (Mbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	8B / 10B ENDEC	Functions	No. of Channels	Package	Min. Operating Temp. (°C)
CY7B923-400JXC	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	PLCC	0
CY7B923-400JXCT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	PLCC	0
CY7B923-JXC	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	PLCC	0
CY7B923-JXCT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	PLCC	0
CY7B923-JXI	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	PLCC	-40
CY7B923-JXIT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	PLCC	-40
CY7B923-SXC	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	SOIC	0
CY7B923-SXCT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Transmitter	N/A	SOIC	0
CY7B933-400JXC	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	PLCC	0
CY7B933-400JXCT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	PLCC	0
CY7B933-JXC	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	PLCC	0
CY7B933-JXCT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	PLCC	0
CY7B933-JXI	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	PLCC	-40
CY7B933-JXIT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	PLCC	-40
CY7B933-SXC	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	SOIC	0
CY7B933-SXCT	In Production	Fibre Channel / ESCON / GE / DVBASI	150	400	4.5	5.5	Y	Receiver	N/A	SOIC	0
CY7C9689A-AXC	In Production	TAXI / FDDI	50	200	4.5	5.5	N	Transceiver	N/A	TQFP	0
CY7C9689A-AXI	In Production	TAXI / FDDI	50	200	4.5	5.5	N	Transceiver	N/A	TQFP	-40
CYP15G0101DXB-BBXC	In Production	SMPTE / DVBASI	195	1500	3	3.6	Y	Transceiver	1	BGA	0

Multi-Protocol PHYs

Part Number	Status	Standard	Min. Speed (Mbps)	Max. Speed (Mbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	8B / 10B ENDEC	Functions	No. of Channels	Package	Min. Operating Temp. (°C)
CYP15G0101DXB-BBXI	In Production	CPRI / OBSAI	195	1500	3	3.6	Y	Transceiver	1	BGA	-40
CYP15G0201DXB-BBXC	In Production	Fibre Channel / ESCON / GE / DVBASI	200	1500	3.15	3.45	N	Transceiver	2	BGA	0
CYP15G0201DXB-BBXI	In Production	Fibre Channel / ESCON / GE / DVBASI	200	1500	3.15	3.45	N	Transceiver	2	BGA	-40
CYP15G0401DXB-BGXC	In Production	Fibre Channel / ESCON / GE / DVBASI	200	1500	3.15	3.45	Y	Transceiver	4	BGA	0
CYP15G0401DXB-BGXI	In Production	Fibre Channel / ESCON / GE / DVBASI	200	1500	3.15	3.45	Y	Transceiver	4	BGA	-40
CYP15G0403DXB-BGXC	In Production	Fibre Channel / ESCON / GE / DVBASI	200	1500	3.15	3.45	Y	Transceiver	4	BGA	0

SONET & SDH PHYs

Cypress offers a family of high performance, SONET/SDH physical layer (PHY) and framing devices that operate at OC-1 (51.85 Mbps), OC-3 (155.52 Mbps), and OC-48 (2.488 Gbps).

Part Number	Status	Standard	Min. Speed (Mbps)	Max. Speed (Mbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	8B / 10B ENDEC	Functions	No. of Channels	Package	Min. Operating Temp. (°C)
CY7B951-SXC	In Production	OC-1 / OC-3	51	155	4.5	5.5	N	Transceiver	N/A	SOIC	0
CY7B951-SXCT	In Production	OC-1 / OC-3	51	155	4.5	5.5	N	Transceiver	N/A	SOIC	0
CY7B952-SXC	In Production	OC-1 / OC-3	51	155	4.5	5.5	N	Transceiver	N/A	SOIC	0
CY7B952-SXCT	In Production	OC-1 / OC-3	51	155	4.5	5.5	N	Transceiver	N/A	SOIC	0
CYS25G0101DX-AEXC	In Production	OC-48	155	2488	3	3.6	N	Transceiver	1	TQFP	0

POWERLINE COMMUNICATION

Cypress's Powerline Communication (PLC) solution enables the implementation of robust and reliable communication over AC and DC Powerlines. With Cypress's PLC solution, you do not need new wires to transmit command and control data—you can reuse the existing infrastructure. Cypress's PLC family of devices (CY8CPLC10 and CY8CPLC20) combines revolutionary PSoC® technology with reliable powerline communication to allow integration of multiple system functions in a single device, thereby reducing BOM costs and providing a smarter way to implement command and control. FCC- and CENELEC-compliant boards and complete network protocol implementation from Cypress accelerate time-to-market.

Key Applications: Lighting control, home/building automation, automatic metering infrastructure, and smart energy management

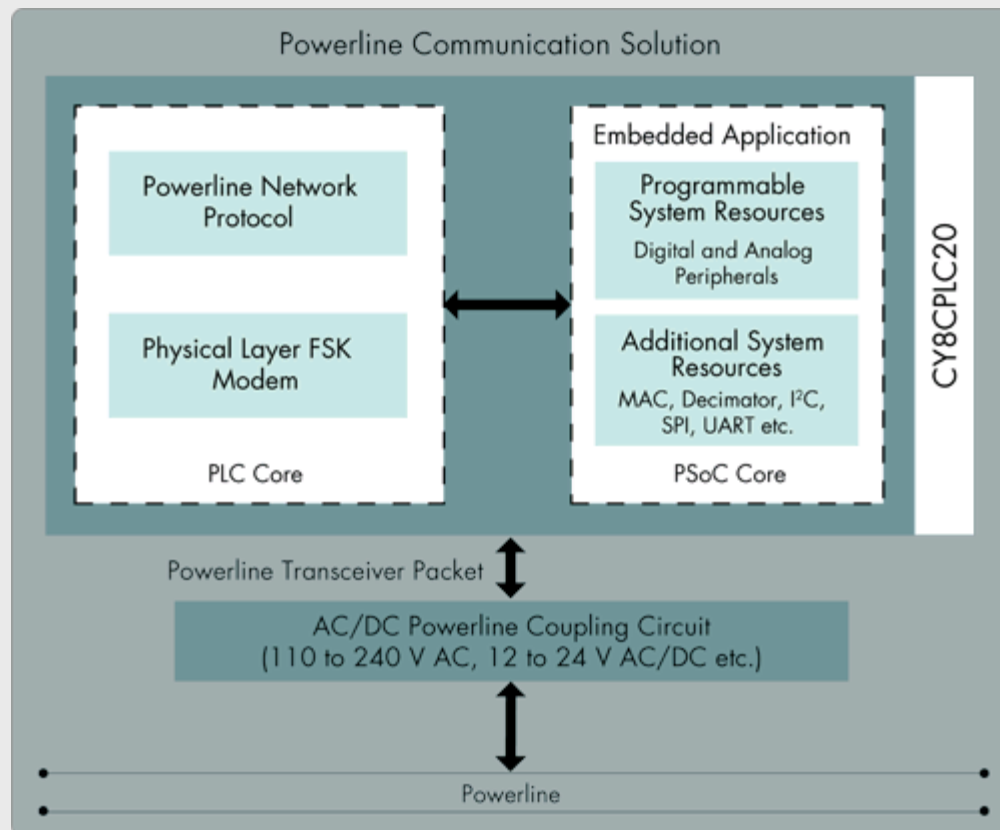
CY8CPLC20—INDUSTRY'S FIRST PROGRAMMABLE POWERLINE COMMUNICATION SOLUTION

Features

- Powerline communication solution
 - Integrated Powerline modem PHY
 - Integrates data link, transport & Powerline optimized network protocol
 - Supports bidirectional half-duplex communication using FSK modulation
 - Variable baud rates up to 2400 bps
- PSoC programmability
 - Integrated powerful Harvard architecture processor
 - 12 Rail-to-Rail configurable analog blocks and 16 programmable digital blocks
 - 32 KB flash and 2 KB SRAM on-chip
 - Enables multiple system functions on a single chip
- Flexibility
 - Ability to communicate over high voltage and low voltage Powerlines
 - Reference Designs available for both high voltage (110 to 240 V AC) and low voltage (12 to 24 V AC/DC) coupling circuits
- Compliant Standards
 - FCC (North America), CENELEC (Europe), and UL certified evaluation boards

Key Applications: Lighting and industrial control, home automation, automatic meter reading, and smart energy management

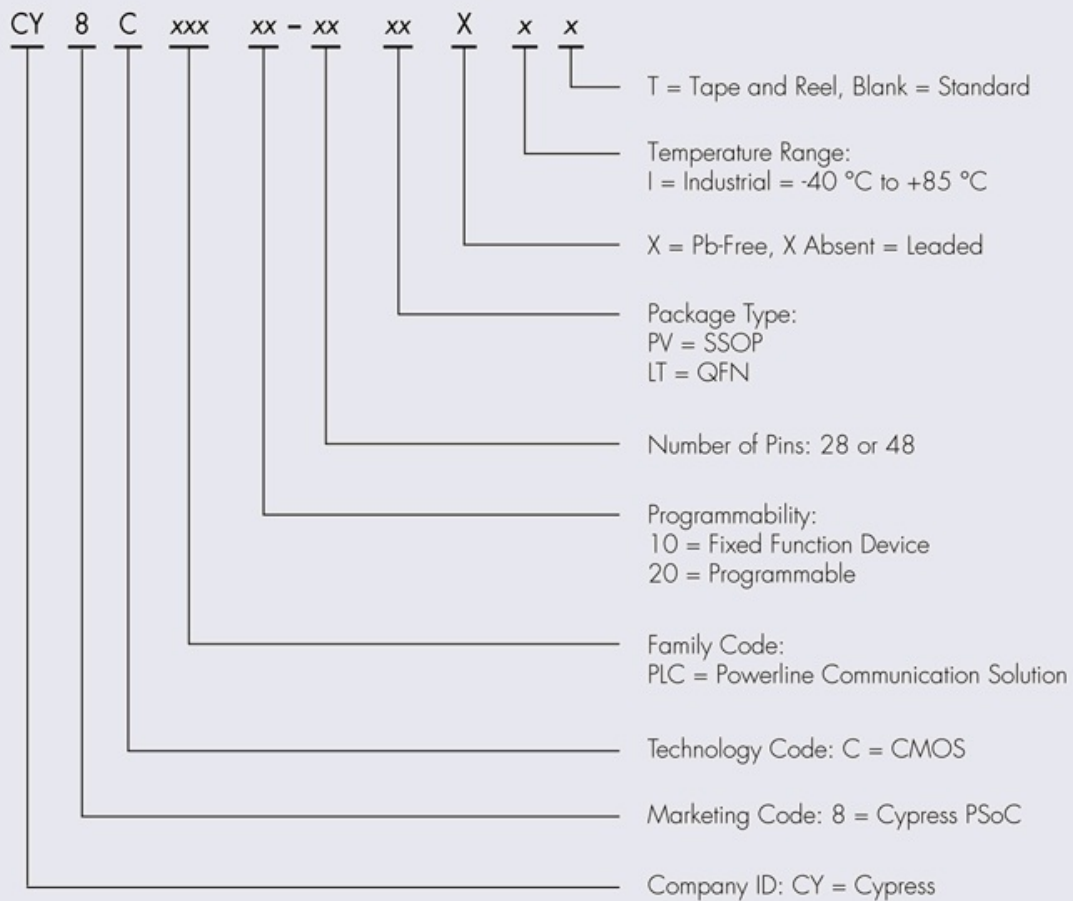
For more information on Powerline Communication visit www.cypress.com/go/plc



POWERLINE COMMUNICATION

Part Number	Status	Max Baud Rate (bps)	PLC Type	No. of GPIOs	SRAM (Bytes)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	Package	Min. Operating Temp. (°C)
CY8CPLC10-28PVXI	In Production	2400	Fixed-Function	N/A	N/A	4.75	5.25	N/A	N/A	SSOP	-40
CY8CPLC10-28PVXIT	In Production	2400	Fixed-Function	N/A	N/A	4.75	5.25	N/A	N/A	SSOP	-40
CY8CPLC20-28PVXI	In Production	2400	Programmable	24	2408	4.75	5.25	16	32	SSOP	-40
CY8CPLC20-28PVXIT	In Production	2400	Programmable	24	2408	4.75	5.25	16	32	SSOP	-40
CY8CPLC20-48LTXI	In Production	2400	Programmable	44	2408	4.75	5.25	16	32	QFN	-40
CY8CPLC20-48LTXIT	In Production	2400	Programmable	44	2408	4.75	5.25	16	32	QFN	-40
CY8CPLC20-OC	Sampling	2400	Programmable	64	2408	4.75	5.25	16	32	TQFP	-40

Powerline Communication Part Number Decoder



VIDEO (SMPTE) PHYS

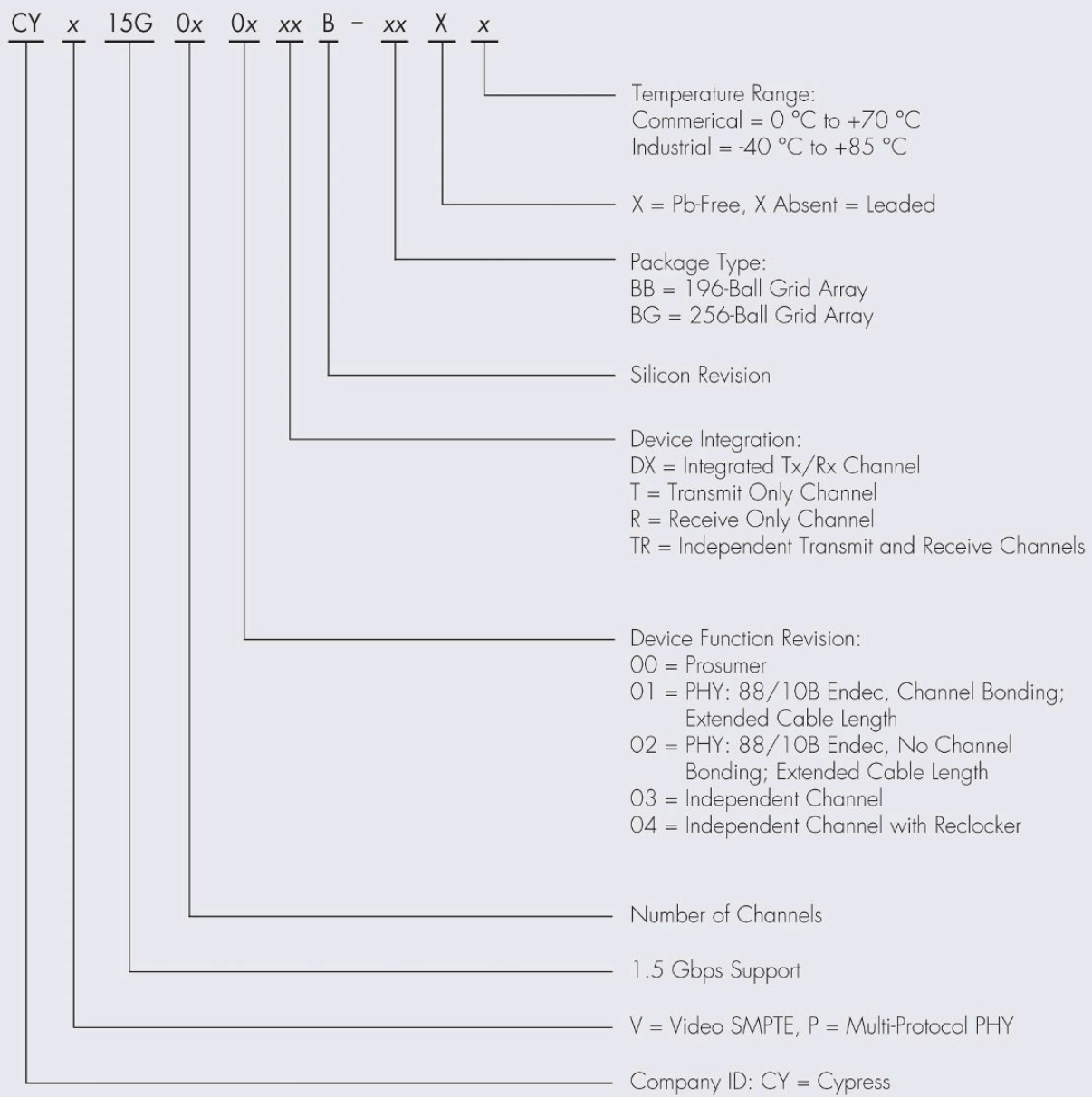
Cypress supplies a chipset for the transmission of digital video signals. This chipset is based on our popular HOTLink family and complies with the Society of Motion Picture & Television Engineers (SMPTE) video encoding, SMPTE-259M, and Digital Video Broadcasting (DVB) standards.

It is widely used in professional digital video applications such as:

- Editing (titles, overlays, real-time special effects)
- Routing (for example, within a broadcast studio)
- Recording
- Storage

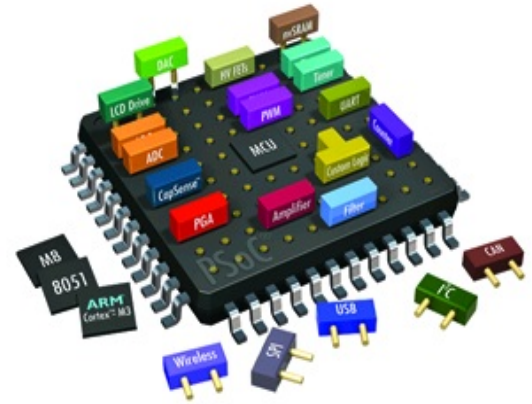
Part Number	Status	Standard	Min. Speed (Mbps)	Max. Speed (Mbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	8B / 10B ENDEC	Functions	No. of Channels	Package	Min. Operating Temp. (°C)
CYV15G0101DXB-BBXC	In Production	SMPTE / DVBASI	143	1500	3.15	3.45	Y	SERDES	1	BGA	0
CYV15G0104TRB-BGXC	In Production	SMPTE / DVBASI	143	1500	3.15	3.45	N	SERDES	1	BGA	0
CYV15G0203TB-BGXC	In Production	SMPTE / DVBASI	143	1500	3.15	3.45	N	Serializer	2	BGA	0
CYV15G0204TRB-BGXC	In Production	SMPTE / DVBASI	143	1500	3.15	3.45	N	SERDES	2	BGA	0
CYV15G0401DXB-BGXC	In Production	SMPTE / DVBASI	143	1500	3.15	3.45	Y	SERDES	4	BGA	0

PHY Part Number Decoder



PSoC® PROGRAMMABLE SYSTEM-ON-CHIP

The PSoC® programmable system-on-chip platform gives you the freedom to imagine revolutionary new products and the capability to get to market faster than anyone else. PSoC is a true programmable embedded SoC integrating configurable analog and digital peripheral functions, memory, and a microcontroller on a single chip. With an extremely flexible visual embedded design methodology that includes preconfigured, user-defined peripherals, and hierarchical schematic entry, you can change your mind as often as you want and stay on schedule. No more restarting projects from scratch. No more catalogs. No more limits.



PSoC WORLD

The Most Comprehensive Virtual Conference for Embedded Designers

PSoC World is the industry's most comprehensive virtual design conference, where attendees learn new design skills, train for credit, browse PSoC partner booths, and engage in live, local-language Q&A. All for free! With robust programmable analog and digital resources, and a variety of MCU cores, PSoC can integrate your designs, get you to market faster, and unleash your design creativity.

Register for the event and receive kits at discounted prices. Visit psocworld.com and view recorded events at your convenience.

PSoC 5LP - HIGH PRECISION ANALOG 32-BIT ARM® EMBEDDED PROCESSOR

Introducing Cypress's fully-qualified PSoC 5LP programmable system-on-chip family. The new devices provide unmatched high-performance programmable analog, the best ADCs available on an ARM®Cortex™-M3-based device, and the flexibility to design custom systems with 80+ pre-verified production-ready Components for the PSoC Creator™ IDE.

UNMATCHED HIGH-PRECISION ANALOG

- Best-in-class ADCs
 - 2x12-bit 1Msps SAR ADCs
 - 20-bit DelSig ADC
- 1.024V $\pm$ 0.1% on-chip reference
- Precision Analog
 - OpAmps, Comparators, I/V DACs, CapSense®, Tran Impedance Amplifier, Sample & Hold, and more
- Fully functional analog from 1.71 – 5.50 V

THE MOST FLEXIBLE LOW POWER PSoC

- 0.5V start-up Boost
- 300nA low leakage Hibernate
- Widest operating range 0.5V to 5.5V

80+ PRODUCTION-READY COMPONENTS

- CapSense® touch sensing
- Segment LCD display
- Trans Impedance Amplifier



These capabilities open up new applications needing single-cell battery performance and high-precision analog to a world beyond fixed function MCUs. PSoC 5LP devices are shipping today; more information, including data sheets, applications notes and development kits, is available at www.cypress.com/go/psoc5lp.

ELECTRONIC PRODUCT SELECTOR GUIDE (ePSG)

The ePSG is an interactive online tool that helps in quick selection of PSoC devices based on the peripheral functions. It allows you to compare devices, click on part numbers for more information, and rearrange columns to highlight the most relevant data.

Use the interactive PSoC product selector guide at www.cypress.com/go/psocpsg

296 Products [Reset Form](#) [Hide Search Criteria](#)

CPU Subsystem

Speed (MHz) 40 48 67 80

MCU Core Type **8051** **ARM Cortex-M3**

Program Memory (KB) 16 32 64 128 256

SRAM (KB) 2 4 8 16 32 64

EEPROM (KB) 0.5 1 2

Voltage Range (V) 0.5 1.8 2.7 3.5 5 5.5

IO <= 35 **36 - 60** >= 61

Temp Range (°C) -40 0 70 85

Package **QFN** **SSOP** **TOFP**

Pins 48 68 100

Digital Subsystem

Timers 0 4 8 12 16 20 24 28

PWMs 0 4 8 12 16 20 24 28

Counters 0 4 8 12 16 20 24 28

I2C 0 3 6 9 13

UART 0 2 4 6 8 10 12

SPI 0 2 4 6 8 10 12

I2S 0 2 4 6 8 10 12

Full Speed USB

CAPI

Analog Subsystem

ADCs 1

ADC 1 Resolution 8 10 12 16 20

ADC 1 Sampling Rate (ksps) <1 100 250 500 1000

ADC 2 Resolution 8 10 12 16 20

ADC 2 Sampling Rate (ksps) <1 100 250 500 1000

ADC 3 Resolution 8 10 12 16 20

ADC 3 Sampling Rate (ksps) <1 100 250 500 1000

DAC 1 2 3 4

Comparators 1 2 3 4

Op Amps 0 1 2 3 4

PGA 0 1 2 3 4

TIA 0 1 2 3 4

Mixers 0 1 2 3 4

Filters

Voltage Ref Accuracy **0.1%**

Advanced Features

External Memory Interface ☒

Direct Memory Access ☒

CapSense ☒

Automotive Qual'd ☒

LCD Direct Drive ☒

296 Results [Compare Selected](#)

Catalog	Item	Status	Category	Package	CPU Core	CapSense	Min Temp	Max Temp	Dedicated ADC	Dedicated DAC	Dedicated I2C	Dedicated UART	Dedicated SPI	USB Type
☐	PSoC 3 CY8C3244AXI-143	Contact Sales	CY8C32xxx	TQFP	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244AXI-153	Contact Sales	CY8C32xxx	TQFP	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244LI-123	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244LI-127	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244LI-130	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244LI-130ES2	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244LI-135	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244PVI-133	Contact Sales	CY8C32xxx	SSOP	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244PVI-155	Contact Sales	CY8C32xxx	SSOP	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	None
☐	PSoC 3 CY8C3244AXI-146	Contact Sales	CY8C32xxx	TQFP	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	Full-S
☐	PSoC 3 CY8C3244AXI-159	Contact Sales	CY8C32xxx	TQFP	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	Full-S
☐	PSoC 3 CY8C3244LI-151	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(0, 8-bit @ 8 msp/s)	1	0	0	Full-S
☐	PSoC 3 CY8C3244LI-152	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	Full-S
☐	PSoC 3 CY8C3244LI-161	Contact Sales	CY8C32xxx	QFN	8051	Yes	-40	85	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp/s)	1	0	0	Full-S

DESIGN WIN REPLICATION (DWR) HIGHLIGHTS

PSoC Power Supervision Solution

Fail-Safe Supervision for Mission-Critical Systems: A Great BOM Control Opportunity

Secure a critical Power Supervision socket on every customer board

[Click here for more details](#)

**PSoC Home Application System Solution**

The Growing Appliance User Interface (UI) Market Provides a Big Opportunity

Win profitable designs with full 25% Demand Creation margin

[Click here for more details](#)

**PSoC Thermal Management System**

Fail-Safe Thermal Management for Mission-Critical Systems: A Great BOM Control Opportunity

Secure the Thermal Management socket that is on every customer board

[Click here for more details](#)



PSOC® 1

The PSoC family consists of on-chip controller devices that are designed to replace multiple traditional MCU-based system components with one low cost single-chip programmable device. PSoC devices include configurable blocks of analog and digital logic, and programmable interconnects. This architecture enables the user to create customized peripheral configurations that match the requirements of each individual application. Additionally, a fast CPU, flash program memory, SRAM data memory, and configurable IO are included in a range of convenient pinouts and packages.

PSoC 1 comprises 12 different families with 173 devices.

CY8C20x34

Part Number	Status	No. of CapSense IO	Sliders	No. of GPIOs	SmartSense Enabled	Min. Operating Voltage (V)	PWMs	Max. Operating Voltage (V)	Proximity Sensing	No. of Programmable Digital Blocks	Comm. Interface
CY8C20234-12LKXIT	In Production	10	2	13	N	2.4	SW	5.25	N	0	I2C, SPI

CY8C20xx6A

CY8C20xx6A family is the newest and lowest power, 1.8 V CapSense solution with an optional USB interface from Cypress, the world leader in touch sensing. This family is geared towards battery-powered applications such as handheld devices, mobile, bluetooth headsets and towards wall-plugged applications sensitive to electrical noise such as printers, LCD TVs and monitors. The CY8C20xx6A family is enabled with SmartSense™ automatic tuning technology that makes CapSense designs easier than ever to use.

Part Number	Status	No. of CapSense IO	Sliders	No. of GPIOs	SmartSense Enabled	Min. Operating Voltage (V)	PWMs	Max. Operating Voltage (V)	Proximity Sensing	No. of Programmable Digital Blocks	Comm. Interface
CY8C20236A-24LKXA	In Production	10	2	13	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20236A-24LKXAT	In Production	10	2	13	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20236A-24LKXI	In Production	10	2	13	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20236A-24LKXIT	In Production	10	2	13	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20246A-24LKXI	In Production	10	2	13	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20246A-24LKXIT	In Production	10	2	13	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20336A-24LQXI	In Production	17	3	20	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20336A-24LQXIT	In Production	17	3	20	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20346A-24LQXI	In Production	17	3	20	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20346A-24LQXIT	In Production	17	3	20	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20396A-24LQXI	In Production	16	3	19	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20396A-24LQXIT	In Production	16	3	19	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20436A-24LQXI	In Production	25	5	28	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20436A-24LQXIT	In Production	25	5	28	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20446A-24LQXI	In Production	25	5	28	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20446A-24LQXIT	In Production	25	5	28	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20466A-24LQXI	In Production	25	5	28	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20466A-24LQXIT	In Production	25	5	28	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20496A-24LQXI	In Production	22	5	25	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20496A-24LQXIT	In Production	22	5	25	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20536A-24PVXI	In Production	31	4	34	N	1.71	SW	5.5	N	0	I2C, SPI
CY8C20536A-24PVXIT	In Production	31	4	34	N	1.71	SW	5.5	N	0	I2C, SPI
CY8C20546A-24PVXI	In Production	33	6	34	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20546A-24PVXIT	In Production	33	6	34	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20566A-24PVXI	In Production	31	6	34	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20566A-24PVXIT	In Production	31	6	34	Y	1.71	SW	5.5	N	0	I2C, SPI

CY8C20xx6A

Part Number	Status	No. of CapSense IO	Sliders	No. of GPIOs	SmartSense Enabled	Min. Operating Voltage (V)	PWMs	Max. Operating Voltage (V)	Proximity Sensing	No. of Programmable Digital Blocks	Comm. Interface
CY8C20636A-24LQXI	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20636A-24LQXIT	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20636A-24LTXI	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20636A-24LTXIT	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI
CY8C20646A-24LQXI	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20646A-24LQXIT	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20646A-24LTXI	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20646A-24LTXIT	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20666A-24LQXI	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI, USB
CY8C20666A-24LQXIT	In Production	33	6	36	Y	1.71	SW	5.5	N	0	I2C, SPI, USB

CY8C21x23

PSoC architecture, consists of four main areas: the core, the system resources, the digital system, and the analog system. Configurable global bus resources allow the combining of all device resources into a complete custom system. Each CY8C21x23 PSoC device includes four digital blocks. Depending on the PSoC package, up to 2 analog comparators and up to 16 general purpose IO (GPIO) are also included. The GPIO provide access to the global digital and analog interconnects.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C21123-24SXI	In Production	0	6	2.4	5.25	4	4	0.25	SOIC	-40	85
CY8C21123-24SXIT	In Production	0	6	2.4	5.25	4	4	0.25	SOIC	-40	85
CY8C21223-24LGXI	In Production	0	12	2.4	5.25	4	4	0.25	QFN	-40	85
CY8C21223-24LGXIT	In Production	0	12	2.4	5.25	4	4	0.25	QFN	-40	85
CY8C21223-24SXI	In Production	0	12	2.4	5.25	4	4	0.25	SOIC	-40	85
CY8C21223-24SXIT	In Production	0	12	2.4	5.25	4	4	0.25	SOIC	-40	85
CY8C21323-24LFXI	In Production	0	16	2.4	5.25	4	4	0.25	QFN	-40	85
CY8C21323-24LFXIT	In Production	0	16	2.4	5.25	4	4	0.25	QFN	-40	85
CY8C21323-24PVXI	In Production	0	16	2.4	5.25	4	4	0.25	SSOP	-40	85
CY8C21323-24PVXIT	In Production	0	16	2.4	5.25	4	4	0.25	SSOP	-40	85

CY8C21x34

Part Number	Status	No. of CapSense IO	Sliders	No. of GPIOs	SmartSense Enabled	Min. Operating Voltage (V)	PWMs	Max. Operating Voltage (V)	Proximity Sensing	No. of Programmable Digital Blocks	Comm. Interface
CY8C21234-24SXI	In Production	8	1	12	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21312-12PVXE	In Production	12	2	16	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21312-12PVXET	In Production	12	2	16	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21312-24PVXA	In Production	12	2	16	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21312-24PVXAT	In Production	12	2	16	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21334-12PVXE	In Production	12	2	16	N	4.75	HW	5.25	Y	3	I2C, SPI, UART
CY8C21334-12PVXET	In Production	12	2	16	N	4.75	HW	5.25	Y	3	I2C, SPI, UART
CY8C21334-24PVXA	In Production	12	2	16	N	3	HW	5.25	Y	3	I2C, SPI, UART

CY8C21x34

Part Number	Status	No. of CapSense IO	Sliders	No. of GPIOs	SmartSense Enabled	Min. Operating Voltage (V)	PWMs	Max. Operating Voltage (V)	Proximity Sensing	No. of Programmable Digital Blocks	Comm. Interface
CY8C21334-24PVXAT	In Production	12	2	16	N	3	HW	5.25	Y	3	I2C, SPI, UART
CY8C21334-24PVXI	In Production	12	2	16	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21334-24PVXIT	In Production	12	2	16	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21434-24LQXI	In Production	24	4	28	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21434-24LQXIT	In Production	24	4	28	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21434-24LTXI	In Production	24	4	28	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21434-24LTXIT	In Production	24	4	28	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21512-12PVXE	In Production	20	4	24	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21512-12PVXET	In Production	20	4	24	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21512-24PVXA	In Production	20	4	24	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21512-24PVXAT	In Production	20	4	24	N	3	HW	5.25	Y	1	I2C, SPI, UART
CY8C21534-12PVXE	In Production	20	4	24	N	4.75	HW	5.25	Y	3	I2C, SPI, UART
CY8C21534-12PVXET	In Production	20	4	24	N	4.75	HW	5.25	Y	3	I2C, SPI, UART
CY8C21534-24PVXA	In Production	20	4	24	N	3	HW	5.25	Y	3	I2C, SPI, UART
CY8C21534-24PVXAT	In Production	20	4	24	N	3	HW	5.25	Y	3	I2C, SPI, UART
CY8C21534-24PVXI	In Production	20	4	24	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21534-24PVXIKO	Contact Sales	20	4	24	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21634-24LTXI	In Production	22	4	26	N	2.4	HW	5.25	Y	3	I2C, SPI, UART
CY8C21634-24LTXIT	In Production	22	4	26	N	2.4	HW	5.5	Y	3	I2C, SPI, UART

CY8C22xxx/CY8C21x45

The CY8C22xxx/CY8C21x45 PSoC family can have up to five IO ports connecting to the global digital and analog interconnects, providing access to 8 digital blocks and 6 analog blocks. This PSoC family is intended for applications which require Capsense buttons in addition to core device functionality. This family has a dedicated 10-bit SAR ADC with sample and hold.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C21345-12PVXE	In Production	21	24	4.75	5.25	4	8	0.51	SSOP	-40	125
CY8C21345-12PVXET	In Production	21	24	4.75	5.25	4	8	0.51	SSOP	-40	125
CY8C21345-24PVXA	In Production	21	24	3	5.25	4	8	0.51	SSOP	-40	85
CY8C21345-24PVXAT	In Production	21	24	3	5.25	4	8	0.51	SSOP	-40	85
CY8C21345-24SXI	In Production	24	24	3	5.25	4	8	0.51	SOIC	-40	85
CY8C21345-24SXIT	In Production	24	24	3	5.25	4	8	0.51	SOIC	-40	85
CY8C21645-12PVXE	In Production	36	39	4.75	5.25	4	8	0.51	SSOP	-40	125
CY8C21645-12PVXET	In Production	36	39	4.75	5.25	4	8	0.51	SSOP	-40	125
CY8C21645-24PVXA	In Production	36	39	3	5.25	4	8	0.51	SSOP	-40	85
CY8C21645-24PVXAT	In Production	36	39	3	5.25	4	8	0.51	SSOP	-40	85
CY8C22345-12PVXE	In Production	21	24	4.75	5.25	8	16	1	SSOP	-40	125
CY8C22345-12PVXET	In Production	21	24	4.75	5.25	8	16	1	SSOP	-40	125
CY8C22345-24PVXA	In Production	21	24	3	5.25	8	16	1	SSOP	-40	85
CY8C22345-24PVXAT	In Production	21	24	3	5.25	8	16	1	SSOP	-40	85
CY8C22345-24SXI	In Production	24	24	3	5.25	8	16	1	SOIC	-40	85
CY8C22345-24SXIT	In Production	24	24	3	5.25	8	16	1	SOIC	-40	85
CY8C22345H-24PVXA	In Production	21	24	3	5.25	8	16	1	SSOP	-40	85
CY8C22345H-24PVXAT	In Production	21	24	3	5.25	8	16	1	SSOP	-40	85
CY8C22545-24AXI	In Production	38	38	3	5.25	8	16	1	TQFP	-40	85
CY8C22545-24AXIT	In Production	38	38	3	5.25	8	16	1	TQFP	-40	85
CY8C22645-12PVXE	In Production	36	39	4.75	5.25	8	16	1	SSOP	-40	125
CY8C22645-12PVXET	In Production	36	39	4.75	5.25	8	16	1	SSOP	-40	125
CY8C22645-24PVXA	In Production	36	39	3	5.25	8	16	1	SSOP	-40	85
CY8C22645-24PVXAT	In Production	36	39	3	5.25	8	16	1	SSOP	-40	85

CY8C23x33

The PSoC CY8C23x33 family can have up to three IO ports that connect to the global digital and analog interconnects, providing access to 4 digital blocks and 4 analog blocks, and a dedicated 8-bit SAR ADC.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C23433-24PVXI	In Production	0	26	3	5.25	4	8	0.25	SSOP	-40	85
CY8C23533-24LQXI	In Production	0	26	3	5.25	4	8	0.25	QFN	-40	85
CY8C24633-24PVXI	In Production	0	26	3	5.25	4	8	0.25	SSOP	-40	85
CY8C24633-24PVXIT	In Production	0	26	3	5.25	4	8	0.25	SSOP	-40	85

CY8C24x23A

The PSoC CY8C24x23A family can have up to three IO ports that connect to the global digital and analog interconnects, providing access to four digital blocks and six analog blocks.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C24123A-24PXI	In Production	0	6	3	5.25	4	4	0.25	PDIP	-40	85
CY8C24123A-24SXI	In Production	0	6	3	5.25	4	4	0.25	SOIC	-40	85
CY8C24123A-24SXIT	In Production	0	6	3	5.25	4	4	0.25	SOIC	-40	85
CY8C24223A-12PVXE	In Production	0	16	4.75	5.25	4	4	0.25	SSOP	-40	125
CY8C24223A-12PVXET	In Production	0	16	4.75	5.25	4	4	0.25	SSOP	-40	125
CY8C24223A-24PVXA	In Production	0	16	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24223A-24PVXAT	In Production	0	16	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24223A-24PVXI	In Production	0	16	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24223A-24PVXIT	In Production	0	16	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24223A-24PXI	In Production	0	16	3	5.25	4	4	0.25	PDIP	-40	85
CY8C24223A-24SXI	In Production	0	16	3	5.25	4	4	0.25	SOIC	-40	85
CY8C24223A-24SXIT	In Production	0	16	3	5.25	4	4	0.25	SOIC	-40	85
CY8C24423A-12PVXE	In Production	0	24	4.75	5.25	4	4	0.25	SSOP	-40	125
CY8C24423A-12PVXET	In Production	0	24	4.75	5.25	4	4	0.25	SSOP	-40	125
CY8C24423A-24LTXI	In Production	0	24	3	5.25	4	4	0.25	QFN	-40	85
CY8C24423A-24LTXIT	In Production	0	24	3	5.25	4	4	0.25	QFN	-40	85
CY8C24423A-24PVXA	In Production	0	24	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24423A-24PVXAT	In Production	0	24	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24423A-24PVXI	In Production	0	24	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24423A-24PVXIT	In Production	0	24	3	5.25	4	4	0.25	SSOP	-40	85
CY8C24423A-24PXI	In Production	0	24	3	5.25	4	4	0.25	PDIP	-40	85
CY8C24423A-24SXI	In Production	0	24	3	5.25	4	4	0.25	SOIC	-40	85
CY8C24423A-24SXIT	In Production	0	24	3	5.25	4	4	0.25	SOIC	-40	85

CY8C24x94

The CapSense™ Plus family provides programmable touchsensing with additional functionality via assembly or C language coding in PSoC Designer and a wide array of analog and digital interface capabilities. It supports up to fifty-six general purpose I/Os for buttons, multi-segment sliders, proximity detection, touchpads, LEDs, and other general purpose functions. The Plus feature in this family enables integration of additional functions like LED backlight, motor control, power management and gyro sensing. The family provides field upgrade capability via bootloader. This family also has the capability to support I²C, SPI, USB, and UART interfaces.

Part Number	Status	No. of CapSense IO	Sliders	No. of GPIOs	SmartSense Enabled	Min. Operating Voltage (V)	PWMs	Max. Operating Voltage (V)	Proximity Sensing	No. of Programmable Digital Blocks	Comm. Interface
CY8C24094-24AXI	Sampling	44	8	56	N	3	HW	5.25	Y	0	I ² C, SPI, UART, USB
CY8C24094-24BVXI	NRND	44	8	56	N	3	HW	5.25	Y	0	I ² C, SPI, UART, USB
CY8C24094-24BVXIT	NRND	44	8	56	N	3	HW	5.25	Y	0	I ² C, SPI, UART, USB
CY8C24094-24LTXI	NRND	44	8	56	N	3	HW	5.25	Y	3	I ² C, SPI, UART, USB
CY8C24094-24LTXIT	NRND	44	8	56	N	3	HW	5.25	Y	3	I ² C, SPI, UART, USB
CY8C24794-24LQXI	In Production	44	8	50	N	3	HW	5.25	Y	3	I ² C, SPI, UART, USB
CY8C24794-24LQXIT	In Production	44	8	50	N	3	HW	5.25	Y	3	I ² C, SPI, UART, USB
CY8C24794-24LTXI	In Production	44	8	50	N	3	HW	5.25	Y	0	I ² C, SPI, UART, USB
CY8C24794-24LTXIT	In Production	44	8	50	N	3	HW	5.25	Y	0	I ² C, SPI, UART, USB

CY8C24x94

Part Number	Status	No. of CapSense IO	Sliders	No. of GPIOs	SmartSense Enabled	Min. Operating Voltage (V)	PWMs	Max. Operating Voltage (V)	Proximity Sensing	No. of Programmable Digital Blocks	Comm. Interface
CY8C24894-24LFXA	In Production	43	8	49	N	3	HW	5.25	Y	3	I2C, SPI, UART
CY8C24894-24LFXAT	In Production	43	8	49	N	3	HW	5.25	Y	3	I2C, SPI, UART
CY8C24894-24LTXI	In Production	43	8	49	N	3	HW	5.25	Y	3	I2C, SPI, UART, USB
CY8C24894-24LTXIT	In Production	43	8	49	N	3	HW	5.25	Y	3	I2C, SPI, UART, USB
CY8C24994-24LTXI	In Production	44	8	56	N	3	HW	5.25	Y	3	I2C, SPI, UART, USB
CY8C24994-24LTXIT	In Production	44	8	56	N	3	HW	5.25	Y	3	I2C, SPI, UART, USB

CY8C27x43

The PSoC CY8C27x43 family can have up to five IO ports that connect to the global digital and analog interconnects, providing access to 8 digital blocks and 12 analog blocks.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C27002-24PVXI	Sampling	0	44	3	5.25	8	16	0.25	SSOP	-40	85
CY8C27143-24PXI	In Production	0	6	3	5.25	8	16	0.25	PDIP	-40	85
CY8C27243-24PVXI	In Production	0	16	3	5.25	8	16	0.25	SSOP	-40	85
CY8C27243-24SXI	In Production	0	16	3	5.25	8	16	0.25	SOIC	-40	85
CY8C27443-24PVXI	In Production	0	24	3	5.25	8	16	0.25	SSOP	-40	85
CY8C27443-24PXI	In Production	0	24	3	5.25	8	16	0.25	PDIP	-40	85
CY8C27443-24SXI	In Production	0	24	3	5.25	8	16	0.25	SOIC	-40	85
CY8C27543-24AXI	In Production	0	40	3	5.25	8	16	0.25	TQFP	-40	85
CY8C27643-24LTXI	In Production	0	44	3	5.25	8	16	0.25	QFN	-40	85
CY8C27643-24LTXIT	In Production	0	44	3	5.25	8	16	0.25	QFN	-40	85
CY8C27643-24PVXI	In Production	0	44	3	5.25	8	16	0.25	SSOP	-40	85

CY8C28xxx

The PSoC CY8C28xxx family can have up to five IO ports that connect to the global digital and analog interconnects, providing access to 12 digital blocks and 12 analog blocks. This PSoC family is intended for applications which require Capsense buttons in addition to core device functionality in addition to being able to drive LCDs. This family can be configured to function as four simultaneous Delta-Sigma ADCs in addition to a dedicated 10-bit SAR ADC with sample and hold.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C28243-24PVXI	In Production	16	16	3	5.25	12	16	1	SSOP	-40	85
CY8C28243-24PVXIT	In Production	16	16	3	5.25	12	16	1	SSOP	-40	85
CY8C28403-24PVXI	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28403-24PVXIT	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28413-24PVXI	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28413-24PVXIT	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28433-24PVXI	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28433-24PVXIT	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28445-24PVXI	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28445-24PVXIT	In Production	24	24	3	5.25	12	16	1	SSOP	-40	85
CY8C28452-24PVXI	In Production	24	24	3	5.25	8	16	1	SSOP	-40	85
CY8C28452-24PVXIT	In Production	24	24	3	5.25	8	16	1	SSOP	-40	85
CY8C28513-24AXI	In Production	24	24	3	5.25	12	16	1	TQFP	-40	85
CY8C28513-24AXIT	In Production	24	24	3	5.25	12	16	1	TQFP	-40	85

CY8C28xxx

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C28533-24AXI	In Production	40	40	3	5.25	12	16	1	TQFP	-40	85
CY8C28533-24AXIT	In Production	40	40	3	5.25	12	16	1	TQFP	-40	85
CY8C28545-24AXI	In Production	40	40	3	5.25	12	16	1	TQFP	-40	85
CY8C28545-24AXIT	In Production	40	40	3	5.25	12	16	1	TQFP	-40	85
CY8C28623-24LTXI	In Production		44	3	5.25	12	16	1	QFN	-40	85
CY8C28623-24LTXIT	In Production	44	44	3	5.25	12	16	1	QFN	-40	85
CY8C28643-24LTXI	In Production	44	44	3	5.25	12	16	1	QFN	-40	85
CY8C28643-24LTXIT	In Production	44	44	3	5.25	12	16	1	QFN	-40	85
CY8C28645-24LTXI	In Production	44	44	3	5.25	12	16	1	QFN	-40	85
CY8C28645-24LTXIT	In Production	44	44	3	5.25	12	16	1	QFN	-40	85

CY8C29x66

The PSoC CY8C29x66 family can have up to eight IO ports that connect to the global digital and analog interconnects, providing access to 16 digital blocks and 12 analog blocks.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C29000-24AXI	Sampling	0	64	3	5.25	16	32	2	TQFP	-40	85
CY8C29466-12PVXE	In Production	0	24	4.75	5.25	16	32	2	SSOP	-40	125
CY8C29466-12PVXET	In Production	0	24	4.75	5.25	16	32	2	SSOP	-40	125
CY8C29466-24PVXA	In Production	0	24	3	5.25	16	32	2	SSOP	-40	85
CY8C29466-24PVXAT	In Production	0	24	3	5.25	16	32	2	SSOP	-40	85
CY8C29466-24PVXI	In Production	0	24	3	5.25	16	32	2	SSOP	-40	85
CY8C29466-24PVXIT	In Production	0	24	3	5.25	16	32	2	SSOP	-40	85
CY8C29466-24PXI	In Production	0	24	3	5.25	16	32	2	PDIP	-40	85
CY8C29466-24SXI	In Production	0	24	3	5.25	16	32	2	SOIC	-40	85
CY8C29566-24AXI	In Production	0	40	3	5.25	16	32	2	TQFP	-40	85
CY8C29566-24AXIT	In Production	0	40	3	5.25	16	32	2	TQFP	-40	85
CY8C29666-12PVXE	Sampling	0	44	4.75	5.25	16	32	2	SSOP	-40	125
CY8C29666-12PVXET	Sampling	0	44	4.75	5.25	16	32	2	SSOP	-40	125
CY8C29666-24LTXI	In Production	0	44	3	5.25	16	32	2	QFN	-40	85
CY8C29666-24LTXIT	In Production	0	44	3	5.25	16	32	2	QFN	-40	85
CY8C29666-24PVXA	In Production	0	44	3	5.25	16	32	2	SSOP	-40	85
CY8C29666-24PVXAT	In Production	0	44	3	5.25	16	32	2	SSOP	-40	85
CY8C29666-24PVXI	In Production	0	44	3	5.25	16	32	2	SSOP	-40	85
CY8C29866-24AXI	In Production	0	64	3	5.25	16	32	2	TQFP	-40	85

CY8C95xx

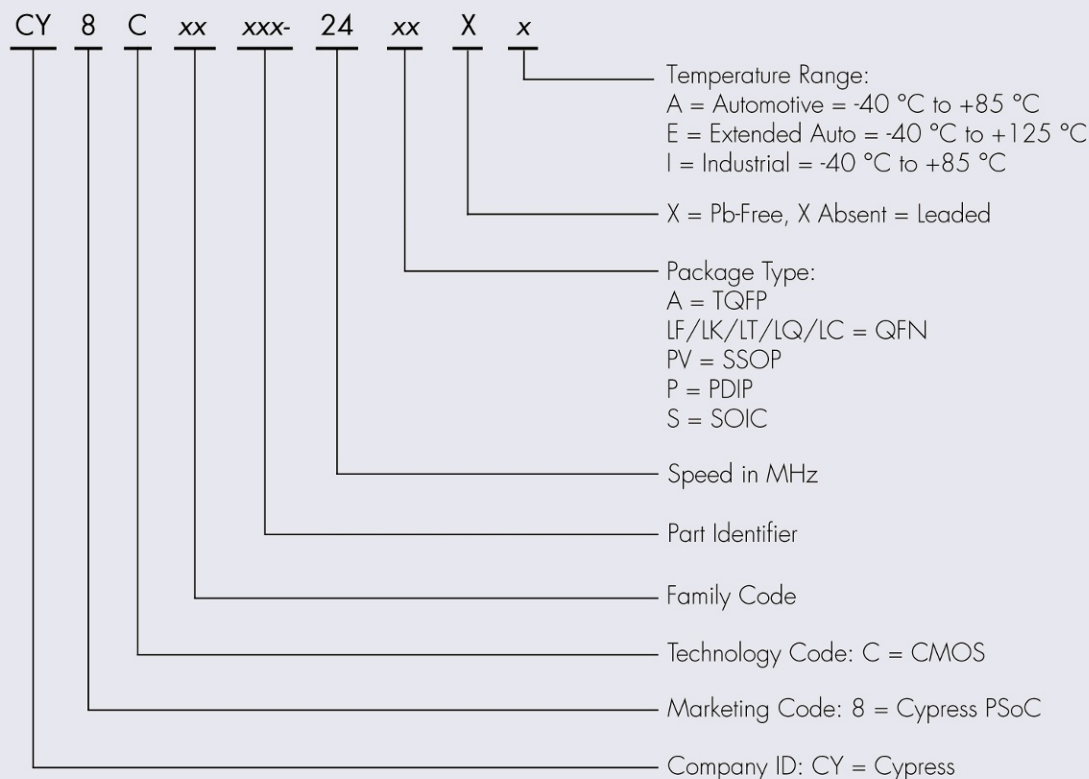
The CY8C95xxA is a multiport IO expander with on board user available EEPROM and several PWM outputs. All devices in this family operate identically but differ in IO pins, number of PWMs, and internal EEPROM size.

The CY8C95xxA operates as two I²C slave devices. The first device is a multi port IO expander (single I²C address to access all ports through registers). The second device is a serial EEPROM. Dedicated configuration registers can be used to disable the EEPROM. The EEPROM uses 2-byte addressing to support the 28 Kbyte EEPROM address space. The selected device is defined by the most significant bits of the I²C address or by specific register addressing.

The IO expander's data pins can be independently assigned as inputs, outputs, quasi-bidirectional input/outputs or PWM outputs. The individual data pins can be configured as open drain or collector, strong drive (10 mA source, 25 mA sink), resistively pulled up or down, or high impedance. The factory default configuration is pulled up internally.

Part Number	Status	No. of CapSense IO	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	No. of Programmable Digital Blocks	Flash (KB)	SRAM (KB)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)
CY8C9520A-24PVXI	In Production	0	20	3	5.25	0	3	0	SSOP	-40	85
CY8C9520A-24PVXIT	In Production	0	20	3	5.25	0	3	0	SSOP	-40	85
CY8C9540A-24PVXI	In Production	0	40	3	5.25	0	11	0	SSOP	-40	85
CY8C9540A-24PVXIT	In Production	0	40	3	5.25	0	11	0	SSOP	-40	85
CY8C9560A-24AXI	In Production	0	60	3	5.25	0	27	0	TQFP	-40	85
CY8C9560A-24AXIT	In Production	0	60	3	5.25	0	27	0	TQFP	-40	85

PSoC 1 Part Number Decoder



PSOC® 3

PSoC 3 is a true programmable embedded system-on-chip integrating configurable analog and digital peripheral functions, memory, and a microcontroller on a single chip. PSoC 3 comprises four families with 181 parts. The architecture features:

- Integrated high-precision up to 20-bit DelSig ADC
- Fixed function and programmable analog components
- Ultra low power with industry's widest voltage range
- Programmable PLD-based logic
- Programmable 8-bit universal digital blocks
- Single-cycle 8051 core up to 67 MHz
- Support for variety of communication interfaces: FS USB 2.0, CAN, SPI, I²C, UART, I²S, and more

CY8C32xxx

CY8C32xxx is the programmable digital family within the PSoC 3 portfolio and supports applications that require minimal analog peripheral integration alongside a highly programmable digital subsystem. In addition to the digital features found across the PSoC 3 portfolio, this family also has an 8- to 12-bit Delta-Sigma ADC, a single 8-bit DAC, and two comparators. The CY8C32xxx family is targeted at digital requirements with lower analog requirements. Each device in this family contains:

- 50 MHz Single Cycle 8051
- 16 KB - 64 KB Flash
- 16 - 24 UDBs
- 1x12-bit 192ksps Delta-Sig ADC
- 1x 8-bit 8 msp DAC
- 2x high performance comparators
- 1.7 V to 5.5 V operating voltage range

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_Max Resolution @ Sample Rate)	Dedicated DAC (#_Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C3244AXI-153	In Production	16	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	TQFP
CY8C3244AXI-153T	In Production	16	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	TQFP
CY8C3244LTI-123	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	QFN
CY8C3244LTI-123T	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	QFN
CY8C3244LTI-130	In Production	16	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	QFN
CY8C3244LTI-130T	In Production	16	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	QFN
CY8C3244PVI-133	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	SSOP
CY8C3244PVI-133T	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	16	Y	2	SSOP
CY8C3245AXI-158	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	TQFP
CY8C3245AXI-158T	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	TQFP
CY8C3245AXI-166	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	TQFP
CY8C3245AXI-166T	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	TQFP
CY8C3245LTI-129	NRND	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN
CY8C3245LTI-129T	NRND	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN
CY8C3245LTI-139	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN
CY8C3245LTI-139T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN
CY8C3245LTI-144	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN
CY8C3245LTI-144T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN
CY8C3245LTI-163	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN
CY8C3245LTI-163T	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksps)	(1, 8-bit @ 8 msp)	32	Y	4	QFN

CY8C32xxx

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C3245PVI-134	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3245PVI-134T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3245PVI-150	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3245PVI-150T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3246AXI-131	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3246AXI-131T	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3246AXI-138	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3246AXI-138T	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3246LTI-125	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246LTI-125T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246LTI-128	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246LTI-128T	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246LTI-149	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246LTI-149T	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246LTI-162	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246LTI-162T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3246PVI-122	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3246PVI-122T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3246PVI-147	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3246PVI-147T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	8	SSOP

CY8C34xxx

CY8C34xxx is the analog lite family within the PSoC 3 portfolio and supports applications that require a minimal set of analog peripherals alongside a highly programmable digital subsystem. In addition to the digital features found across the PSoC 3 portfolio, this family also has an 8- to 12-bit Delta-Sigma ADC, two 8-bit DACs, two Opamps, four comparators, and two programmable analog blocks that can be configured via PSoC Creator as PGAs, TIAs, etc. The CY8C34xxx family is targeted at digital applications with some analog processing capabilities. Each device contains:

- 50 MHz Single Cycle 8051
- 16 KB - 64 KB Flash
- 16 - 24 UDBs
- 1x12-bit ADC
- 2xdac
- 2x OpAmps
- 2x Analog blocks
- 4x Comparators

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C3444AXI-116	NRND	16	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	TQFP
CY8C3444AXI-116T	NRND	16	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	TQFP
CY8C3444LTI-110	In Production	16	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	QFN
CY8C3444LTI-110T	In Production	16	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	QFN
CY8C3444LTI-119	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	QFN
CY8C3444LTI-119T	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	QFN
CY8C3444PVI-100	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	SSOP
CY8C3444PVI-100T	In Production	16	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	16	Y	2	SSOP
CY8C3445AXI-104	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	TQFP
CY8C3445AXI-104T	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	TQFP
CY8C3445AXI-108	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	TQFP

CY8C34xxx

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C3445AXI-108T	In Production	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	TQFP
CY8C3445LTI-078	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445LTI-078T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445LTI-079	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445LTI-079T	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445LTI-081	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445LTI-081T	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445LTI-089	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445LTI-089T	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3445PVI-090	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3445PVI-090T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3445PVI-094	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3445PVI-094T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3446AXI-099	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3446AXI-099T	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3446AXI-105	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3446AXI-105T	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3446LTI-073	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446LTI-073T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446LTI-074	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446LTI-074T	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446LTI-083	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446LTI-083T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446LTI-085	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446LTI-085T	In Production	24	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3446PVI-076	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3446PVI-076T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3446PVI-091	NRND	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3446PVI-091T	NRND	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3446PVI-102	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	SSOP
CY8C3446PVI-102T	In Production	24	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	SSOP

CY8C36xxx

CY8C36xxx is the performance analog family within the PSoC 3 portfolio and supports applications that require a large number of analog peripheral features alongside a highly programmable digital subsystem. In addition to the digital features found across the PSoC 3 portfolio, this family also has as an 8- to 12-bit Delta-Sigma ADC, four 8-bit DACs, four Opamps, four comparators, a digital filter block for IIR/FIR filtering, and four programmable analog blocks that can be configured via PSoC Creator as PGAs, TIAs, etc.

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C3665AXI-010	NRND	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	TQFP
CY8C3665AXI-010T	NRND	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	TQFP
CY8C3665AXI-016	NRND	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	N	4	TQFP
CY8C3665AXI-016T	NRND	20	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	N	4	TQFP
CY8C3665AXI-198	In Production	16	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	TQFP
CY8C3665LTI-006	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3665LTI-006T	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3665LTI-044	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3665LTI-044T	In Production	20	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3665LTI-199	In Production	16	38	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	QFN
CY8C3665PVI-007	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3665PVI-007T	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3665PVI-008	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3665PVI-008T	In Production	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3665PVI-080	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3665PVI-080T	NRND	20	25	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3666AXI-036	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3666AXI-036T	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3666AXI-037	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3666AXI-037T	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3666AXI-052	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3666AXI-052T	In Production	24	62	1.7	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3666AXI-200	In Production	20	62	1.71	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3666AXI-202	In Production	24	62	1.71	5.5	DelSig (1, 12-bit @ 192 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP

CY8C38xxx

CY8C38xxx is the precision analog family within the PSoC 3 portfolio and supports applications that require not only a large number of analog peripherals but also precision analog capabilities alongside a highly programmable digital subsystem. In addition to the digital features found across the PSoC 3 portfolio, this family also has an 8- to 20-bit Delta-Sigma ADC, four 8-bit DACs, four Opamps, four comparators, a digital filter block for IIR/FIR filtering, 0.1% accurate integrated voltage reference, and four programmable analog blocks that can be configured via PSoC Creator as PGAs, TIAs, etc.

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C3865AXI-019	In Production	20	62	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	TQFP
CY8C3865AXI-019T	In Production	20	62	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	TQFP
CY8C3865AXI-204	In Production	16	62	1.71	5.5	DelSig (1, 20-bit @ 180 sp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	TQFP
CY8C3865LTI-014	In Production	20	38	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3865LTI-014T	In Production	20	38	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3865LTI-062	NRND	20	25	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3865LTI-062T	NRND	20	25	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	QFN
CY8C3865LTI-205	In Production	16	38	1.71	5.5	DelSig (1, 20-bit @ 180 sp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	QFN
CY8C3865PVI-060	NRND	20	25	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3865PVI-060T	NRND	20	25	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3865PVI-063	NRND	20	25	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3865PVI-063T	NRND	20	25	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	32	Y	4	SSOP
CY8C3866AXI-035	In Production	24	62	1.7	5.5	DelSig (1, 20-bit @ 180 sp/s)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP

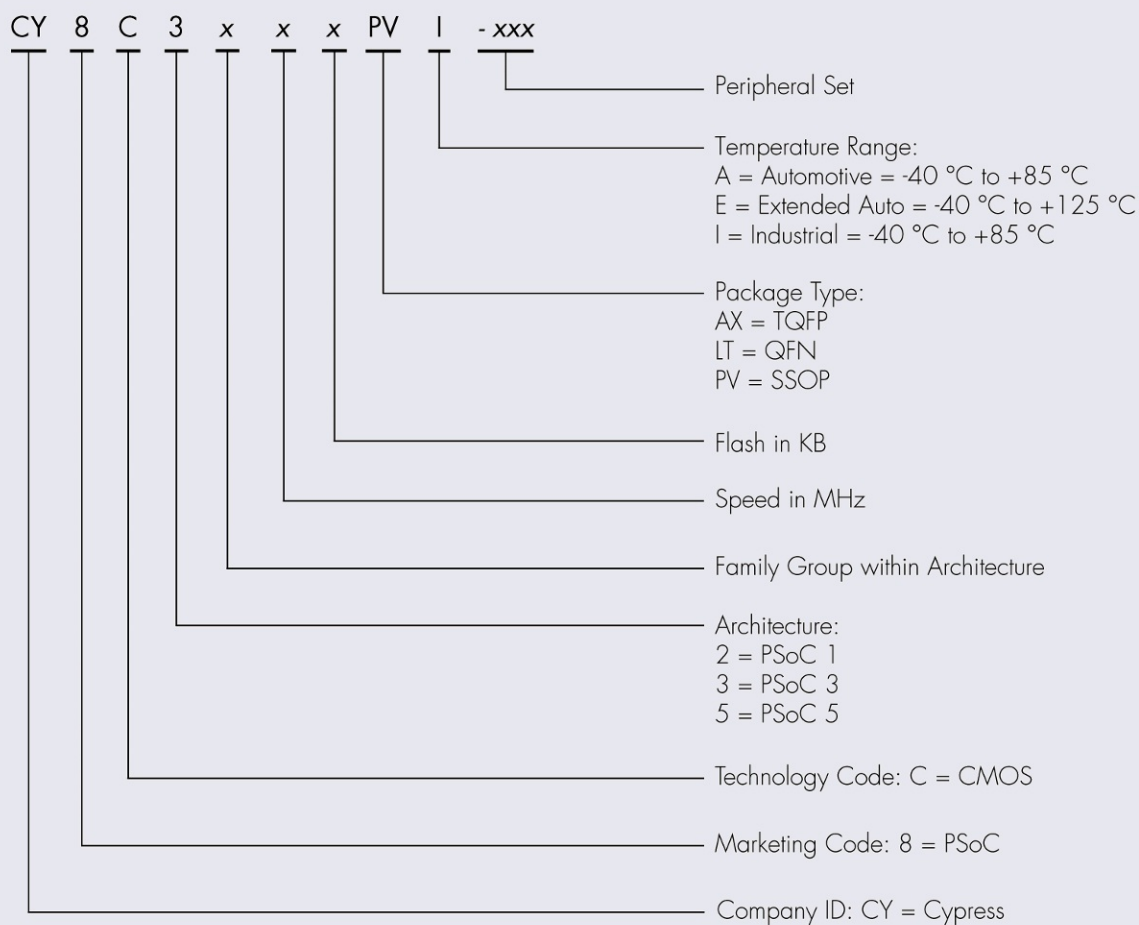
CY8C38xxx

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C3866AXI-035T	In Production	24	62	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3866AXI-039	In Production	24	62	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3866AXI-039T	In Production	24	62	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3866AXI-040	In Production	24	62	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3866AXI-040T	In Production	24	62	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3866AXI-206	In Production	20	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps)	(2, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3866AXI-208	In Production	24	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps)	(2, 8-bit @ 8 msp/s)	64	Y	8	TQFP
CY8C3866LTI-030	In Production	24	38	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3866LTI-030T	In Production	24	38	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3866LTI-067	In Production	24	25	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3866LTI-067T	In Production	24	25	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3866LTI-068	In Production	24	25	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	QFN
CY8C3866LTI-068T	In Production	24	25	1.7	5.5	DelSig (1, 20-bit @ 180 sps)	(4, 8-bit @ 8 msp/s)	64	Y	8	QFN

Table Notes:

1. All devices are available in Industrial temperature range (-40 °C to +85 °C) unless noted otherwise.
2. Digital blocks can implement the following peripherals: Timers, Counters, Pulse Width Modulators, CRC, Custom Logic and many other digital peripherals.
3. Analog blocks can implement the following peripherals: ADCs, PGAs, TIAs, DACs and many other analog peripherals.

PSoC 3 Part Number Decoder



PSOC® 5

PSoC 5 is a true programmable embedded system-on-chip integrating configurable analog and digital peripheral functions, memory, and a microcontroller on a single chip. PSoC 5 comprises four families in which 68 parts are in sampling. The architecture features:

- Integrated high-precision 20-bit DelSig ADC
- Fixed function and programmable analog components
- Integrated high-speed 1 Msps SAR ADCs
- Programmable PLD-based logic, programmable 8-bit universal digital blocks
- 32-bit ARM Cortex-M3 CPU up to 67 MHz
- Support for a variety of communication interfaces: FS USB 2.0, CAN, SPI, I²C, UART, I²S, and more

CY8C52xxx

With its unique array of configurable blocks, PSoC 5 is a true system level solution providing MCU, memory, analog, and digital peripheral functions in a single chip. The CY8C52 family offers a modern method of signal acquisition, signal processing, and control with high accuracy, high bandwidth, and high flexibility. Analog capability spans the range from thermocouples (near DC voltages) to ultrasonic signals.

The CY8C52 family can handle dozens of data acquisition channels and analog inputs on every GPIO pin. The CY8C52 family is also a high-performance configurable digital system with some part numbers including interfaces such as USB and multimaster I²C. In addition to communication interfaces, the CY8C52 family has an easy-to-configure logic array, flexible routing to all I/O pins, and a high performance 32-bit ARM Cortex-M3 microprocessor core. Designers can easily create system level designs using a rich library of prebuilt components and boolean primitives using PSoC Creator, a hierarchical schematic design entry tool. The CY8C52 family provides unparalleled opportunities for analog and digital bill of materials integration while easily accommodating last minute design changes through simple firmware updates.

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5246AXI054	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5246AXI054T	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5246LTI029	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5246LTI029T	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5247AXI051	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5247AXI051T	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5247LTI089	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5247LTI089T	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5248AXI047	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5248AXI047T	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5248LTI030	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	256	Y	64	QFN
CY8C5248LTI030T	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(1, 8-bit @ 8 msp/s)	256	Y	64	QFN

CY8C53xxx

With its unique array of configurable blocks, PSoC 5 is a true system level solution providing MCU, memory, analog, and digital peripheral functions in a single chip. The CY8C53 family offers a modern method of signal acquisition, signal processing, and control with high accuracy, high bandwidth, and high flexibility. Analog capability spans the range from thermocouples (near DC voltages) to ultrasonic signals. The CY8C53 family can handle dozens of data acquisition channels and analog inputs on every GPIO pin.

The CY8C53 family is also a high-performance configurable digital system with some part numbers including interfaces such as USB and multimaster I²C. In addition to communication interfaces, the CY8C53 family has an easy to configure logic array, flexible routing to all I/O pins, and a high-performance 32-bit ARM Cortex-M3 microprocessor core.

Designers can easily create system level designs using a rich library of prebuilt components and boolean primitives using PSoC Creator, a hierarchical schematic design entry tool. The CY8C53 family provides unparalleled opportunities for analog and digital bill of materials integration while easily accommodating last minute design changes through simple firmware updates.

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5365AXI-043	In Production	20	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	TQFP
CY8C5365AXI-043T	In Production	20	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	TQFP
CY8C5365LTI-104	In Production	20	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	QFN
CY8C5365LTI-104T	In Production	20	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	32	Y	8	QFN
CY8C5366AXI-001	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5366AXI-001T	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5366LTI-053	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5366LTI-053T	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5367AXI-108	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5367AXI-108T	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5367LTI-003	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5367LTI-003T	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5368AXI-106	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5368AXI-106T	In Production	24	60	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5368LTI-026	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	256	Y	64	QFN
CY8C5368LTI-026T	In Production	24	36	2.7	5.5	SAR (1, 12-bit @ 700 ksp/s)	(2, 8-bit @ 8 msp/s)	256	Y	64	QFN

CY8C54xxx

With its unique array of configurable blocks, PSoC 5 is a true system level solution providing MCU, memory, analog, and digital peripheral functions in a single chip. The CY8C54 family offers a modern method of signal acquisition, signal processing, and control with high accuracy, high bandwidth, and high flexibility. Analog capability spans the range from thermocouples (near DC voltages) to ultrasonic signals. The CY8C54 family can handle dozens of data acquisition channels and analog inputs on every GPIO pin.

The CY8C54 family is also a high-performance configurable digital system with some part numbers including interfaces such as USB and multimaster I²C. In addition to communication interfaces, the CY8C54 family has an easy to configure logic array, flexible routing to all I/O pins, and a high-performance 32-bit ARM Cortex-M3 microprocessor core.

Designers can easily create system level designs using a rich library of prebuilt components and boolean primitives using PSoC Creator, a hierarchical schematic design entry tool. The CY8C54 family provides unparalleled opportunities for analog and digital bill of materials integration while easily accommodating last minute design changes through simple firmware updates.

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5466AXI-064	In Production	24	60	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5466AXI-064T	In Production	24	60	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5466LTI-063	In Production	24	36	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5466LTI-063T	In Production	24	36	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5467AXI-011	In Production	24	60	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5467AXI-011T	In Production	24	60	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5467LTI-007	In Production	24	36	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5467LTI-007T	In Production	24	36	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5468AXI-018	In Production	24	60	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5468AXI-018T	In Production	24	60	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5468LTI-037	In Production	24	36	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	QFN
CY8C5468LTI-037T	In Production	24	36	2.7	5.5	SAR (2, 12-bit @ 700 ksp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	QFN

CY8C55xxx

With its unique array of configurable blocks, PSoC 5 is a true system-level solution providing MCU, memory, analog and digital peripheral functions in a single chip. The CY8C55 family offers a modern method of signal acquisition, signal processing, and control with high accuracy, high bandwidth, and high flexibility. Analog capability spans the range from thermocouples (near DC voltages) to ultrasonic signals.

The CY8C55 family can handle dozens of data acquisition channels and analog inputs on every GPIO pin. The CY8C55 family is also a high performance configurable digital system with some part numbers including interfaces such as USB, multi-master I²C, and CAN. In addition to communication interfaces, the CY8C55 family has an easy to configure logic array, flexible routing to all I/O pins, and a high performance 32-bit ARM Cortex-M3 microprocessor core.

Designers can easily create system-level designs using a rich library of prebuilt components and boolean primitives using PSoC Creator, a hierarchical schematic design entry tool. The CY8C55 family provides unparalleled opportunities for analog and digital bill of materials integration while easily accommodating last minute design changes through simple firmware updates.

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_Max Resolution @ Sample Rate)	Dedicated DAC (#_Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5566AXI-061	In Production	24	60	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5566AXI-061T	In Production	24	60	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5566LTI-017	In Production	24	36	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5566LTI-017T	In Production	24	36	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5567AXI-019	In Production	24	60	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5567AXI-019T	In Production	24	60	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5567LTI-079	In Production	24	36	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5567LTI-079T	In Production	24	36	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5568AXI-060	In Production	24	60	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5568AXI-060T	In Production	24	60	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5568LTI-114	In Production	24	36	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	256	Y	64	QFN
CY8C5568LTI-114T	In Production	24	36	2.7	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 700 ksps)	(4, 8-bit @ 8 msp/s)	256	Y	64	QFN

1. All devices are available in Industrial temperature range (-40 °C to +85 °C) unless noted otherwise.

2. Digital blocks can implement the following peripherals: Times, Counters, Pulse Width Modulators, CRC, Custom Logic and many other digital peripherals.

3. Analog blocks in PSoC 5LP can implement: PGA, TIA, Mixer, Sample & Hold.

It is recommended to use PSoC 5LP for new designs instead of PSoC 5. For information on migration from PSoC 5 to PSoC 5LP visit www.cypress.com/go/psoc5lp.

PSOC® 5LP

PSoC 5LP is a low power ARM® Cortex™ M3 based programmable system-on-chip device offering unmatched high-precision analog and the flexibility to design custom system solutions. Use PSoC 5LP with PSoC Creator™ components to shorten design schedules accelerating your time-to-market.

FEATURES

- ARM Cortex-M3, runs up to 67MHz, 1KB cache
- Unmatched precision analog integration
 - Best-in-class ADCs
 - 2x12-bit 1MSPS SAR ADCs
 - 20-bit DelSig ADC
 - Programmable Analog includes OpAmps, Comparators, I/V DACs, CapSense®, and more
- The most flexible low power PSoC
 - Integrated Boost starts-up from 0.5 V
 - 300 nA low leakage Hibernate
 - Widest operating range 0.5 - 5.5 V
- Programmable PLD-based logic and 8-bit universal digital blocks
- Communication interfaces: FS USB 2.0, CAN, SPI, I2C, UART, I2S, and more

CY8C52LPxxx

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5267AXHP051	Contact Sales	24	62	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(1, 8-bit @ 8 mSPS)	128	Y	32	TQFP
CY8C5267LTHLP089	Contact Sales	24	38	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(1, 8-bit @ 8 mSPS)	128	Y	32	QFN
CY8C5268AXHP047	Contact Sales	24	62	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(1, 8-bit @ 8 mSPS)	256	Y	64	TQFP
CY8C5268LTHLP030	Contact Sales	24	38	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(1, 8-bit @ 8 mSPS)	256	Y	64	QFN

CY8C54LPxxx

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5467AXHP108	Contact Sales	24	62	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(2, 8-bit @ 8 mSPS)	128	Y	32	TQFP
CY8C5467LTHLP003	Contact Sales	24	38	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(2, 8-bit @ 8 mSPS)	128	Y	32	QFN
CY8C5468AXHP106	Contact Sales	24	62	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(2, 8-bit @ 8 mSPS)	256	Y	64	TQFP
CY8C5468LTHLP026	Contact Sales	24	38	1.71	5.5	SAR (1, 12-bit @ 1 mSPS)	(2, 8-bit @ 8 mSPS)	256	Y	64	QFN

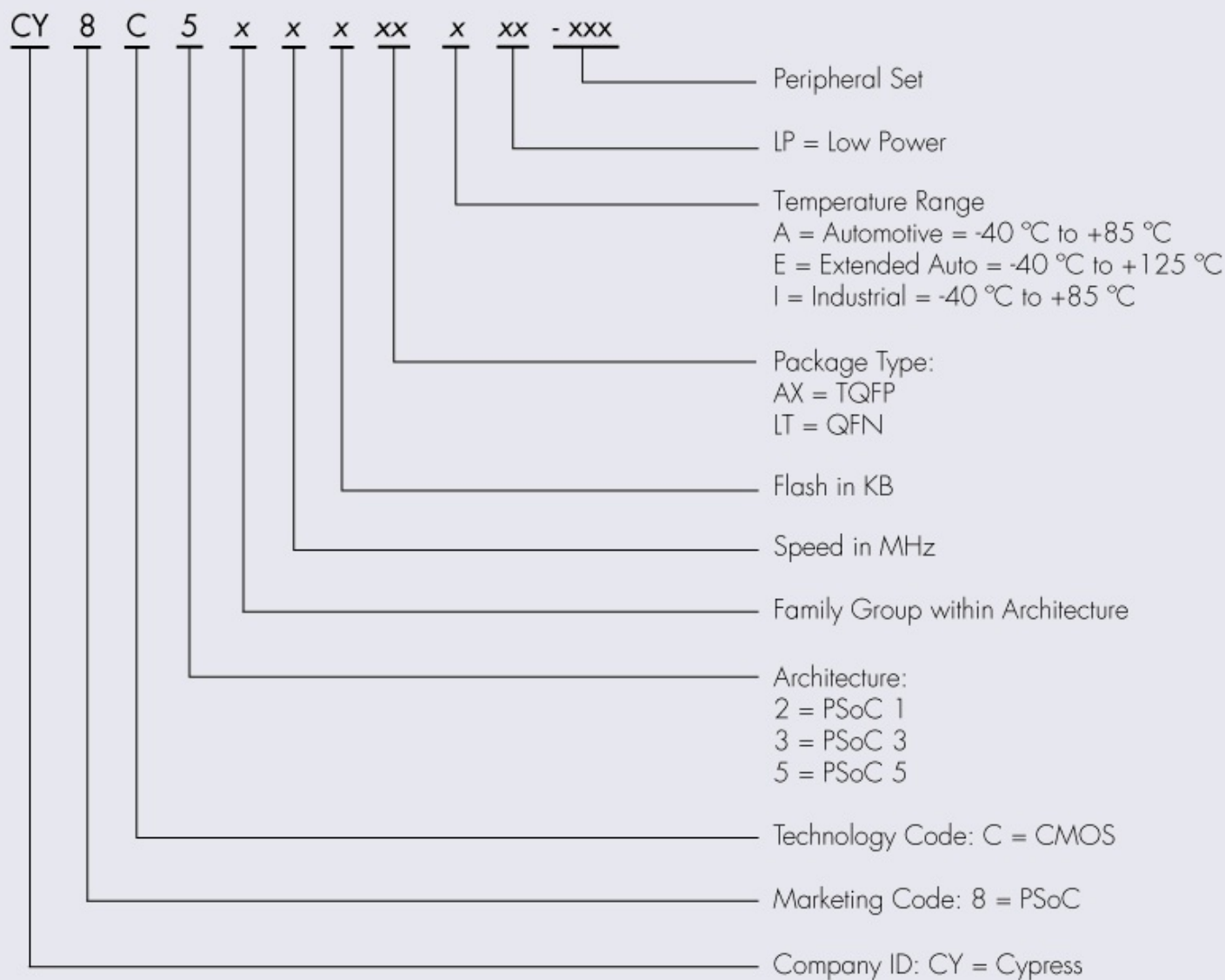
CY8C56LPxxx

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5666AXHP004	Contact Sales	20	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5666LTHLP005	Contact Sales	20	38	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5667AXHP006	Contact Sales	24	62	1.71	5.5	SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5667LTHLP009	Contact Sales	24	38	1.71	5.5	SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5668AXHP013	Contact Sales	24	62	1.71	5.5	SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5668LTHLP014	Contact Sales	24	38	1.71	5.5	SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	QFN

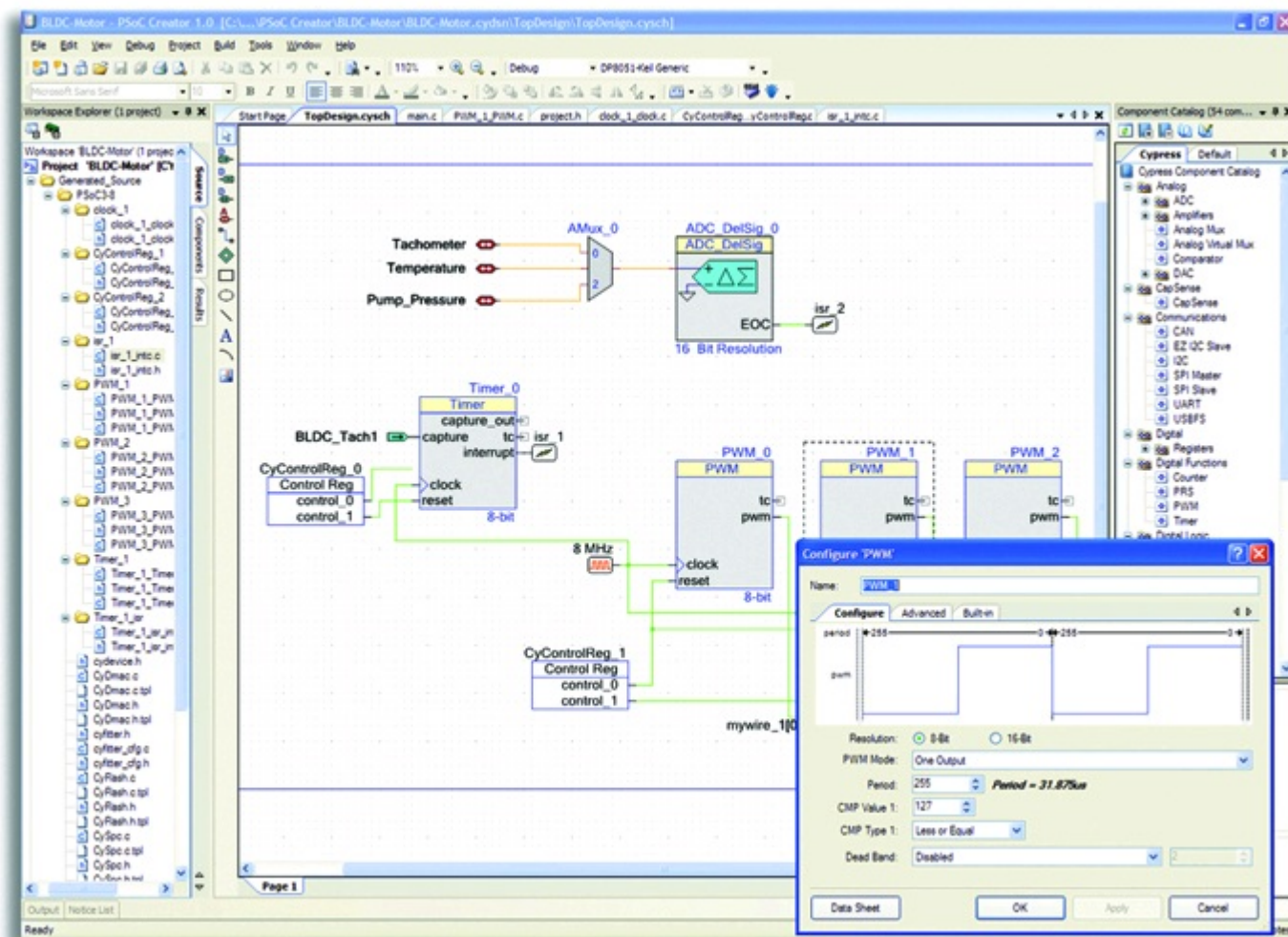
CY8C58LPxxx

Part Number	Status	No. of Programmable Universal Digital Blocks	No. of GPIOs	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Dedicated ADC (#_ Max Resolution @ Sample Rate)	Dedicated DAC (#_ Max Resolution @ Sample Rate)	Flash (KB)	LCD Direct Drive (Yes/No)	SRAM (KB)	Package
CY8C5866AXHP020	Contact Sales	20	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5866AXHP021	Contact Sales	20	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	TQFP
CY8C5866LTHLP022	Contact Sales	20	38	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	64	Y	16	QFN
CY8C5867AXHP024	Contact Sales	24	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	TQFP
CY8C5867LTHLP025	In Production	24	38	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5867LTHLP028	Contact Sales	24	38	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (1, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	128	Y	32	QFN
CY8C5868AXHP032	In Production	24	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5868AXHP035	In Production	24	62	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	TQFP
CY8C5868LTHLP038	In Production	24	38	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	QFN
CY8C5868LTHLP039	In Production	24	38	1.71	5.5	DelSig (1, 20-bit @ 180 sps), SAR (2, 12-bit @ 1 msp/s)	(4, 8-bit @ 8 msp/s)	256	Y	64	QFN

PSoC 5LP Part Number Decoder



PSOC Creator for PSOC 3 and PSOC 5 Development



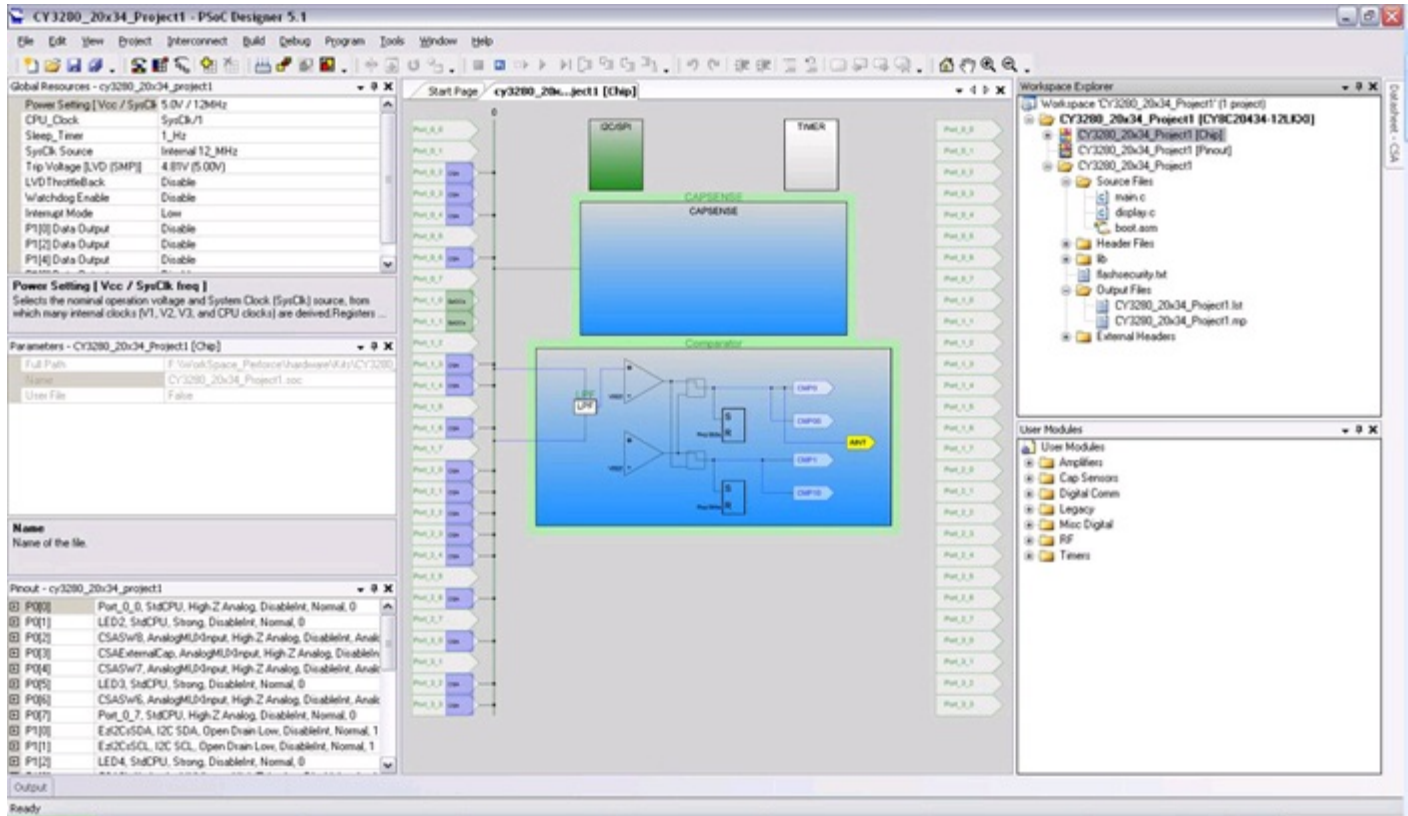
www.cypress.com/go/psoccreator

PSoC Creator is a state-of-the-art software development IDE combined with a revolutionary graphical design editor to form a uniquely powerful hardware/software co-design environment. It offers a unique combination of hardware configuration and software development in a single, unified tool. It frees embedded designers from the innovation-killing division between hardware design and software development. The custom bootloader supports instance-specific APIs. Moving the APIs into the component means that any communications component can be extended to support bootloading. In addition, users can select the bootloading channel at run-time and CDC checking is available on the image download. The combination of a software IDE with schematic capture for device configuration forms a uniquely powerful hardware-software co-design environment. Features include:

- Keil MicroVision IDE Integration
- Support for real PsoC 5 production designs
- Live start page
- Static Timing Analysis
- Timing Driven Routing
- Run-time bootloader channel selection
- Bootloader support in UDB-based I²C
- CDC bootloader image checking

PSoC Designer

PSOC Designer™ for PSOC 1 Development



www.cypress.com/go/psocdesigner

PSoC Designer is the revolutionary Integrated Design Environment (IDE) that you can use to customize PSoC to meet your specific application requirements. It comes with a library of pre-characterized analog and digital peripherals in a drag-and-drop design environment that accelerate system bring-up and time-to-market. It allows for easy debugging and testing of designs through the integrated debug environment including in-circuit emulation and standard software debug features. Develop your applications using a library of analog and digital peripherals in a drag-and-drop design environment. Then, customize your design leveraging the dynamically generated API libraries of code. Finally, debug and test your designs with the integrated debug environment including in-circuit emulation and standard software debug features.

- Application Editor GUI for device and user module configuration and dynamic reconfiguration
- Extensive user module catalog
- Integrated source code editor (C and Assembly)
- Free C compiler with no size restrictions or time limits
- Built-in debugger
- Integrated Circuit Emulation (ICE)
- Built-in support for communication interfaces:
 - Hardware and software I2C: slaves and masters
 - Full-speed USB 2.0
 - Up to four full-duplex UARTs, SPI master and slave, and Wireless

CY8CKIT-001 PSoC Development Kit

- Quickly and easily evaluate and develop: PSoC 1, PSoC 3, or PSoC 5 applications
- PSoC Designer and PSoC Creator Integrated Development Environments
- Programmable precision analog & digital
- UART, USB, and wireless communication
- All I/O routed to connectors to allow easy prototyping

Get more information at www.cypress.com/go/CY8CKIT-001



CY8CKIT-030 PSoC 3 Development Kit

- Evaluate and develop high precision analog, low-power and low-voltage PSoC 3 applications
- Specifically designed for analog performance
- Separate analog and digital domains, regulators and ground planes
- PSoC Designer and PSoC Creator Integrated Development Environments
- Significant reduction in Leakage currents compared to CY8CKIT-001
- Onboard programmer(Cypress USB chip based) in addition to Minipro3

Get more information at www.cypress.com/go/CY8CKIT-030



CY8CKIT-050 PSoC 5 Development Kit

- Evaluate and develop high precision analog, low-power and low-voltage PSoC 5 applications
- Powered by Cypress's CY8C58LP high precision analog device family
- Demonstrates the low power operation of PSoC 5LP
- Specifically designed for analog performance
- External precision voltage reference can be added
- Special terminals to enable boost converter operation
- Onboard programmer(Cypress USB chip based) in addition to Minipro3

Get more information at www.cypress.com/go/CY8CKIT-050



TRUETOUCH® TOUCHSCREEN SOLUTIONS

INTRODUCTION

With more than four billion buttons replaced, over one billion touch solutions shipped, and over 300 patents granted or pending, Cypress is a worldwide leader in capacitive touch technology. Touchscreens are the predominant user interface for smartphones, tablets, e-readers, and other portable devices. Cypress offers the expertise you need at every stage of building a projected capacitive touchscreen, from concept to mass production. We also provide the silicon, software, tools, design, and system-level experience required to get to market quickly.

A COMPLETE RANGE OF SOLUTIONS

Whether you need simple single-touch functionality or want true multitouch with gestures, TrueTouch supports a wide range of applications. This family of single-chip solutions works with screen sizes from 1.5 to 10.1 inches with the highest in-application signal-to-noise ratio (SNR), fast refresh rates, and low active power consumption. We are the world leader in small touchscreen packages, with chips available at 3 x 3 mm. Cypress offers single layer sensors with multitouch and two-touch capabilities for thin, cost-effective devices. TrueTouch also supports multiple materials and stackup options for flexibility in design, including PET, glass, and metal mesh. Supported stackup types include sensor-on-lens, direct lamination, and display integrated solutions.



RISE ABOVE THE NOISE

TrueTouch is the worldwide leader in touchscreen performance in the presence of noise. Electrical noise from chargers, LCD displays, and other sources can have a significant impact in the responsiveness and accuracy of your touchscreen. Cypress has an array of tools to solve this problem. We have developed proprietary noise-canceling technology to deal with noise from these sources. Nothing else on the market comes close to solving these issues so effectively.

TrueTouch also delivers 10V Tx for the industry's best SNR in application. 10V Tx generates more signal in the presence of noise. SNR is directly proportional to Tx voltage. Cypress's 10V Tx more than triples the SNR of the competition, eliminating many noise problems before engineers even open their design applications. TrueTouch can also provide proprietary Tx-Boost™ technology, based on patent-pending high-voltage, multi-phase Tx drivers. Tx-Boost delivers three times the native SNR, all without the use of performance-robbing digital filters or external components.

TRUETOUCH ONE-OF-A-KIND NOISE SOLUTIONS

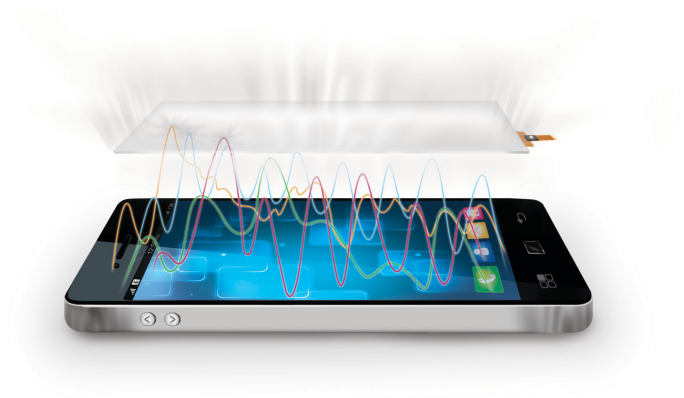
Charger Armor™

Charger Armor™ pulls the plug on charger noise. Noise enters the touchscreen system through a power supply, such as a mobile handset's battery charger, during the presence of touch. The mobile device industry has established EN standards for maximum charger noise, and TrueTouch easily exceeds these standards. However, for chargers that can emit noise at 20 times the spec and beyond, we have Charger Armor. It's an adaptive technology that listens for charger noise and activates when it surpasses a preset threshold to effectively deal with both periodic and broadband noise. The result is truly revolutionary charger noise immunity to the market.



Display Noise Cancellation

LCD displays are inherently noisy. This makes it difficult for touchscreen sensors to accurately read and interpret touch input. TrueTouch controllers can deliver external display synchronization, eliminating the need for air gaps or shield layers to protect against noise. This makes TrueTouch the ideal solution for all types of stackups, including in-cell, on-cell, and direct lamination.



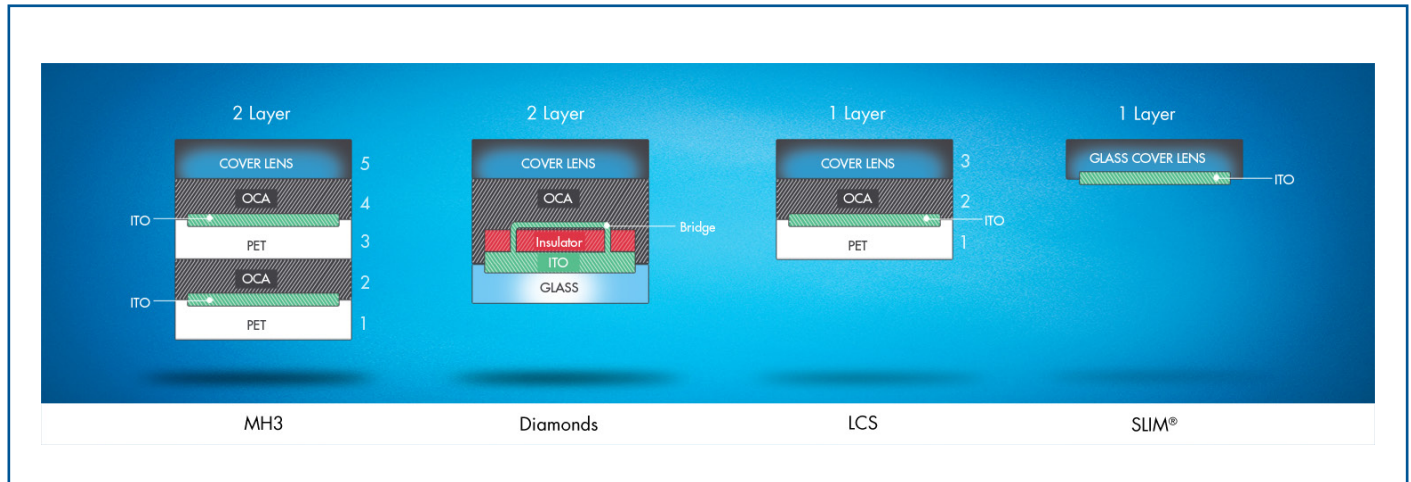
SOLUTIONS FOR EVERY DEVICE

TrueTouch features support many different designs. From support for a wide range of screen sizes to true single-layer touchscreen sensors and advanced features like waterproofing, hover, and 1 mm passive stylus, Cypress has the right technology for your needs.

In addition to offering touchscreen solutions that provide industry-leading performance and features, Cypress is here to help designers bring multitouch to the masses with an unmatched portfolio of low-cost solutions. Whether your design calls for the high-performance Gen4 family, a low-cost Gen2 device, or something in between, Cypress has the right solution for your needs. TrueTouch also delivers the premier single-layer sensor solution with our SLIM® sensor, which enables unbelievably thin multifinger designs with TrueTouch.

SLIM® - For The Thinnest Devices Yet

Our new SLIM (Single-Layer Independent Multitouch) sensor takes Cypress's ground-breaking touchscreen innovation to a new level. The world's first true single-layer multitouch sensor is a unique solution that delivers full multitouch functionality at half the thickness and cost, allowing designers to create innovative new products. SLIM does something truly revolutionary – it enables the lowest manufacturing cost, thinnest bezel, and thinnest stackup of any multitouch all-points touchscreen sensor module. Even with only one sensor layer, SLIM delivers excellent accuracy and signal-to-noise ratio, and best-in-class active power.



Screen Size Support

We have expanded our position as a leader in the small-screen market as the first company to deliver a single-chip controller exclusively for large screens. TrueTouch controllers can support everything from the tiny 1.5" screen on an MP3 player all the way up to a 10.1" tablet, with the same high performance you've come to expect from Cypress. Our portfolio of large screen solutions delivers the lowest active power consumption available, with built-in noise cancelling technology and very fast 10-finger refresh rates for screens 7 to 10.1 inches.

Advanced Features

TrueTouch supports the most advanced touchscreen functionality. A state-of-the-art touchscreen system with a flawless user interface experience involves much more than just being able to reliably detect a finger touch. Thanks to our unique use of self and mutual capacitance sensing on the same chip, TrueTouch provides an unmatched feature set, that includes true waterproofing, hover, and 1 mm passive stylus support. TrueTouch controllers enable real waterproofing, with end-customer products that meet stringent IP-67 standards in production today. Water on a touchscreen typically causes false touches and poor accuracy. Cypress delivers both water rejection and wet finger tracking to ensure normal operation in the presence of rain, mist, or sweat.

Self plus mutual capacitance sensing also enables the touchscreen controller to sense very small touches. Hover allows TrueTouch to accurately track a user's finger while hovering up to 10 mm above the surface. This unique technology allows UI designers to enable useful features like mouse-over capability, and screen magnification, and create exciting new possibilities for gaming and 3D displays. It also allows users to operate their touchscreen devices with gloves or long fingernails, something no other capacitive touchscreen controller can support.

Mobile device owners are no longer forced to use a bulky, inconvenient capacitive stylus; TrueTouch supports a 1 mm stylus for accurate handwriting and character capture and precise navigation.

KEY APPLICATIONS

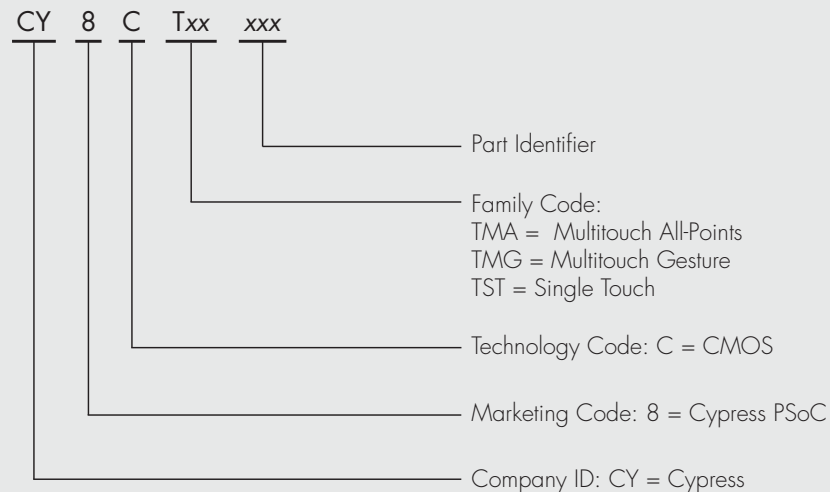
Mobile phones, tablet and notebook PCs, GPS navigation devices, digital still and video cameras, portable media players, e-readers, automotive infotainment displays, printers, white goods

FIND YOUR SOLUTION

Cypress has the world's broadest portfolio of touchscreen solutions to meet your needs. TrueTouch provides a platform of single-chip solutions to support everything from mobile handsets to tablets. Cypress can also accelerate your time to market with an easy design platform that includes assisted tuning support, a platform of single-chip solutions, and multiple stackup options for the most flexible and cost-effective designs. TrueTouch can support your designs with proven performance.

Part Number	Max. Sensor Inputs	Max. Screen Size (inches)	Max. Fingers Supported	True Single Layer Sensor	Waterproofing	Communication Interface	Packages
CY8CTMA140	32	5.1	4	N	N	I ² C, SPI	QFN
CY8CTST241	32	3.8	1	Y	Y	I ² C, SPI	QFN, CSP
CY8CTST242	32	3.8	2	Y	Y	I ² C, SPI	QFN, CSP
CY8CTMG240	32	3.8	2	N	Y	I ² C, SPI	QFN, CSP
CY8CTMA340	32	5.1	4	Y	Y	I ² C, SPI	QFN, CSP
CY8CTMA460	40	6.0	10	Y	Y	I ² C, SPI	QFN, CSP, BGA
CY8CTMA44X	36	5.0	10	Y	Y	I ² C, SPI	QFN
CY8CTMA616	50	8.0	10	N	Y	I ² C	QFN
CY8CTMA768	56	8.5	10	N	Y	I ² C	BGA
CY8CTMA884	60	9.4	10	N	Y	I ² C	QFN
CY8CTMA1036	65	10.1	10	N	Y	I ² C	BGA

TRUETOUCH PART NUMBER DECODER



For more information on TrueTouch, visit touch.cypress.com.

USB CONTROLLERS

BRIDGES - WEST BRIDGE® CONTROLLERS

The West Bridge® family provides optimal performance and connectivity in the embedded world, enabling direct connection between peripherals, creating ultra-fast transfers while offloading the main processor from data-intensive operations.

Antioch™

West Bridge Antioch™ (CYWB012*AB) is a three port device designed specifically for handsets, providing a direct path from PC to handset mass storage such as SD, MMC, HDD and NAND using High-Speed USB.

Part Number	Status	Clock Input Frequency (MHz)	Interfaces Supported	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYWB0120AB-BVXI	NRND	19.2, 24, 26, 48	HS-USB, SD/MMC+	1.8	3.3	BGA	-40	85	N
CYWB0120AB-BVXIT	NRND	19.2, 24, 26, 48	HS-USB, SD/MMC+	1.8	3.3	BGA	-40	85	N
CYWB0124AB-BVXI	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+, SLC NAND	1.8	3.3	BGA	-40	85	N
CYWB0124AB-BVXIT	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+, SLC NAND	1.8	3.3	BGA	-40	85	N
CYWB0124ABX-FDXIT	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+, SLC NAND	1.8	3.3	WLCSP	-40	85	N
CYWB0125ABX-FDXIT	NRND	19.2, 24, 26, 48	HS-USB, SLC NAND, Dual-SD/MMC+	1.8	3.3	WLCSP	-40	85	N

Arroyo™

West Bridge Arroyo™ (CYWB032*) is an entry level product that supports USB 2.0 and SDHC/SDIO/eMMC interfaces via a memory bus connection to the embedded processor with MSC sideload speeds up to 15 Mbps. Arroyo will not support Turbo-MTP and does not integrate a USB switch. Arroyo is the entry level part for the West Bridge family and offered at the entry-level price.

Part Number	Status	Clock Input Frequency (MHz)	Interfaces Supported	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYWB0320ABX-FDXIT	In Production	26	HS-USB, SD/MMC+	1.8	3.3	WLCSP	-40	85	N

Astoria™

West Bridge Astoria™ (CYWB022*) is a multimedia mass-storage controller that introduces Cypress's N-Xpress™ NAND controller technology. The N-Xpress technology provides fast interleaving, bad block management, static wear-leveling, and 4-bit ECC for up to 16 SLC NAND devices.

Part Number	Status	Clock Input Frequency (MHz)	Interfaces Supported	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYWB0224ABS-BVXI	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+	1.8	3.3	BGA	-40	85	N
CYWB0224ABS-BVXIT	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+	1.8	3.3	BGA	-40	85	N
CYWB0224ABS-BZXI	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+	1.8	3.3	BGA	-40	85	N
CYWB0224ABSX-FDXIT	NRND	19.2, 26	HS-USB, SD/MMC+	1.8	3.3	WLCSP	-40	85	N
CYWB0226ABS-BVXI	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+	1.8	3.3	BGA	-40	85	N
CYWB0226ABS-BVXIT	In Production	19.2, 24, 26, 48	HS-USB, SD/MMC+	1.8	3.3	BGA	-40	85	N

Bay

WestBridge Bay™ (CYWB016*) is Cypress's new USB OTG and USB 2.0 solution for mobile handheld devices. Bay's SLIM™ II architecture offloads data transfer from the main baseband or applications processor, and provides the optimal user-experience with faster USB 2.0 sideloading and battery charging.

Part Number	Status	Clock Input Frequency (MHz)	Interfaces Supported	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYWB0163BB-FNXIES	Contact Sales	19.2, 26, 38.4, 52	SD 2.0, SD 3.0, eMMC 4.3, eMMC 4.4, I2C, I2S, UART, SPI, SDIO, HS-USB, HS/FS/LS OTG	1.15	3.6	WLCSP	-40	85	N
CYWB0164BB-BZXI	Contact Sales	19.2, 26, 38.4, 52	SD 2.0, SD 3.0, eMMC 4.3, eMMC 4.4, I2C, I2S, UART, SPI, SDIO, HS-USB, HS/FS/LS OTG	1.15	1.25	BGA	-40	85	N

USB FULL-SPEED PERIPHERALS

Our Full-Speed product line features low-cost Serial Interface Engines (SIEs), plus those that also include a robust 8-bit RISC processor, or the popular 8051.

- **enCoRe™ III** - enCoRe USB meets PSoC® programmable system-on-chip functionality in a low-power, low-cost, highly flexible Full-Speed microcontroller
- **enCoRe™ V** - With a flash size of up to 32 K, this is a highly integrated, cost-effective Full-Speed USB microcontroller solution ideal for applications that require a Full-Speed USB interface for outstanding performance such as a wired gaming mouse or high-end dongles
- **EZ-USB FX1™** - Faster, extended technology for ultra high-performance

EZ-USB™ FX1

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C64713-100AXC	In Production	RAM	16	40	3.15	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.45	Other	TQFP	0
CY7C64713-128AXC	In Production	RAM	16	40	3.15	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.45	Other	TQFP	0
CY7C64713-56LTXC	In Production	RAM	16	24	3.15	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.45	Other	QFN	0

USB M8™ Series

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C64013C-SXC	In Production	EPROM	8	19	3.15	Bulk, Interrupt, Isochronous	DAC Port, GPIO, HAPI, I2C, Programmable Drive	3.45	USB Full-Speed Peripherals	SOIC	0
CY7C64013C-SXCT	In Production	EPROM	8	19	3.15	Bulk, Interrupt, Isochronous	DAC Port, GPIO, HAPI, I2C, Programmable Drive	3.45	USB Full-Speed Peripherals	SOIC	0

USB to UART Controller

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C64225-28PVXC	In Production	Flash	N/A	N/A	3.15	Bulk, Interrupt, Control	USB, UART	5.25	USB Full-Speed Peripherals	SSOP	0

enCoRe™ III

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C64215-28PVXC	In Production	Flash	16	22	3.15	Bulk, Interrupt, Isochronous	I2C, 8-Bit UART, SPI, RF Interface	5.25	Gaming Mice, Keyboard, Joystick	SSOP	0
CY7C64215-28PVXCT	In Production	Flash	16	22	3.15	Bulk, Interrupt, Isochronous	I2C, 8-Bit UART, SPI, RF Interface	5.25	Gaming Mice, Keyboard, Joystick	SSOP	0
CY7C64215-56LTXC	In Production	Flash	16	50	3.15	Bulk, Interrupt, Isochronous	I2C, 8-Bit UART, SPI, RF Interface	5.25	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64215-56LTXCT	In Production	Flash	16	50	3.15	Bulk, Interrupt, Isochronous	I2C, 8-Bit UART, SPI, RF Interface	5.25	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64215-56LTXI	In Production	Flash	16	50	3.15	Bulk, Interrupt, Isochronous	I2C, 8-Bit UART, SPI, RF Interface	5.25	Gaming Mice, Keyboard, Joystick	QFN	-40
CY7C64215-56LTXIT	In Production	Flash	16	50	3.15	Bulk, Interrupt, Isochronous	I2C, 8-Bit UART, SPI, RF Interface	5.25	Gaming Mice, Keyboard, Joystick	QFN	-40

enCoRe™ V

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C64315-16LKXC	In Production	Flash	16	11	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64315-16LKXCT	In Production	Flash	16	11	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64315-3X14C	In Production	Flash	16	11	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	Die	0
CY7C64316-16LKXC	In Production	Flash	32	11	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64316-16LKXCT	In Production	Flash	32	11	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64316-WAFC	In Production	Flash	32	11	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	Wafer	0
CY7C64343-32LQXC	In Production	Flash	8	25	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64343-32LQXCT	In Production	Flash	8	25	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64345-32LQXC	In Production	Flash	16	25	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64345-32LQXCT	In Production	Flash	16	25	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64355-48LTXC	In Production	Flash	16	36	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64355-48LTXCT	In Production	Flash	16	36	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0
CY7C64356-48LTXC	In Production	Flash	32	36	3	Bulk, Interrupt, Isochronous	USB, GPIO, SPI, CLKIN/OUT, Vreg, ADC, I2C	5.5	Gaming Mice, Keyboard, Joystick	QFN	0

USB HI-SPEED HUBS

Since 2002, Cypress's USB hubs have been playing a part in increasing the proliferation of USB products in many applications today. The Cypress hub controller portfolio includes both single and multi-transaction translator controllers ranging from two ports to four ports as well as options for both Full-Speed and Hi-Speed USB.

HX2LP

Cypress's HX2LP™ is a family of low power single chip USB 2.0 hubs with a Single Transaction Translator controller. They feature integrated upstream and downstream transceivers, a USB Serial Interface Engine (SIE) and are available in 2 or 4 port configurations. The HX2LP Lite (CY7C656*1) family is optimized for the lower end market segment.

Part Number	Status	No. of Hub Ports	Single/Multi TT	Min. Operating Voltage (V)	I/O Options	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C65620-56LFXA	In Production	2	Single	3.15	SPI	3.45	QFN	-40	85	Y
CY7C65620-56LFXAT	In Production	2	Single	3.15	SPI	3.45	QFN	-40	85	Y
CY7C65620-56LTXC	In Production	2	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65620-56LTXCT	In Production	2	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65620-56LTXI	In Production	2	Single	3.15	SPI	3.45	QFN	-40	85	N
CY7C65620-56LTXIT	In Production	2	Single	3.15	SPI	3.45	QFN	-40	85	N
CY7C65621-56LTXC	In Production	2	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65621-56LTXCT	In Production	2	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65621-56LTXI	Contact Sales	2	Single	3.15	SPI	3.45	QFN	-40	85	N
CY7C65621-56LTXIT	Contact Sales	2	Single	3.15	SPI	3.45	QFN	-40	85	N
CY7C65630-56LFXA	In Production	4	Single	3.15	SPI	3.45	QFN	-40	85	Y
CY7C65630-56LFXAT	In Production	4	Single	3.15	SPI	3.45	QFN	-40	85	Y
CY7C65630-56LTXC	In Production	4	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65630-56LTXCT	In Production	4	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65630-56LTXI	In Production	4	Single	3.15	SPI	3.45	QFN	-40	85	N
CY7C65630-56LTXIT	In Production	4	Single	3.15	SPI	3.45	QFN	-40	85	N
CY7C65631-56LTXC	In Production	4	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65631-56LTXCT	In Production	4	Single	3.15	SPI	3.45	QFN	0	70	N
CY7C65631-56LTXI	Contact Sales	4	Single	3.15	SPI	3.45	QFN	-40	85	N
CY7C65631-56LTXIT	Contact Sales	4	Single	3.15	SPI	3.45	QFN	-40	85	N

HX2VL

Cypress HX2VL™ is Cypress's next generation family of high performance, very low power USB 2.0 hub controllers. HX2VL has integrated upstream and downstream transceivers, a USB SIE, Transaction Translator logic as well as USB Hub Control and Repeater logic. It also has integrated external components such as voltage regulator and pull-up/pull-down resistors, reducing the overall bill of materials required to implement a USB hub system.

Part Number	Status	No. of Hub Ports	Single/Multi TT	Min. Operating Voltage (V)	I/O Options	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C65632-28LTXC	In Production	4	Single	3.15	SPI, I2C, GPIO	3.45	QFN	0	70	N
CY7C65632-28LTXCT	In Production	4	Single	3.15	SPI, I2C, GPIO	3.45	QFN	0	70	N
CY7C65632-48AXC	In Production	4	Single	3.15	SPI, I2C, GPIO	3.45	TQFP	0	70	N
CY7C65632-48AXCT	In Production	4	Single	3.15	SPI, I2C, GPIO	3.45	TQFP	0	70	N
CY7C65634-28LTXC	In Production	2	Single	3.15	SPI, I2C, GPIO	3.45	QFN	0	70	N
CY7C65634-28LTXCT	In Production	2	Single	3.15	SPI, I2C, GPIO	3.45	QFN	0	70	N
CY7C65634-48AXC	In Production	2	Single	3.15	SPI, I2C, GPIO	3.45	TQFP	0	70	N
CY7C65634-48AXCT	In Production	2	Single	3.15	SPI, I2C, GPIO	3.45	TQFP	0	70	N

HX2VL

Part Number	Status	No. of Hub Ports	Single/Multi TT	Min. Operating Voltage (V)	I/O Options	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C65642-28LTXC	In Production	4	Multi	3.15	SPI, I2C, GPIO	3.45	QFN	0	70	N
CY7C65642-48AXC	In Production	4	Multi	3.15	SPI, I2C, GPIO	3.45	TQFP	0	70	N
CY7C65642-48AXCT	In Production	4	Multi	3.15	SPI, I2C, GPIO	3.45	TQFP	0	70	N

TetraHub

Cypress TetraHub™ is a high performance Multiple Transaction Translator (TT) USB2.0 hub controller. Each downstream port of the TetraHub has its own transaction translator to provide the best USB performance no matter what class of USB device is connected it. TetraHub is ideal for applications that need guaranteed performance on each downstream port.

Part Number	Status	No. of Hub Ports	Single/Multi TT	Min. Operating Voltage (V)	I/O Options	Max. Operating Voltage (V)	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C65640A-LTXC	NRND	4	Multi	3.15	SPI	3.45	QFN	0	70	N
CY7C65640A-LTXCT	NRND	4	Multi	3.15	SPI	3.45	QFN	0	70	N

USB HI-SPEED PERIPHERALS

Cypress's complete portfolio of High-Speed USB Peripherals (HSP) encompasses products for both storage and video that are available in programmable or fixed function configurations. Our devices come in various package, have different I/O configurations and flexible software to provide you with the best High-Speed USB solution for your design.

General-Purpose Solutions

- **EZ-USB FX2LP™** Low-Power programmable MCU for bus- and battery-powered peripherals, pin-for-pin compatible with EZ-USB FX2

External Mass Storage Solutions

- **EZ-USB AT2LP™** Programmable USB to PATA bridge for external HDD, optical drives, and multi-role storage applications
- **EZ-USB NX2LP-Flex™** Programmable USB NAND flash controller for multi-role NAND flash drives

Key Applications: External Hard Disk Drives (HDD), USB NAND flash drives, biometric security, and set top boxes

EZ-USB AT2LP™

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C68300C-56LTXC	In Production	N/A	N/A	6	3	Bulk, Interrupt, Isochronous	ATA, ATAPI, Compact Flash, GPIO	3.6	USB High-Speed Mass Storage Controller	QFN	0
CY7C68300C-56PVXC	In Production	N/A	N/A	6	3	Bulk, Interrupt, Isochronous	ATA, ATAPI, Compact Flash, GPIO	3.6	USB High-Speed Mass Storage Controller	SSOP	0
CY7C68300C-56PVXCT	In Production	N/A	N/A	6	3	Bulk, Interrupt, Isochronous	ATA, ATAPI, Compact Flash, GPIO	3.6	USB High-Speed Mass Storage Controller	SSOP	0
CY7C68301C-56LTXC	NRND	N/A	N/A	6	3	Bulk, Interrupt, Isochronous	ATA, ATAPI, Compact Flash, GPIO	3.6	USB High-Speed Mass Storage Controller	QFN	0
CY7C68320C-100AXC	In Production	N/A	N/A	6	3	Bulk, Interrupt, Isochronous	ATA, ATAPI, Compact Flash, GPIO	3.6	USB High-Speed Mass Storage Controller	TQFP	0
CY7C68320C-56LTXC	In Production	N/A	N/A	6	3	Bulk, Interrupt, Isochronous	ATA, ATAPI, Compact Flash, GPIO	3.6	USB High-Speed Mass Storage Controller	QFN	0
CY7C68321C-56LTXC	NRND	N/A	N/A	6	3	Bulk, Interrupt, Isochronous	ATA, ATAPI, Compact Flash, GPIO	3.6	USB High-Speed Mass Storage Controller	QFN	0

EZ-USB FX2LP™

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C68013A-100AXC	In Production	RAM	16	40	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	TQFP	0
CY7C68013A-100AXI	In Production	RAM	16	40	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	TQFP	-40
CY7C68013A-128AXC	In Production	RAM	16	40	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	TQFP	0
CY7C68013A-128AXI	In Production	RAM	16	40	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	TQFP	-40
CY7C68013A-56BAXC	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	VFBCA	0
CY7C68013A-56BAXCT	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	VFBCA	0
CY7C68013A-56LTXC	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	QFN	0
CY7C68013A-56LTXCT	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	QFN	0
CY7C68013A-56LTXI	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	QFN	-40
CY7C68013A-56PVXC	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	SSOP	0
CY7C68013A-56PVXCT	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	SSOP	0

EZ-USB FX2LP™

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C68013A-56PVXI	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	SSOP	-40
CY7C68014A-100AXC	In Production	RAM	16	40	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	TQFP	0
CY7C68014A-128AXC	In Production	RAM	16	40	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	TQFP	0
CY7C68014A-56LTXC	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	QFN	0
CY7C68014A-56PVXC	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	SSOP	0
CY7C68015A-56LTXC	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	QFN	0
CY7C68016A-56LTXC	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	QFN	0
CY7C68016A-56LTXCT	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	QFN	0
CY7C68053-56BAXI	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	VFBGA	-40
CY7C68053-56BAXIT	In Production	RAM	16	24	3	Bulk, Interrupt, Isochronous	8/16-bit Databus, DMA, GPIO, I2C, UART	3.6	USB High-Speed Peripherals	VFBGA	-40

EZ-USB NX2LP-Flex™

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C68023-56LTXC	In Production	N/A	N/A	35	3	Bulk, Interrupt, Isochronous	NAND, LED	3.6	USB High-Speed Peripherals NAND Controller	QFN	0
CY7C68023-56LTXCT	In Production	N/A	N/A	35	3	Bulk, Interrupt, Isochronous	NAND, LED	3.6	USB High-Speed Peripherals NAND Controller	QFN	0
CY7C68033-56LTXC	In Production	RAM	15	12	3	Bulk Only Transport	NAND, LED	3.6	USB High-Speed Peripherals NAND Controller	QFN	0
CY7C68034-56LTXC	In Production	RAM	15	12	3	Bulk Only Transport	NAND, LED	3.6	USB High-Speed Peripherals NAND Controller	QFN	0
CY7C68034-56LTXI	In Production	RAM	15	12	3	Bulk Only Transport	NAND, LED	3.6	USB High-Speed Peripherals NAND Controller	QFN	-40

EZ-USB SX2™

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C68001-56LTXC	In Production	N/A	N/A	0	3	Bulk, Interrupt, Isochronous, Control	8/16-bit Databus, DMA	3.6	USB High-Speed Peripherals	QFN	0
CY7C68001-56PVXC	In Production	N/A	N/A	0	3	Bulk, Interrupt, Isochronous, Control	8/16-bit Databus, DMA	3.6	USB High-Speed Peripherals	SSOP	0
CY7C68001-56PVXCT	In Production	N/A	N/A	0	3	Bulk, Interrupt, Isochronous, Control	8/16-bit Databus, DMA	3.6	USB High-Speed Peripherals	SSOP	0

USB HOSTS

These dual role devices switch to host mode when connected to a peripheral and to peripheral mode when connected to a host. In addition, our embedded host/peripheral controllers support both Full- and Low-Speed USB devices in either mode.

Cypress also offers Automotive Electronics Council (AEC) Q100 compliant embedded host/peripheral controllers ideal for automotive “infotainment” applications.

USB On-the-Go (OTG), a new supplement to the USB 2.0 specification, is for the portable market. Cypress has extended its position as industry leader in USB peripheral technology by taking a leading role in the OTG working group and in defining the specification.

- **EZ-Host™** — World’s first automotive qualified host/peripheral controller; Microprocessor-based 4-port host/peripheral controller
- **EZ-OTG™** — Microprocessor-based 2-port USB OTG controller
- **SL811HS** — World’s first Dual Role Device (DRD); Serial Interface Engine (SIE) with 8-bit microprocessor interface

EZ-Host™

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C67300-100AXA	In Production	ROM/RAM	16	32	2.7	Bulk, Interrupt, Isochronous	GPIO, HPI, HSS, SPI, I2C, UART	3.6	USB Embedded Hosts	TQFP	-40
CY7C67300-100AXAT	In Production	ROM/RAM	16	32	2.7	Bulk, Interrupt, Isochronous	GPIO, HPI, HSS, SPI, I2C, UART	3.6	USB Embedded Hosts	TQFP	-40
CY7C67300-100AXI	In Production	ROM/RAM	16	32	2.7	Bulk, Interrupt, Isochronous	GPIO, HPI, HSS, SPI, I2C, UART	3.6	USB Embedded Hosts	TQFP	-40
CY7C67300-100AXIT	In Production	ROM/RAM	16	32	2.7	Bulk, Interrupt, Isochronous	GPIO, HPI, HSS, SPI, I2C, UART	3.6	USB Embedded Hosts	TQFP	-40

EZ-OTG™

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C67200-48BAXI	In Production	ROM/RAM	16	25	2.7	Bulk, Interrupt, Isochronous	GPIO, HPI, HSS, SPI, I2C, UART	3.6	USB Embedded Hosts	FBGA	-40
CY7C67200-48BAXIT	In Production	ROM/RAM	16	25	2.7	Bulk, Interrupt, Isochronous	GPIO, HPI, HSS, SPI, I2C, UART	3.6	USB Embedded Hosts	FBGA	-40

SL811HS

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
SL811HSTAXC	In Production	ROM/RAM	256	8	3	Bulk, Interrupt, Isochronous	N/A	3.45	USB Embedded Hosts	TQFP	0

USB LOW-SPEED PERIPHERALS

Cypress's Low-Speed USB controllers feature the industry's smallest 8-bit RISC core that contains RAM, EPROM/flash, USB logic, and an USB transceiver. The enCoRe™ II series is the second generation of enhanced Component Reduction technology, adding flash memory, and more integration.

enCoRe™ II

Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CY7C63310-SXC	In Production	Flash	3	14	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse	SOIC	0
CY7C63801-SXC	In Production	Flash	4	14	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse	SOIC	0
CY7C63803-LQXC	In Production	Flash	8	14	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse, Wireless Dongle	QFN	0
CY7C63803-SXC	In Production	Flash	8	14	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse, Wireless Dongle	SOIC	0
CY7C63803-SXCT	In Production	Flash	8	14	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse, Wireless Dongle	SOIC	0
CY7C63813-PXC	In Production	Flash	8	16	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse, Wireless Dongle	PDIP	0
CY7C63813-SXC	In Production	Flash	8	16	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse, Wireless Dongle	SOIC	0
CY7C63823-3XWC	In Production	Flash	8	20	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse	Wafer	0
CY7C63823-QXC	In Production	Flash	8	20	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse, Wireless Dongle	QSOP	0
CY7C63823-SXC	In Production	Flash	8	20	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse, Wireless Dongle	SOIC	0
CY7C63823-SXCT	In Production	Flash	8	20	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse	SOIC	0
CY7C63823-XC	In Production	Flash	8	20	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse	Wafer	0
CY7C63833-LTXC	In Production	Flash	8	20	4	Interrupt	USB, PS/2, SPI, GPIO	5.5	Mouse	QFN	0

USB SUPERSPEED PERIPHERALS

Cypress EZ-USB® FX3™ is the next-generation USB 3.0 peripheral controller, which provides highly integrated and flexible features that enable developers to add USB 3.0 functionality to any system.

EZ-USB FX3 has a fully configurable, parallel, General Programmable Interface called GPIF II, which can connect to any processor, ASIC, image sensor, or FPGA. The General Programmable Interface GPIF II is an enhanced version of the GPIF in FX2LP, Cypress's flagship USB 2.0 product. It provides easy and glueless connectivity to popular industry interfaces such as synchronous Slave FIFO, asynchronous SRAM, asynchronous and synchronous Address Data Multiplexed interface, parallel ATA, and so on.

EZ-USB FX3™

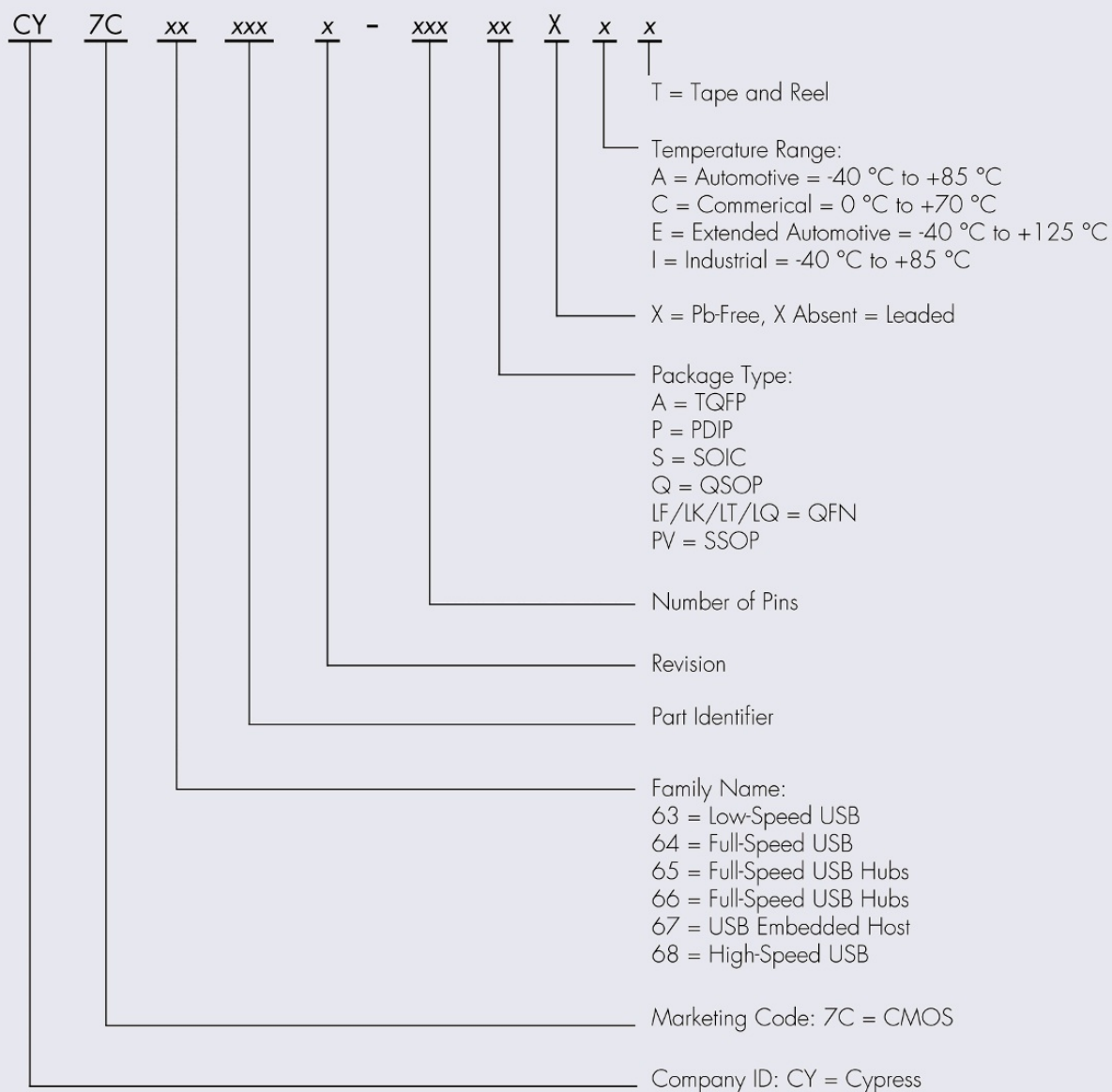
Part Number	Status	Memory Architecture	Memory Size (KB)	No. of I/Os	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)
CYUSB3011-BZXC	In Production	RAM	256	60	1.15	Bulk, Interrupt, Isochronous	8/16-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	1.25	USB SuperSpeed Peripherals	FBGA	0
CYUSB3012-BZXC	In Production	RAM	256	60	1.15	Bulk, Interrupt, Isochronous	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	1.25	USB SuperSpeed Peripherals	FBGA	0
CYUSB3013-BZXC	In Production	RAM	512	60	1.15	Bulk, Interrupt, Isochronous	8/16-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	1.25	USB SuperSpeed Peripherals	FBGA	0
CYUSB3014-BZXC	In Production	RAM	512	60	1.15	Bulk, Interrupt, Isochronous	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	1.25	USB SuperSpeed Peripherals	FBGA	0
CYUSB3014-BZXI	In Production	RAM	512	60	1.15	Bulk, Interrupt, Isochronous	8/16/32-bit GPIF, DMA, GPIO, I2C, UART, I2S, SPI	1.25	USB SuperSpeed Peripherals	FBGA	-40

USB TRANSCEIVERS

Cypress's TX2UL is the world's smallest USB 2.0 ULPI transceiver. TX2UL is suitable for use in any application that already has a USB controller but requires a ULPI transceiver. TX2UL supports a wide variable input voltage range of 3.0 to 5.775 V, and is configurable to clock frequencies of 13, 19.2, 24 and 26 MHz. Along with its ultra small size (2.14 x 1.76 mm), TX2UL consumes only 5 μ A in sleep mode, thus making it ideal for mobile and battery powered applications. This Cypress product is popular with USB modem dongles, handsets and other consumer electronic devices.

Part Number	Status	Min. Operating Voltage (V)	Data Transfers	I/O Options	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CY7C68003-20FNXI	In Production	1.7	Bulk, Interrupt, Isochronous	ULPI, 8-bit uni or bi directional	1.9	USB High-Speed ULPI PHY	WLCSP	-40	85	N
CY7C68003-24LQXI	In Production	1.8	Bulk, Interrupt, Isochronous	ULPI, 8-bit uni or bi directional	3.3	USB High-Speed ULPI PHY	QFN	-40	85	N
CY7C68003-24LQXIT	In Production	1.8	Bulk, Interrupt, Isochronous	ULPI, 8-bit uni or bi directional	3.3	USB High-Speed ULPI PHY	QFN	-40	85	N

USB Part Number Decoder



WIRELESS/RF

CYFi™ LOW-POWER RF

CYFi™ Low-Power RF is a PSoC-based, ultra-reliable 2.4-GHz RF solution. With its easy-to-use star network protocol, it is optimized for embedded control.

Part Number	Status	Range (m)	Throughput (Kbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYRF7936-40LTXC	In Production	100	1000, 250, 125	1.8	3.6	Wireless Embedded Control	QFN	0	70	N

Other features include Direct Spread Spectrum and active power management.

RF COMPANION MICROCONTROLLERS

Cypress offers a line of low-power, 8-bit microcontrollers that are ideal for wireless applications. The wireless enCoRe™ family consists of base parts targeting different applications. The devices feature the industry's smallest 8-bit RISC core with flash memory and a variety of internal peripheral functions.

- The enCoRe II LV family provides a 2.7 V, high I/O solution (CY7C601xx) that is optimal for keyboards and a low-to-mid I/O (CY7C602xx) solution that is optimal for mice, presenter tools, and similar applications. They provide a competitive silicon cost coupled with a high level of integration for an overall system cost reduction.
- The enCoRe III LV family provides a 2.4 to 3.6 V, mid-I/O solution (CY7C603xx) with configurable analog and digital peripherals. These devices provide a feature-rich, low-power solution for gaming, mice, presenter tools, and other applications.
- The enCoRe V LV (CY7C604xx) family provides a 1.71 to 3.6 V, mid-to-high-I/O solution (CY7C604xx), to enable true low-power wireless microcontroller designs. These devices have an increased flash size of up to 32 Kb, providing additional code space to enable feature-rich multimedia functionality in next-generation wireless HID products.

enCoRe II Low Voltage

Part Number	Status	No. of I/Os	Code Memory Architecture	Code Memory Size (KB)	Min. Operating Voltage (V)	RAM Size (Bytes)	I/O Options	Max. Operating Voltage (V)	Application	Max. Speed (MHz)	Package
CY7C60123-3X14C	In Production	36	Flash	8	2.7	256	GPIO, SPI	3.6	Wireless Keyboard, Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	Die
CY7C60123-3XWC	In Production	36	Flash	8	2.7	256	GPIO, SPI	3.6	Wireless Keyboard, Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	Wafer
CY7C60123-PVXC	In Production	36	Flash	8	2.7	256	GPIO, SPI	3.6	Wireless Keyboard, Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	SSOP
CY7C60223-3X14C	In Production	20	Flash	8	2.7	256	GPIO, SPI	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	Die
CY7C60223-3XWC	In Production	20	Flash	8	2.7	256	GPIO, SPI	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	Wafer
CY7C60223-QXC	In Production	20	Flash	8	2.7	256	GPIO, SPI	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	QSOP
CY7C60223-SXC	In Production	20	Flash	8	2.7	256	GPIO, SPI	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	SOIC

enCoRe III Low Voltage

Part Number	Status	No. of I/Os	Code Memory Architecture	Code Memory Size (KB)	Min. Operating Voltage (V)	RAM Size (Bytes)	I/O Options	Max. Operating Voltage (V)	Application	Max. Speed (MHz)	Package
CY7C60323-LTXC	In Production	28	Flash	8	2.4	512	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	QFN
CY7C60323-LTXCT	In Production	28	Flash	8	2.4	512	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	QFN
CY7C60323-PVXC	In Production	24	Flash	8	2.4	512	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	SSOP

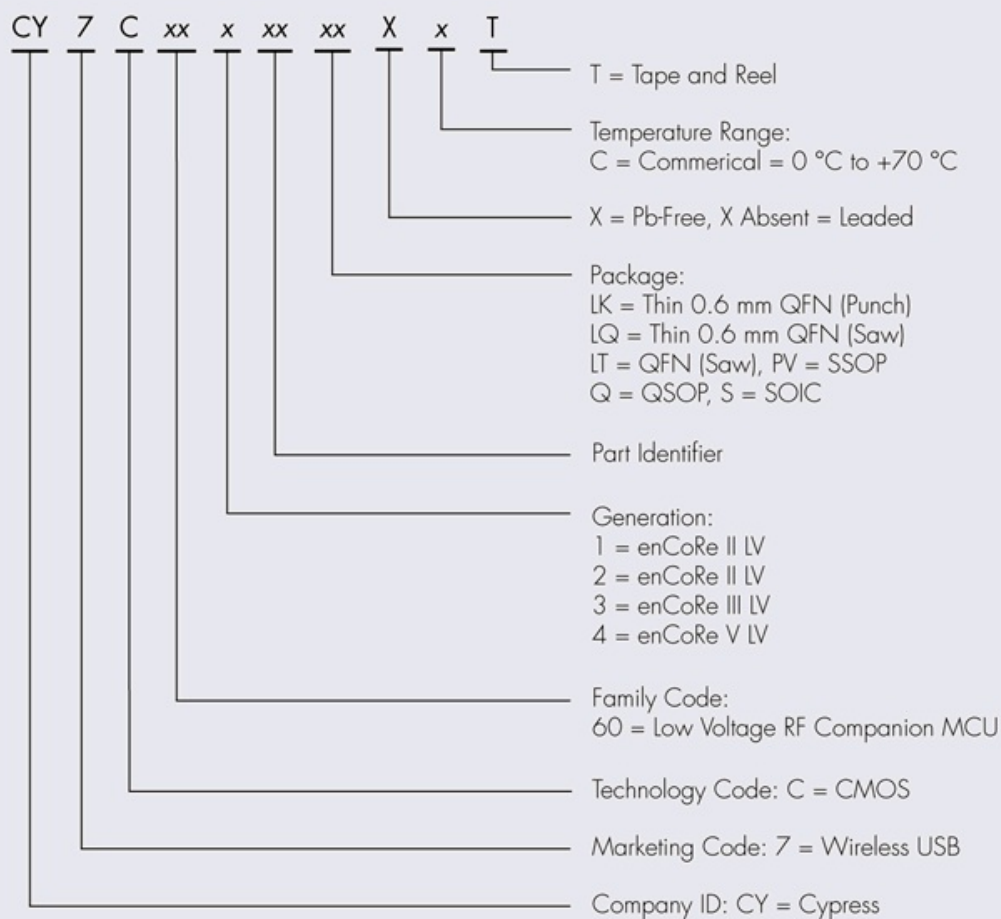
enCoRe III Low Voltage

Part Number	Status	No. of I/Os	Code Memory Architecture	Code Memory Size (KB)	Min. Operating Voltage (V)	RAM Size (Bytes)	I/O Options	Max. Operating Voltage (V)	Application	Max. Speed (MHz)	Package
CY7C60323-PVXCT	In Production	24	Flash	8	2.4	512	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	SSOP
CY7C60333-3X14C	In Production	26	Flash	8	2.4	512	GPIO, I2C, SPI, ADC	3.6	Wireless Keyboard, Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	12	Die

enCoRe V Low Voltage

Part Number	Status	No. of I/Os	Code Memory Architecture	Code Memory Size (KB)	Min. Operating Voltage (V)	RAM Size (Bytes)	I/O Options	Max. Operating Voltage (V)	Application	Max. Speed (MHz)	Package
CY7C60413-16LXKC	In Production	13	Flash	8	1.71	1024	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN
CY7C60413-16LXCT	In Production	13	Flash	8	1.71	1024	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN
CY7C60445-32LQXC	In Production	28	Flash	16	1.71	1024	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN
CY7C60445-32LQXCT	In Production	28	Flash	16	1.71	1024	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN
CY7C60445-3X14C	In Production	28	Flash	16	1.71	1024	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	Die
CY7C60455-48LTXC	In Production	36	Flash	16	1.71	1024	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN
CY7C60455-48LTXCT	In Production	36	Flash	16	1.71	1024	GPIO, I2C, SPI, ADC	3.6	Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN
CY7C60456-48LTXC	In Production	36	Flash	32	1.71	2048	GPIO, I2C, SPI, ADC	3.6	Wireless Keyboard, Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN
CY7C60456-48LTXCT	In Production	36	Flash	32	1.71	2048	GPIO, I2C, SPI, ADC	3.6	Wireless Keyboard, Wireless Mouse, Remote Control, Presenter Tool, Medical Devices, Gaming Controllers, Other General Purpose Wireless Applications	24	QFN

RF Companion Microcontroller Part Number Decoder



RF TRANSCEIVERSTM

PRoC LP

Cypress also offers PRoC™ - a flash-based programmable radio system-on-chip. PRoC is the world's first low-cost, flash-programmable microcontroller with an integrated 2.4 GHz radio transceiver. The microcontroller core is the M8C 8-bit engine that supports a rich instruction set. It contains 256 bytes of data SRAM and 8 kilobytes code flash memory.

Part Number	Status	Range (m)	Throughput (Kbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYRF69103-40LTXC	In Production	100	1000	1.8	3.6	Wireless Mouse, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	QFN	0	70	N
CYRF69213-40LTXC	In Production	100	1000	1.8	3.6	Wireless Keyboard / Mouse Dongle, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	QFN	0	70	N

PRoC LPstar

PRoC LPstar is a complete Radio System-on-Chip device providing a complete RF system solution with a single device and few discrete components. Integrating a 2.4GHz 1-Mbps GFSK radio transceiver, DSSS baseband controller, powerful 8-bit microcontroller, 8 Kbytes Flash for user firmware code, 256 byte of RAM, PRoC LPstar is designed to implement low cost wireless systems operating in the worldwide 2.4-GHz Industrial, Scientific, and Medical (ISM) frequency band.

Part Number	Status	Range (m)	Throughput (Kbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYRF69303-40LTXC	In Production	50	1000	2.7	3.6	Wireless Mouse, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	QFN	0	70	N
CYRF69313-40LTXC	In Production	50	1000	2.7	3.6	Wireless Mouse, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	QFN	0	70	N

WirelessUSB™ LP

Designed for short-range desktop wireless connectivity in PC peripheral applications, the WirelessUSB™ system acts as a USB HID-class device.

Benefits

- World's most robust 2.4 GHz solution operates reliably in busy 2.4 GHz environments
- Ultra low-power optimization for battery-powered devices
- Low cost implementation and BOM integration
- Easy-to-use reference design and tools for quick time-to-market

Key Applications: Wireless mouse, wireless USB bridge, wireless keyboard, wireless presenters, gaming, and remote controls

Part Number	Status	Range (m)	Throughput (Kbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYRF6936-40LTXC	In Production	100	1000	1.8	3.6	Wireless Keyboard, Wireless Mouse, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	QFN	0	70	N

WirelessUSB™ LP star

The WirelessUSB™ LPstar radio is Cypress's second generation WirelessUSB radio. It adds a range of enhanced features including reduced supply current in all operating modes, reduced crystal start up and synthesizer settling. The WirelessUSB LPstar has best-in-class noise and interference immunity, co-location capability, and long operating range.

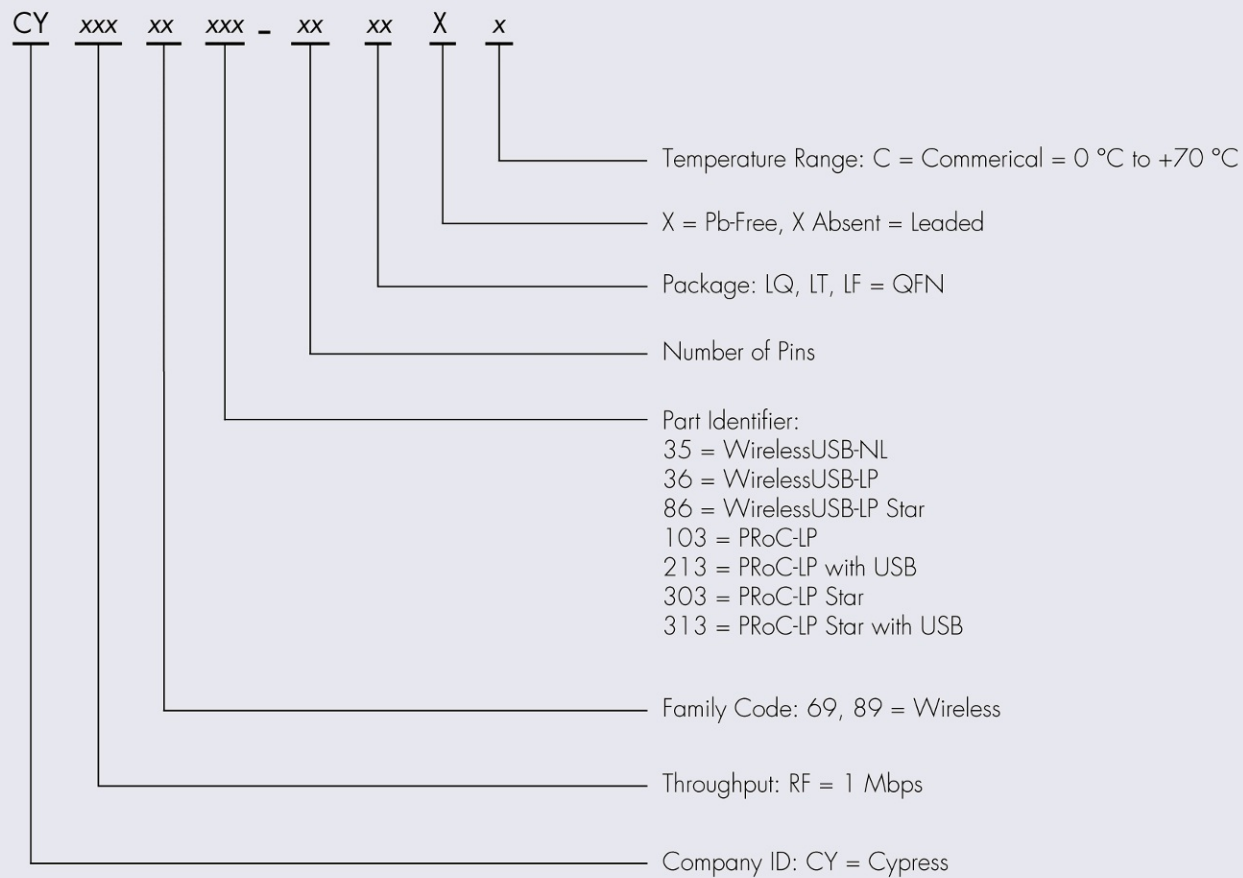
Part Number	Status	Range (m)	Throughput (Kbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYRF6986-40LTXC	In Production	50	1000	2.7	3.6	Wireless Keyboard / Mouse Dongle, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	QFN	0	70	N

WirelessUSB™ NL

The WirelessUSB™ NL radio is Cypress's third generation of 2.4 GHz low-power RF technology, bringing the next level of low power performance into a small 4 mm x 4 mm footprint. Fast lock times and channel switching, along with the ability to transmit larger payloads makes WirelessUSB NL perfect for streaming applications such as audio, along with HID applications such as wireless keyboards, mice, and USB dongles.

Part Number	Status	Range (m)	Throughput (Kbps)	Min. Operating Voltage (V)	Max. Operating Voltage (V)	Application	Package	Min. Operating Temp. (°C)	Max. Operating Temp. (°C)	Automotive Qualified
CYRF8935A-24LQXC	In Production	10	1000	1.9	3.6	Wireless Keyboard / Mouse Dongle, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	QFN	0	70	N
CYRF8935A-4X14C	In Production	10	1000	1.9	3.6	Wireless Keyboard / Mouse Dongle, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	Die	0	70	N
CYRF8935A-4XW14C	Contact Sales	10	1000	1.9	3.6	Wireless Keyboard / Mouse Dongle, Remote Control, Presenter Tool, Gaming Controllers, Other General Purpose Wireless Applications	Wafer	0	70	N

WirelessUSB Part Decoder



CONTACT US

CYPRESS HEADQUARTERS

Cypress Semiconductor Corporation

198 Champion Court
San Jose, CA 95134 USA
Tel: +1 (408) 943-2600
Fax: +1 (408) 943-6848
Toll-free: +1 (800) 858-1810 (U.S. only)

www.cypress.com

FOR MORE INFORMATION ON CYPRESS SOLUTIONS:

AUTOMOTIVE

www.cypress.com/go/automotive

CLOCKS AND BUFFERS

www.cypress.com/go/clocks

LIGHTING AND POWER CONTROL

www.cypress.com/go/lighting

MEMORY

www.cypress.com/go/memory

PHYSICAL LAYER DEVICES

www.cypress.com/go/phy

PSOC TECHNOLOGY

www.cypress.com/go/PSoC

CAPSENSE TECHNOLOGY

www.cypress.com/go/CapSense

TRUETOUGH TECHNOLOGY

www.cypress.com/go/TrueTouch

USB CONTROLLERS

www.cypress.com/go/usb

WEST BRIDGE CONTROLLERS

www.cypress.com/go/westbridge

WIRELESS/RF

www.cypress.com/go/wireless

QUALITY AND RELIABILITY

www.cypress.com/go/quality

CYPRESS EDUCATION— UNIVERSITY ALLIANCE

www.cypress.com/go/university

ONLINE TECHNICAL SUPPORT

www.cypress.com/go/support

CyPROS® CERTIFIED CONSULTANTS

www.cypress.com/go/cypros

CYPRESS ONLINE STORE

www.cypress.com/go/shop

THIRD-PARTY USER FORUM

www.PSoCdeveloper.com

CYPRESS DEVELOPER COMMUNITY™

www.cypress.com/go/community

ABOUT CYPRESS

Cypress delivers high-performance, mixed-signal, programmable solutions that provide customers with rapid time-to-market and exceptional system value. Cypress offerings include the flagship PSoC® programmable system-on-chip families and derivatives such as PowerPSoC® solutions for high-voltage and LED lighting applications, CapSense® touch-sensing and TrueTouch™ solutions for touchscreens. Cypress is the world leader in USB controllers, including the high-performance West Bridge® solution that enhances connectivity and performance in multimedia handsets. Cypress is also a leader in high-performance memories and programmable timing devices. Cypress serves numerous markets including consumer, mobile handsets, computation, data communications, automotive, industrial and military. Cypress trades on the NASDAQ Global Select Market under the ticker symbol CY. Visit Cypress online at www.cypress.com.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cypress Semiconductor:

[CY8CTST241-LQI-01T](#) [CY8CTMG240-LTI-01](#) [FM25V40-DGCTR](#) [FM28V402-TGC](#) [CY8CTST241-LTI-01](#)
[CY8CTMG240-LTI-01T](#) [FM25V40-DGC](#) [FM25V40-GCTR](#) [CY8CTST241-LQI-01](#) [CY8CTST241-LTI-01T](#) [FM28V402-](#)
[BGC](#) [CY8CTST242-LTI-01](#) [CY8CTMG120-56LFXAT](#) [CY8CTST242-LQI-01T](#) [FM25V40-GC](#) [FM28V402-BGCTR](#)
[CY8CTMG120-56LFXA](#) [CY8CTMG240-LQI-01T](#) [FM28V402-TGCTR](#) [CY8CTMG240-LQI-01](#)