

Wireless Selector Guide

SPRING 2014



Hardware and Software Support

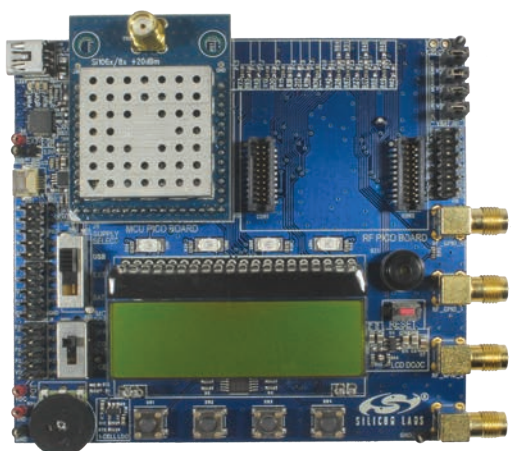
FIND THE TOOLS YOU NEED TO HELP WITH YOUR ENTIRE PROJECT www.silabs.com/wireless

Sub-GHz EZRadio Development Support

Silicon Labs offers complete tools to help designers throughout the entire project. The EZRadio®, EZRadioPRO® and wireless solutions offer hardware and software platforms to easily set up and configure, compile and debug a project. Full documentation and a broad range of third-party compilers and development tools are available. Software stacks provide networking support for multi-node metering networks. Software simulation tools can estimate power consumption and determine expected battery life.

Complete development/prototyping system includes the following:

- Prototyping/demonstration board
- USB adapter for in-system programming and debugging
- Silicon Laboratories IDE
- MCU configuration wizard



**WIRELESS MOTHERBOARD
WITH SI106X/8X PICO CARD**



**SI4356 STANDALONE RECEIVER
DEVELOPMENT KIT**



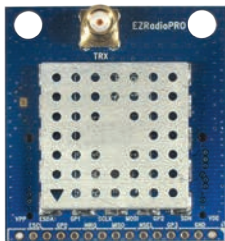
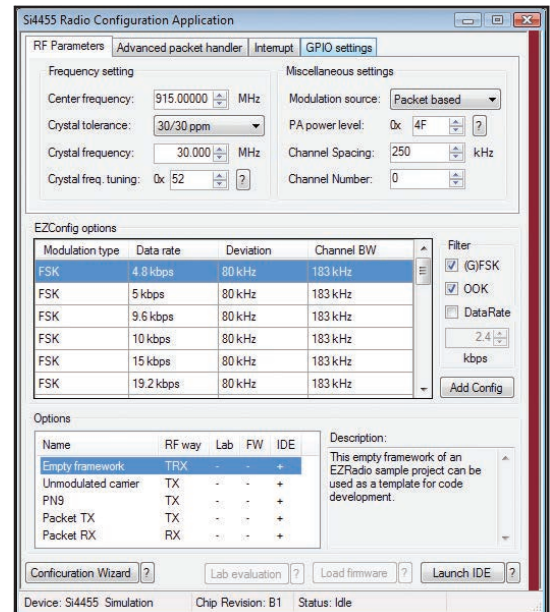
**SI4010 EZRadio®
KEY FOB TRANSMITTER**

Wireless Development Suite

The Wireless Development Suite (WDS) provides developers a comprehensive toolset to quickly and easily create and deploy efficient, robust and low-cost wireless applications. WDS can be used for demonstrating part capabilities, testing performance, and prototyping application examples, with little or no RF design and measurement experience.

To easily set up the EZRadio products, Silicon Labs offers the EZConfig setup tools within our Wireless Development Suite software. The EZConfig tool provides recommended settings for the most common application configurations. These settings have been optimized by Silicon Labs and verified for performance. www.silabs.com/WDS

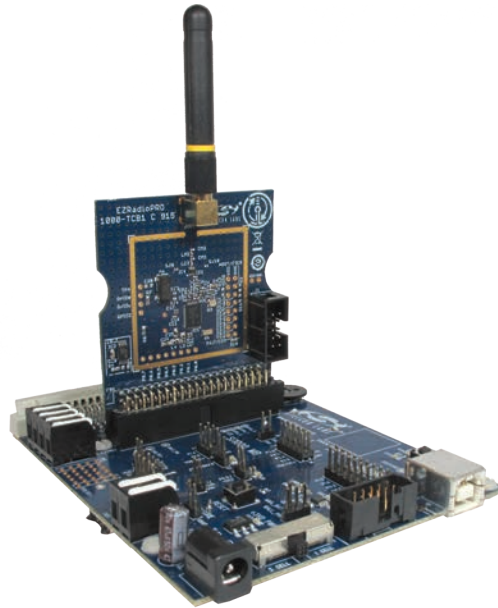
- Supports a family of TX, RX and TRX test cards
- Device config, save, and restore
- Custom scripting API
- Online device documentation
- Terminal window
- PC interface to evaluation boards



Si4463 915 MHz
RF PICO CARD



Si4355/Si4010 ONE-WAY
SUB-GHZ KEY FOB TO LED
RECEIVER STICK



Si1000 TARGET BOARD
WITH EZRadio® TEST CARD



EZRadio® Si4010/Si4355
ONE-WAY AES
DEVELOPMENT KIT

Development Kits

FIND THE EVALUATION TOOLS AND REFERENCE DESIGNS TO HELP YOU GET STARTED: www.silabs.com/wireless-devkits

Ember ZigBee Development Kits

PART NUMBER	DESCRIPTION	PRICE
EM35x-DEV	EM351 and EM357 Development Kit with 30-day trial license for IAR Embedded Workbench for ARM	\$2,500.00
EM35x-DEV-IAR	EM351 and EM357 Development Kit with a full standalone Cortex-M3 licence for IAR Embedded Workbench for ARM	\$5,200.00
EM35x-NCP-ADD-ON-S	Network co-processor development with an existing EM35x Development kit	\$405.00

EZRadio Development Kits

PART NUMBER	DESCRIPTION	PRICE
4010-KFOBDEV-434	Si4010/Si4355 Key Fob Development Kit; 434 MHz Frequency	\$150.00
4010-KFOBDEV-868	Si4010/Si4355 Key Fob Development Kit; 868 MHz Frequency	\$150.00
4010-KFOBDEV-915	Si4010/Si4355 Key Fob Development Kit; 915 MHz Frequency	\$150.00
4010-AESK1W-315	Si4010/Si4355 One-Way AES Development Kit; 315 MHz Frequency	\$50.00
4010-AESK1W-434	Si4010/Si4355 One-Way AES Development Kit; 434 MHz Frequency	\$50.00
4010-AESK1W-868	Si4010/Si4355 One-Way AES Development Kit; 868 MHz Frequency	\$50.00
4010-AESK1W-915	Si4010/Si4355 One-Way AES Development Kit; 915 MHz Frequency	\$50.00
4012-LCDK1W-434	Si4355 One-Way LCD Development Kit; 434 MHz Frequency	\$50.00
4012-LCDK1W-915	Si4355 One-Way LCD Development Kit; 915 MHz Frequency	\$50.00
4455-434-PDK	Si4455 Wireless Development Kit; 434 Frequency	\$199.00
4455-868-PDK	Si4455 Wireless Development Kit; 868 Frequency	\$199.00
4455-915-PDK	Si4455 Wireless Development Kit; 915 Frequency	\$199.00
4356-LEDK1W-434	Si4356 Standalone Receiver Development Kit; 434 Frequency	\$50.00
4356-LEDK1W-868	Si4356 Standalone Receiver Development Kit; 868 Frequency	\$50.00
4356-RX-434-DK	Si4356 Standalone Receiver Module Kit; 434 Frequency	\$50.00
EZR-LEDK1W-434	Si4010/Si4355 One-way Sub-GHz Key Fob to LED Receiver Stick; 434 MHz Frequency	\$20.00
EZR-LEDK1W-868	Si4010/Si4355 One-way Sub-GHz Key Fob to LED Receiver Stick; 868 MHz Frequency	\$20.00
EZR-LEDK1W-915	Si4010/Si4355 One-way Sub-GHz Key Fob to LED Receiver Stick; 915 MHz Frequency	\$20.00
EZR-LEDK2W-434	Si4455 Two-way Sub-GHz Key Fob to LED Receiver Stick; 434 MHz Frequency	\$40.00
EZR-LEDK2W-868	Si4455 Two-way Sub-GHz Key Fob to LED Receiver Stick; 868 MHz Frequency	\$40.00
EZR-LEDK2W-915	Si4455 Two-way Sub-GHz Key Fob to LED Receiver Stick; 915 MHz Frequency	\$40.00
EZR-LCDK2W-434	Si4455 Two-way LCD Development Kit; 434 MHz Frequency	\$100.00
EZR-LCDK2W-868	Si4455 Two-Way LCD Development Kit; 868 MHz Frequency	\$100.00
EZR-LCDK2W-915	Si4455 Two-Way LCD Development Kit; 915 MHz Frequency	\$100.00
RF-to-USB-RD	Two board RF to USB Reference Design	\$49.99

EZRadio Test Cards

PART NUMBER	TYPE	FREQUENCY	ANTENNA CONFIGURATION	PRICE
4313-T-B1_B_ANY	Si4313 RX	240 - 960 MHz	50 Ohm	\$50.00

EZRadioPRO Development Kits

PART NUMBER	DESCRIPTION	PRICE
4060-868-PDK	Si4060 One-way Wireless Development Kit; 868 MHz Frequency	\$299.00
4063-915-PDK	Si4063 One-way Wireless Development Kit; 915 MHz Frequency	\$299.00
4438-490-PDK	Si4438 Wireless Development Kit; 490 MHz Frequency	\$299.00
4461-868-PDK	Si4461 Wireless Development Kit; 868 MHz Frequency	\$299.00
4463-915-PDK	Si4463 Wireless Development Kit; 915 MHz Frequency	\$299.00

EZRadioPRO Development Kit Test Cards

PART NUMBER	TYPE	FREQUENCY	ANTENNA CONFIGURATION	PRICE
4060-PCE10B868-EK	Si4060 TX Testcard	868 MHz	+10 dBm, TX only	\$50.00
4063-PCE20B915-EK	Si4063 TX Testcard	915 MHz	+20 dBm, TX only	\$50.00
4362-PRXB868-EK	Si4362 RX Testcard	868 MHz	-126 dBm, RX only	\$50.00
4362-PRXB915-EK	Si4362 RX Testcard	915 MHz	-126 dBm, RX only	\$50.00
4461-PCE14D868-EK	Si4461 TRX Testcard	868 MHz	+14 dBm, Single antenna implemented without RF switch	\$50.00
4463-PCE20C915-EK	Si4463 TRX Testcard	915 MHz	+20 dBm, Single antenna implemented with RF switch	\$50.00
4063-PSQ20B169-EK	Si4063 TX Testcard	169 MHz	+ 20 dBm, TX only	\$50.00
4060-PCE10B434-EK	Si4063 TX Testcard	434 MHz	+10 dBm, TX only	\$50.00
4362-PRXB169-EK	Si4362 RX Testcard	169 MHz	-126 dBm, RX only	\$50.00
4362-PRXB434-EK	Si4362 RX Testcard	434 MHz	-126 dBm, RX only	\$50.00
4463-PSQ20D169-EK	Si4463 TRX Testcard	169 MHz	+20 dBm, Single antenna implemented without RF switch	\$50.00
4460-PCE10D434-EK	Si4460 TRX Testcard	434 MHz	+10 dBm, Single antenna implemented without RF switch	\$50.00
4463-PCE20B915-EK	Si4463 TRX Testcard	915 MHz	+20 dBm, Separate TX and RX designed for lab testing (not recommended for range testing)	\$50.00
4463-PCE20C460-EK	Si4463 TRX Testcard	460 MHz	+20 dBm, Single antenna implemented with RF switch	\$50.00
4463-PCE20C868SE-EK	Si4463 TRX Testcard	868 MHz	+20 dBm, Single antenna implemented with RF switch, SAW filter, TCXO, for ETSI Cat 1 applications	\$50.00
4463-PSQ20C169SE-EK	Si4463 TRX Testcard	169 MHz	+20 dBm, Single antenna implemented with RF switch, SAW filter, TCXO, for ETSI Cat 1 applications	\$50.00
4463-PSQ27F169-EK	Si4463 TRX Testcard	169 MHz	+27 dBm, Single antenna implemented with RF switch and low cost external amplifier	\$50.00
4463-PCE27F868-EK	Si4463 TRX Testcard	868 MHz	+27 dBm, Single antenna implemented with RF switch and low cost external amplifier	\$50.00
4463-PCE30E915R-EK	Si4463 TRX Testcard	915 MHz	+30 dBm high power design with RFMD FEM	\$50.00
4460-PCE30E915S-EK	Si4460 TRX Testcard	915 MHz	+30 dBm high power design with Skyworks FEM	\$50.00
4463-PCE20A915-EK	Si4463 TRX Testcard	915 MHz	+20 dBm used to evaluate the embedded Antenna Diversity algorithm	\$50.00

Wireless MCU Development Kits

PART NUMBER	DESCRIPTION	PRICE
Si1000DK	Si1000 Wireless MCU Development Kit	\$99.99
Si1010DK	Si1010 Wireless MCU Development Kit	\$99.00
Si1020-915-A-SDK	Si1020 915 MHz Software Development Kit	\$299.00
Si1020-915-A-DK	Si1020 915 MHz Wireless Development Kit	\$829.00
Si1024-868-A-SDK	Si1024 868 MHz Software Development Kit	\$299.00
Si1024-868-A-DK	Si1024 868 MHz Wireless Development Kit	\$829.00
Si1060-490-DK	Si1060 490 MHz Wireless MCU Development Kit	\$299.99
Si1060-915-DK	Si1060 915 MHz Wireless MCU Development Kit	\$299.99

Si1062-868-DK	Si1062 868 MHz Wireless MCU Development Kit	\$299.99
Si1064-434-DK	Si1064 434 MHz Wireless MCU Development Kit	\$299.99
Si1064-868-DK	Si1064 868 MHz Wireless MCU Development Kit	\$299.99
Si1064-915-DK	Si1064 915 MHz Wireless MCU Development Kit	\$299.99

Wireless MCU Development Kit Test Cards

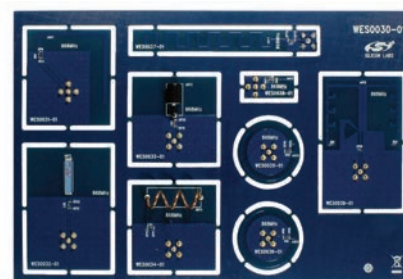
PART NUMBER	TYPE	FREQUENCY	ANTENNA CONFIGURATION	PRICE
1000-TCB1 C 915	Si1000 TRX Testcard	915 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1000-TCB1 C 470	Si1000 TRX Testcard	470 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1002-TCB1 D 868	Si1002 TRX Testcard	868 MHz	Single Tied Antenna Rev c/B1; +13 dBm	\$70.00
1002-TCB1 D 434	Si1002 TRX Testcard	470 MHz	Single Tied Antenna Rev c/B1; +13 dBm	\$70.00
1004-TCB1 D 868	Si1004 TRX Testcard	868 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00
1004-TCB1 D 434	Si1004 TRX Testcard	434 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00
1010-TAB1 C 915	Si1010 TRX Testcard	915 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1010-TCB1 C 470	Si1010 TRX Testcard	470 MHz	Single Switch Antenna Rev c/B1; +20 dBm	\$70.00
1012-TAB1 D 868	Si1012 TRX Testcard	868 MHz	Single Tied Antenna Rev d/B1; +13 dBm	\$70.00
1012-TAB1 D 434	Si1012 TRX Testcard	434 MHz	Single Tied Antenna Rev d/B1; +13 dBm	\$70.00
1014-TAB1 D 868	Si1014 TRX Testcard	868 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00
1014-TAB1 D 434	Si1014 TRX Testcard	434 MHz	Single Tied Antenna Rev d/B1; +13 dBm, dc-dc	\$70.00

Wireless MCU Development Kit Pico Cards

PART NUMBER	FREQUENCY	DESCRIPTION	PRICE
UPPI1020GM-A-915EK	915 MHz	Si1020-GM 915 +20 dBm T/R switch pico board	\$49.00
UPPI1024GM-A-868EK	868 MHz	Si1024-GM 868 +13 dBm direct tie pico board	\$42.00
UPPI1024GM-A-434EK	434 MHz	Si1024-GM 434 +13 dBm direct tie pico board	\$42.00

Antenna Matrix Development Kit

The antenna matrix is intended to simplify antenna design and selection. The antenna designs can be copied into any design after evaluation of various types of antennas in the matrix. The MSC-AMSxxx-EK kit contains a panel of nine antenna designs. Each antenna on the panel is unique and can be individually evaluated with a separately orderable RF Pico Board. The RF Pico Boards are available as part of EZRadio and EZRadioPRO development kits and individually as well. The panel contains a mix of PCB, chip and wire antenna options for a specific frequency band. The antenna matrix kit includes an SMA adapter to connect the SMA on the antenna board to the SMA on the RF Pico Board.



PART NUMBER	DESCRIPTION	PRICE
MSC-AMS868-EK	868 MHz Antenna Development Kit	\$72.00

Product Selector Tables

Wireless Products

REQUEST SAMPLES AND DOWNLOAD DOCUMENTATION AT www.silabs.com/wireless

Ember® ZigBee® ICs

PART NUMBER	FLASH (kB)	RAM (kB)	DATA RATE	FREQ. RANGE (MHz)	SENS. (boost)	ADJ CHANNEL REJECTION (15.4)	ALT CHANNEL REJECTION (15.4)	802.11g REJECTION +12/-13 MHz	TX POWER (boost)	TOTAL LINK BUDGET	DEEP SLEEP CURRENT	RX CURRENT	TX CURRENT (@ +3 dBm)	CRYSTAL FREQ.	VOLTAGE (V)	PACKAGE
EM351	128	12	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	0.4 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48
EM357	192	12	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	0.4 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48
EM3581	256	32	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	1.08 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48
EM3582	256	32	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	1.08 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48
EM3585	512	32	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	1.08 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48
EM3586	512	32	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	1.08 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48
EM3587	512	64	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	1.08 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48
EM3588	512	64	250 kbps	2400-2500	-102 dBm	35 dB	46 dB	36 dB	-55 to +8 dBm	110 dB (boost)	1.08 µA (timer)	26.5 mA (normal)	31 mA (normal)	24 MHz	2.1 to 3.6	QFN48

EZRadio® Universal ISM Band RF ICs

PART NUMBER	TYPE	MODULATION SCHEME (MAX kbps)		FREQUENCY BANDS (MHz)				OUTPUT POWER MAX (dBm)		SUPPLY VOLTAGE (V)	SENSITIVITY (dBm)	PACKAGE
		FSK	OOK	315	434	868	915	868 MHz BAND	434 MHz BAND			
Si4010	MCU +TX	100	50	27 - 960				10		1.8 - 3.6	—	MSOP10/SOIC14
Si4012	TX	100	50	27 - 960				10		1.8 - 3.6	—	MSOP10/SOIC14
Si4313	RX	256	40	*	*	*	*	—	—	1.8 - 3.6	-118/-107	QFN20
Si4355	RX	500	120	*	*	*	*	—	—	1.8 - 3.6	-116	QFN20
Si4356	RX	120	120	*	*	*	*	—	—	1.8 - 3.6	-113	QFN20
Si4455	TRX	500	120	*	*	*	*	12	13	1.8 - 3.6	-116	QFN20

EZRadioPRO® Enhanced Feature Universal ISM Band RF ICs

PART NUMBER	TYPE	MODULATION SCHEME (MAX kbps)		FREQUENCY RANGE (MHz)	OUTPUT POWER RANGE (dBm)	SENSITIVITY (dBm)		RX CURRENT (mA)	TX CURRENT (dBm)				PACKAGE
		FSK	OOK			2.0 kbps FSK	4.8 kbps OOK		0	+11	+13	+20	
Si4030	TX	256	40	900 - 960	-8 to +13	—	—	—	18		30		QFN20
Si4031	TX	256	40	240 - 930	-8 to +13	—	—	—	18		30		QFN20
Si4032	TX	256	40	240 - 930	+1 to +20	—	—	—		35		85	QFN20
Si4060	TX	1000	120	142 - 1050 Major Bands	-40 to +13	—	—	—		18			QFN20
Si4063	TX	1000	120	142 - 1050 Major Bands	-20 to +20	—	—	—				85	QFN20
Si4330	RX	256	40	240 - 960	—	-121	-110	18.5 mA					QFN20
Si4362	RX	1000	120	142 - 1050 Major Bands	—	-124	-112	10/13 mA					QFN20
Si4430	TRX	256	40	900 - 960	-8 to +13	-12	-110	18.5 mA	18		30		QFN20
Si4431	TRX	256	40	240 - 930	-8 to +13	-121	-110	18.5 mA	18		30		QFN20
Si4432	TRX	256	40	240 - 930	+1 to +20	-121	-110	18.5 mA		35		85	QFN20

PART NUMBER	TYPE	MODULATION SCHEME (MAX kbps)		FREQUENCY RANGE (MHZ)	OUTPUT POWER RANGE (dBm)	SENSITIVITY (dBm)		RX CURRENT (mA)	TX CURRENT (dBm)				PACKAGE
		FSK	OOK			2.0 kbps FSK	4.8 kbps OOK		0	+11	+13	+20	
Si4438	TRX	500	120	425 - 525	-20 to +20	-121	-110	14 mA				75	QFN20
Si4460	TRX	1000	120	142 - 1050 Major Bands	-40 to +13	-124	-112	10/13 mA		18	25		QFN20
Si4461	TRX	1000	120	142 - 1050 Major Bands	-30 to +16	-124	-112	10/13 mA			31		QFN20
Si4463	TRX	1000	120	142 - 1050 Major Bands	-20 to +20	-124	-112	10/13 mA				85	QFN20
Si4464	TRX	1000	120	119 - 960 Banded	-20 to +20	-124	-112	10/13 mA				85	QFN20

Wireless MCUs

PART NUMBER	FLASH MEM.	MHz	RAM (kB)	DIG. I/O	COMM.	FSK/ GFSK (kbps)	OOK (kbps)	OUTPUT POWER (dBm)	2/4.8 KBPS SENS.	TX CURRENT (mA)		TIMERS (16-BIT)	PWM/ PCA	INT. OSC	ADC	COMP.	OTHER	PACKAGE	DEV KIT
										+11/+20 (dBm)	+13 (dBm)								
Si1020	128 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK
Si1024	128 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK
Si1030	128 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1034	128 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1000	64 kB	25	4352	22	I ² C, SPI, UART	256	40	+1 to +20	-121/-110	35 mA/85 mA	—	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	LGA42	Si1000DK
Si1002	64 kB	25	4352	22	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	LGA42	Si1000DK
Si1004	64 kB	25	4352	19	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	10-bit, 15-ch., 300 ksps	2	CRC; dc-dc; RTC	LGA42	Si1000DK
Si1021	64 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK
Si1025	64 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK
Si1031	64 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1035	64 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1060	64 kB	25	4352	15	I ² C; SPI; UART	512	120	-20 to +20	-126	18 mA/85 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1062	64 kB	25	4352	15	I ² C; SPI; UART	512	120	-40 to +13	-126	18 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1064	64 kB	25	4352	15	I ² C; SPI; UART	512	120	-40 to +13	-116	18 mA	29 mA	4	6	±2%	10-bit, 15-ch., 300 ksps	2	CRC; RTC	QFN36	Si1064DK
Si1001	32 kB	25	4352	22	I ² C, SPI, UART	256	40	+1 to +20	-121/-110	35 mA/85 mA	—	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	LGA42	Si1000DK
Si1003	32 kB	25	4352	22	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	LGA42	Si1000DK
Si1005	32 kB	25	4352	19	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	10-bit, 15-ch., 300 ksps	2	CRC; dc-dc; RTC	LGA42	Si1000DK
Si1022	32 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK
Si1026	32 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK

PART NUMBER	FLASH MEM.	MHz	RAM (kB)	DIG. I/O	COMM.	FSK/GFSK (kbps)	OOK (kbps)	OUTPUT POWER (dBm)	2/4.8 KBPS SENS.	TX CURRENT (mA) +11/+20 +13 (dBm)		TIMERS (16-BIT)	PWM/ PCA	INT. OSC	ADC	COMP.	OTHER	PACKAGE	DEV KIT
Si1032	32 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1036	32 kB	25	8448	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1061	32 kB	25	4352	15	I ² C; SPI; UART	512	120	-20 to +20	-126	18 mA/ 85 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1063	32 kB	25	4352	15	I ² C; SPI; UART	512	120	-40 to +13	-126	18 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1065	32 kB	25	4352	15	I ² C; SPI; UART	512	120	-40 to +13	-116	18 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si1064DK
Si1010	16 kB	25	768	15	I ² C, SPI, UART	256	40	+1 to +20	-121/-110	35 mA/ 85 mA	—	4	6	±2%	12-bit, 11-ch., 75 ksps	2	CRC; RTC	LGA42	Si1010DK
Si1012	16 kB	25	768	15	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	12-bit, 11-ch., 75 ksps	2	CRC; RTC	LGA42	Si1010DK
Si1014	16 kB	25	768	15	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	12-bit, 11-ch., 75 ksps	2	CRC; dc-dc; RTC	LGA42	Si1010DK
Si1023	16 kB	25	4352	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK
Si1027	16 kB	25	4352	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	128 LCD Segments	LGA85	Si1020DK
Si1033	16 kB	25	4352	53	I ² C, 2x SPI, UART	256	40	+1 to +20	-121/-110	85 mA	—	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1037	16 kB	25	4352	53	I ² C, 2x SPI, UART	256	40	-8 to +13	-121/-110	17 mA	30 mA	4	6	±2%	12-bit, 16-ch., 75 ksps	2	—	LGA85	Si1020DK
Si1080	16 kB	25	768	15	I ² C; SPI; UART	512	120	-20 to +20	-126	18 mA/ 85 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1082	16 kB	25	768	15	I ² C; SPI; UART	512	120	-40 to +13	-126	18 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1084	16 kB	25	768	15	I ² C; SPI; UART	512	120	-40 to +13	-116	18 mA	29 mA	4	6	±2%	10-bit, 15-ch., 300 ksps	2	CRC; RTC	QFN36	Si1064DK
Si1011	8 kB	25	768	15	I ² C, SPI, UART	256	40	+1 to +20	-121/-110	35 mA/ 85 mA	—	4	6	±2%	12-bit, 11-ch., 75 ksps	2	CRC; RTC	LGA42	Si1010DK
Si1013	8 kB	25	768	15	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	12-bit, 11-ch., 75 ksps	2	CRC; RTC	LGA42	Si1010DK
Si1015	8 kB	25	768	15	I ² C, SPI, UART	256	40	-8 to +13	-121/-110	—	30 mA	4	6	±2%	12-bit, 11-ch., 75 ksps	2	CRC; dc-dc; RTC	LGA42	Si1010DK
Si1081	8 kB	25	768	15	I ² C; SPI; UART	512	120	-20 to +20	-126	18 mA/ 85 mA	29 mA	4	6	±2%	10-bit, 18-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1083	8 kB	25	768	15	I ² C; SPI; UART	512	120	-40 to +13	-126	18 mA	29 mA	4	6	±2%	10-bit, 15-ch., 300 ksps	2	CRC; RTC	QFN36	Si106xDK
Si1085	8 kB	25	768	15	I ² C; SPI; UART	512	120	-40 to +13	-116	18 mA	29 mA	4	6	±2%	10-bit, 15-ch., 300 ksps	2	CRC; RTC	QFN36	Si1064DK

Silicon Labs Online Utilities

FIND THE TOOLS YOU NEED TO HELP WITH YOUR ENTIRE PROJECT www.silabs.com/online-utilities

Wireless Chip Selector

The Silicon Labs' wireless product selector online utility helps identify the right wireless product for the application. Simply make the selections that best describe the design, and the appropriate product with all supporting documentation, development software and hardware will be displayed. Enter the design specifications below and in less than a minute we'll match you to the right wireless product for the project. You will receive product match(es), data sheet(s), application notes, development hardware and software.

www.silabs.com/wireless-chip-selector

- 1 Standard/certification
- 2 Frequency spectrum
- 3 One-way or two-way link

In less than a minute, we'll match you to the right wireless product for your project!

Answer Summary:

1) Please select the appropriate standard:

- ☐ FCC (e.g. US market)
- ☐ ARIB (e.g. Japan market)
- ☐ ETSI (e.g. Europe market)
- ☐ China
- ☐ Brazil

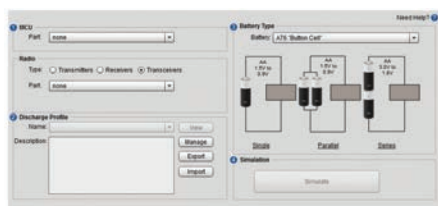
[Next >](#)

Competitor Part Number	Competitor Name	Silicon Labs Part Number	Description	Availability	Buy Now
CC2500	Texas Instruments	CC2500	2.4 GHz 100mW 802.15.4 ZigBee Transceiver	Available	Buy Now
CC2500	Texas Instruments	CC2500	2.4 GHz 100mW 802.15.4 ZigBee Transceiver	Available	Buy Now
CC2500	Texas Instruments	CC2500	2.4 GHz 100mW 802.15.4 ZigBee Transceiver	Available	Buy Now
CC2500	Texas Instruments	CC2500	2.4 GHz 100mW 802.15.4 ZigBee Transceiver	Available	Buy Now

Cross-Reference Utility

Silicon Labs' cross reference utility allows you to type in a competitor's part number (full or partial) and if we have a cross-match, our part number pops up. Results are automatically filtered as you type and can be exported to excel so you can e-mail or save results.

www.silabs.com/cross-reference



Battery Life Estimator

The Battery Life Estimator is an easy-to-use web-based calculator that gives designers a quick and easy way to understand the discharge characteristics of different system configurations to help optimize low-power applications. You can also download the software to your desktop. www.silabs.com/batterycalculator

Silicon Labs' products are designed and manufactured to ISO 9001, ISO 14001 and ISO/TS 16949 standards.



ISO 9001

Quality Management System
Design and Manufacture of Integrated Circuits
Certificate Registration No: 951 08 4762



ISO 14001

Environmental Management System
Design and Manufacture of Integrated Circuits
Certificate Registration No: 951 09 4998



ISO/TS 16949

Quality Management System for
Manufacture of Integrated Circuits and Related
Products for Automotive Applications
Certificate Registration No.: 12 111 33114 TMS
IATF Certificate No.: 0080212



Mixed Sources

Product group from well-managed
forests, controlled sources and
recycled wood or fiber
www.fsc.org Cert no. SW-COC-001730
© 1996 Forest Stewardship Council



Mouser Electronics

Authorized Distributor

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

Silicon Laboratories:

[4060-PCE10B434-EK](#) [4063-PSQ20B169-EK](#) [4362-PRXB169-EK](#) [4362-PRXB434-EK](#) [4460-PCE10D434-EK](#) [4460-PCE30E915S-EK](#) [4463-PCE20A915-EK](#) [4463-PCE20B915-EK](#) [4463-PCE20C460-EK](#) [4463PCE20C868SE-EK](#) [4463-PCE27F868-EK](#) [4463-PCE30E915R-EK](#) [4463PSQ20C169SE-EK](#) [4463-PSQ20D169-EK](#) [4463-PSQ27F169-EK](#) [MSC-F930-PDK](#) [4455-868-PDK](#) [4455-915-PDK](#) [4455-434-PDK](#)