



# Smart, simple solutions for the 12 most common design concerns

NXP I<sup>2</sup>C-bus solutions 2013

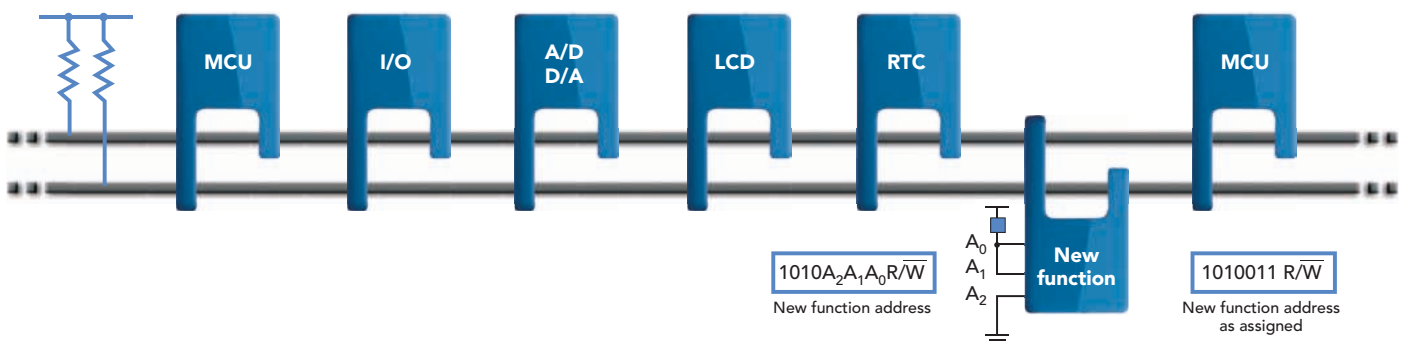
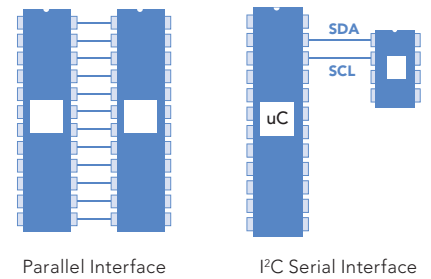


# I<sup>2</sup>C-bus: The serial revolution

By replacing complex parallel interfaces with a straightforward yet powerful serial structure, the I<sup>2</sup>C-bus revolutionized chip-to-chip communications.

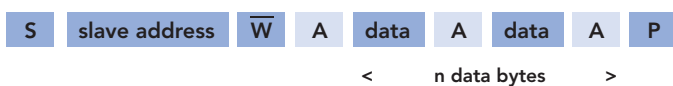
Invented by NXP (Philips) more than 30 years ago, the I<sup>2</sup>C-bus uses a simple two-wire format to carry data one bit at a time. It performs inter-chip addressing, selection, control, and data transfer. Speeds are up to 400 kHz (Fast-mode), 1 MHz (Fast-mode Plus), 3.4 MHz (High Speed-mode), or 5 MHz (Ultra Fast-mode).

The I<sup>2</sup>C-bus shrinks the IC footprint and leads to lower IC costs. Plus, since far fewer copper traces are needed, it enables a smaller PCB, reduces design complexity, and lowers system cost.

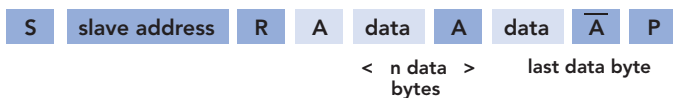


I<sup>2</sup>C-bus devices are available in a wide range of functions. Each slave device has its own I<sup>2</sup>C-bus address, selectable using address pins set high (1) or low (0). Information is transmitted byte by byte, and each byte is acknowledged by the receiver. There can be multiple devices on the same bus, and more than one IC can act as master. The master role is typically played by a microcontroller.

## Write data



## Read data



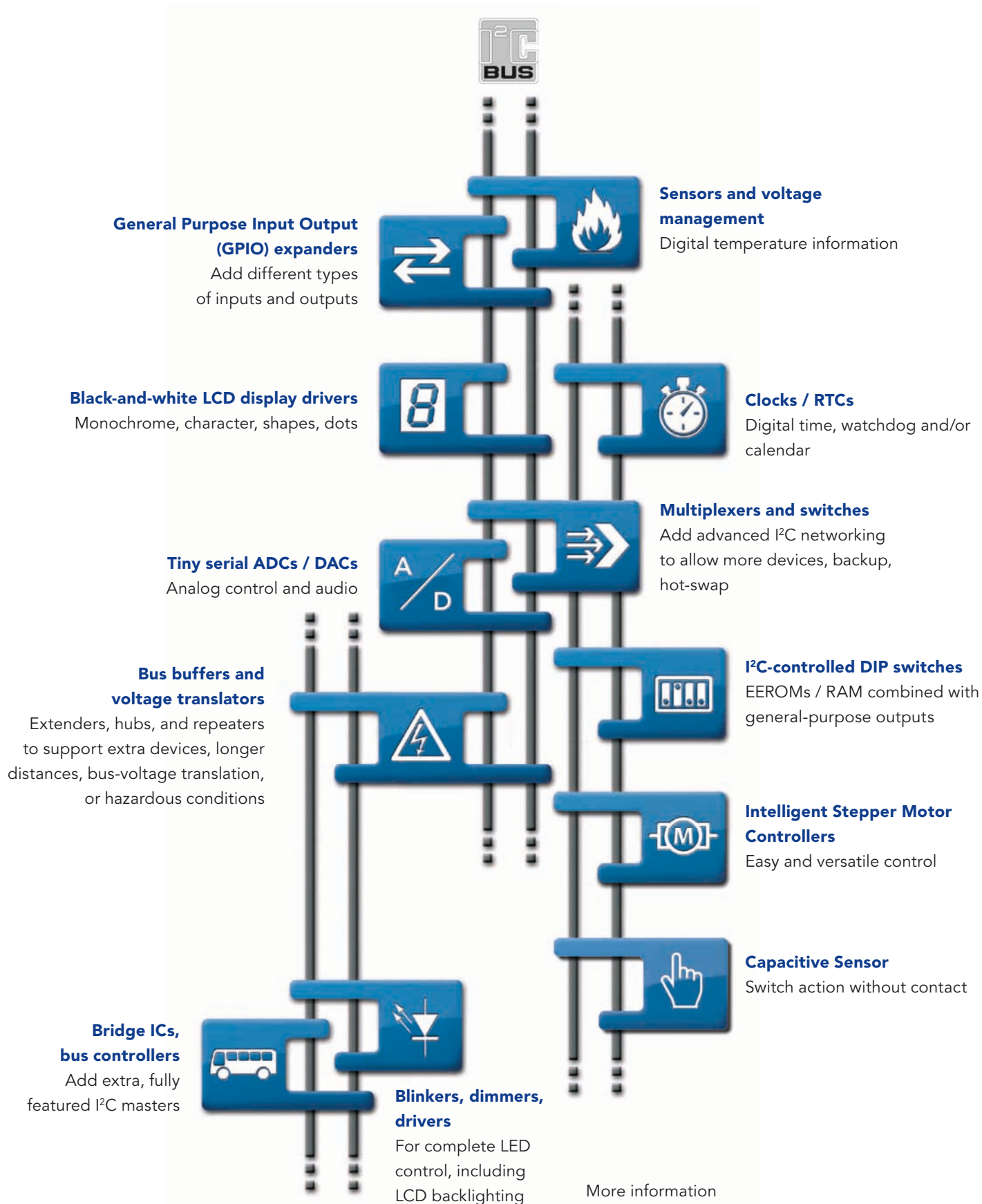
S = Start condition    R/W = read/write  
A = Acknowledge     $\bar{A}$  = Not acknowledge    P = Stop condition

## Master




The master always sends the clock


NXP's I<sup>2</sup>C peripherals portfolio is grouped into twelve families, one for each of the most common, everyday design concerns.




# I<sup>2</sup>C-bus product summary

GPIO Expander			Stepper Motor Controller		
4-bit	PCA9536	4-bit I <sup>2</sup> C Fm TP GPIO with PU	1 motor controller	PCA9629	I <sup>2</sup> C Fm+ Stepper Motor Controller with TP GPIO with INT and RST
	PCA9537	4-bit I <sup>2</sup> C Fm TP GPIO with INT and RST			
	PCA9570	4-bit 1 MHz LV TP GPO			
8-bit	PCA6408A	8-bit I <sup>2</sup> C Fm LV VLT TP GPIO with INT and RST	Capacitive Sensor		
	PCA8574	8-bit I <sup>2</sup> C Fm QB GPIO with INT and PU	8-channel touch switch	+ PCA/PCF8885	I <sup>2</sup> C Fm+ Touch / Proximity Sensor for up to 28 keys
	PCA8574A	8-bit I <sup>2</sup> C Fm QB GPIO with INT and PU (Alternate address)			
	PCA9500	8-bit I <sup>2</sup> C Fm QB GPIO with PU and 2-K EEPROM			
	PCA9501	8-bit I <sup>2</sup> C Fm QB GPIO with INT, PU and 2-K EEPROM	Local	LM75A	I <sup>2</sup> C Fm TS local with ± 2 °C accuracy (NRND)
	PCA9502	8-bit I <sup>2</sup> C Fm/SPI TP GPIO with INT and RST		LM75B	I <sup>2</sup> C Fm TS local with ± 2 °C accuracy and SMBus time-out
	PCA9534	8-bit I <sup>2</sup> C Fm TP GPIO with INT		SE95	I <sup>2</sup> C Fm TS local with ± 1 °C accuracy (NRND)
	+ PCA9538	8-bit I <sup>2</sup> C Fm TP GPIO with INT and RST		SE98A	I <sup>2</sup> C Fm DDR TS local with ± 1 °C accuracy and SMBus time-out
	PCA9538A	8-bit I <sup>2</sup> C Fm LV TP GPIO with INT and RST		PCT1075	I <sup>2</sup> C Fm+ TS with +/- 0.5oC accuracy and SMBus time-out
	+ PCA9554	8-bit I <sup>2</sup> C Fm TP GPIO with INT and PU		PCT2075	I <sup>2</sup> C Fm+ TS with +/- 1oC accuracy and SMBus time-out
	PCA9554A	8-bit I <sup>2</sup> C Fm TP GPIO with INT and PU (Alternate address)	Local and EEPROM	SE97B	I <sup>2</sup> C Fm DDR TS local with ± 1 °C accuracy, 2K SPD and SMBus time-out
	PCA9554B(C)	8-bit I <sup>2</sup> C Fm LV TP GPIO with INT and PU		Local and remote	NE1617A
	PCA9557	8-bit I <sup>2</sup> C Fm TP GPIO with RST	SA56004		I <sup>2</sup> C Fm TS local with ± 2 °C accuracy and remote with ± 1 °C accuracy
	PCA9571	8-bit 1 MHz LV TP GPO	LED controllers		
	PCA9574	8-bit I <sup>2</sup> C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD	Dimmer (2 PWM, 25 mA / 5 V)	PCA9530	2-channel I <sup>2</sup> C Fm OD LED dimmer with RST
	PCA9621	8-bit I <sup>2</sup> C Fm+ 65 mA OD GPO with RST		PCA9531	8-channel I <sup>2</sup> C Fm OD LED dimmer with RST
	PCA9670	8-bit I <sup>2</sup> C Fm+ QB GPIO with RST and PU		PCA9532	16-channel I <sup>2</sup> C Fm OD LED dimmer with RST
	PCA9672	8-bit I <sup>2</sup> C Fm+ QB GPIO with INT, RST and PU		PCA9533	4-channel I <sup>2</sup> C Fm OD LED dimmer
	PCA9674	8-bit I <sup>2</sup> C Fm+ QB GPIO with INT and PU	Blinker (2 PWM, 25 mA / 5 V)	PCA9550	2-channel I <sup>2</sup> C Fm OD LED blinker with RST
	PCA9674A	8-bit I <sup>2</sup> C Fm+ QB GPIO with INT and PU (Alternate address)		PCA9551	8-channel I <sup>2</sup> C Fm OD LED blinker with RST
	PCAL6408A	8-bit I <sup>2</sup> C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD		PCA9552	16-channel I <sup>2</sup> C Fm OD LED blinker with RST
	PCAL9538A	8-bit I <sup>2</sup> C Fm LV TP/OD GPIO with INT, RST, latch and PU/PD		PCA9553	4-channel I <sup>2</sup> C Fm OD LED blinker
	PCAL9554B(C)	8-bit I <sup>2</sup> C Fm LV TP/OD GPIO with INT, latch and PU/PD (PU default)	8-segment	SAA1064	16-channel I <sup>2</sup> C Sm current source/sink 4x8-segment LED display
	PCF8574	8-bit I <sup>2</sup> C Sm QB GPIO with INT and PU		PCA9632	4-channel I <sup>2</sup> C Fm+ low-power TP LED controller
	PCF8574A	8-bit I <sup>2</sup> C Sm QB GPIO with INT and PU (Alternate address)		PCA9633	4-channel I <sup>2</sup> C Fm+ TP LED controller with OE
	16-bit	PCA6416A		16-bit I <sup>2</sup> C Fm LV VLT TP GPIO with INT and RST	PCA9634
		PCA8575	16-bit I <sup>2</sup> C Fm QB GPIO with INT and PU	+ PCA9635	16-channel I <sup>2</sup> C Fm+ TP LED controller with OE
PCA9535		16-bit I <sup>2</sup> C Fm TP GPIO with INT	+ PCA9685	16-channel I <sup>2</sup> C Fm+ TP LED controller with 12-bit PWMs and OE	
PCA9535A		16-bit I <sup>2</sup> C Fm LV TP GPIO with INT	Controller (PWM/Ch, 57 mA / 20 V)	PCA9955A	16-channel I <sup>2</sup> C Fm+ 20 V CS LED controller
PCA9535C		16-bit I <sup>2</sup> C Fm OD GPIO with INT		PCU9955A	16-channel I <sup>2</sup> C UFm 20 V CS LED controller
+ PCA9539		16-bit I <sup>2</sup> C Fm TP GPIO with INT and RST		PCA9956A	24-channel I <sup>2</sup> C Fm+ 20 V CS LED controller
PCA9539A		16-bit I <sup>2</sup> C Fm LV TP GPIO with INT and RST		PCU9956A	24-channel I <sup>2</sup> C UFm 20 V CS LED controller
PCA9539R		16-bit I <sup>2</sup> C Fm TP GPIO with INT and RST (state machine only)	Controller (PWM / Ch, 57 mA / 40 V)	+ PCA9952	16-channel I <sup>2</sup> C Fm+ HV CS LED controller with OE
PCA9555		16-bit I <sup>2</sup> C Fm TP GPIO with INT and PU		+ PCA9955	16-channel I <sup>2</sup> C Fm+ HV CS LED controller
PCA9555A		16-bit I <sup>2</sup> C Fm LV TP GPIO with INT and PU		PCU9955	16-channel I <sup>2</sup> C UFm HV CS LED controller
PCA9575		16-bit I <sup>2</sup> C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD		PCA9624	8-channel I <sup>2</sup> C Fm+ HV OD LED controller with OE
PCA9671		16-bit I <sup>2</sup> C Fm+ QB GPIO with RST and PU	PCA9622	16-channel I <sup>2</sup> C Fm+ HV OD LED controller with OE	
PCA9673		16-bit I <sup>2</sup> C Fm+ QB GPIO with INT, RST and PU	PCA9626	24-channel I <sup>2</sup> C Fm+ HV OD LED controller with OE	
PCA9675		16-bit I <sup>2</sup> C Fm+ QB GPIO with INT and PU	PCU9654	8-channel I <sup>2</sup> C UFm HV OD LED controller with OE	
PCAL6416A		16-bit I <sup>2</sup> C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD	PCU9655	16-channel I <sup>2</sup> C UFm HV OD LED controller	
PCAL9535A		16-bit I <sup>2</sup> C Fm LV TP/OD GPIO with INT, latch and PU/PD	Controller (PWM / Ch, 100 mA / 40 V)	PCU9656	24-channel I <sup>2</sup> C UFm HV OD LED controller with OE
PCAL9539A		16-bit I <sup>2</sup> C Fm LV TP/OD GPIO with INT, RST, latch and PU/PD		SSL3250A	I <sup>2</sup> C Fm 500 mA sink dual LED flash with torch mode
PCAL9555A	16-bit I <sup>2</sup> C Fm LV TP/OD GPIO with INT, latch and PU/PD (PU default)	SSL3252		I <sup>2</sup> C Fm 500 mA source dual LED flash with torch mode	
PCF8575	16-bit I <sup>2</sup> C Fm QB GPIO with INT and PU				
PCF8575C	16-bit I <sup>2</sup> C Fm OD GPIO with INT				
40-bit	PCA9505	40-bit I <sup>2</sup> C Fm TP GPIO with INT, RST, OE and PU			
	PCA9506	40-bit I <sup>2</sup> C Fm TP GPIO with INT, RST and OE			
	PCA9698	40-bit I <sup>2</sup> C Fm+ TP/OD GPIO with INT, RST, OE and PU			

Real-time clocks		
Low-power	PCA8802	I <sup>2</sup> C Fm RTC for One Time Password generation and smart cards
	PCF85063	I <sup>2</sup> C FM / Tiny RTC with 30s, 60s interrupt
	PCF85063A	I <sup>2</sup> C FM / Tiny RTC with Alarm and 30s, 60s interrupt
	PCF8523	I <sup>2</sup> C FM+ Ultra low-power RTC with loss of main power detection and automatic battery back-up
	PCF8563	I <sup>2</sup> C Fm Ultra low-power clock/calendar
Normal	+ PCA8565	I <sup>2</sup> C Fm High temperature clock/calendar -40°C...+125°C
	PCF8583	I <sup>2</sup> C Sm Clock/calendar resolution: 0.01 s, with 256x8 SRAM
Temp-compensated	PCF2127(A)	I <sup>2</sup> C Fm High-accuracy, low-voltage RTC with 512x8 RAM
	+ PCA/PCF2129(A)	I <sup>2</sup> C Fm High-accuracy RTC


Muxes and switches		
2-channel	PCA9540B	2-channel I <sup>2</sup> C Fm mux
	PCA9542A	2-channel I <sup>2</sup> C Fm mux with INT
	PCA9543A/B	2-channel I <sup>2</sup> C Fm switch with INT and RST (B and C Alternate address)
2-to-1 demux	PCA9541A/01	2 to 1 I <sup>2</sup> C Fm demux with INT and RST (channel 0 default)
	PCA9541A/03	2 to 1 I <sup>2</sup> C Fm demux with INT and RST (no channel default)
4-channel	PCA9544A	4-channel I <sup>2</sup> C Fm mux with INT
	PCA9545A/B/C	4-channel I <sup>2</sup> C Fm switch with INT and RST (B and C Alternate address)
	PCA9546A	4-channel I <sup>2</sup> C Fm switch with RST
	PCA9646	4-channel I <sup>2</sup> C Fm+ No Offset buffer/switch with RST
8-channel	PCA9547	8-channel I <sup>2</sup> C Fm mux with RST (channel 0 default)
	PCA9548A	8-channel I <sup>2</sup> C Fm switch with RST

Bus buffers		
Incremental Offset	PCA9510A	I <sup>2</sup> C Fm Incremental Offset hot-swap bus buffer (no RTA)
	PCA9511A	I <sup>2</sup> C Fm Incremental Offset hot swap-bus buffer
	PCA9512A	I <sup>2</sup> C Fm Incremental Offset VLT hot swap bus buffer
	PCA9513A	I <sup>2</sup> C Fm Incremental Offset hot-swap bus buffer (92 µA CS)
	PCA9514A	I <sup>2</sup> C Fm Incremental Offset hot-swap bus buffer (0.8 V offset)
Amplifier	P82B715	I <sup>2</sup> C Fm HV bus extender
No Offset	PCA9525	I <sup>2</sup> C Fm (1 MHz) No Offset bus repeater
	PCA9605	I <sup>2</sup> C Fm+ No Offset bus repeater
	PCA9646	4-channel I <sup>2</sup> C Fm+ No Offset buffer / switch with RST
Static Offset (1 side)	P82B96	I <sup>2</sup> C Fm HV bus buffer
	PCA9507	I <sup>2</sup> C Fm VLT DDC buffer with accelerator
	PCA9508	I <sup>2</sup> C Fm VLT hot-swap bus repeater
	PCA9509	I <sup>2</sup> C Fm 1.0V LV VLT bus buffer with current source
	PCA9509A	I <sup>2</sup> C Fm 0.8V LV VLT bus buffer with current source
	PCA9509P	I <sup>2</sup> C Fm 0.8V LV VLT bus buffer
	PCA9517A	I <sup>2</sup> C Fm 0.9V LV VLT bus repeater
	PCA9519	4-channel version of PCA9509
	PCA9527	I <sup>2</sup> C Fm DDC VLT buffer with accelerator and CEC
	PCA9600	I <sup>2</sup> C Fm+ HV bus buffer
	PCA9601	I <sup>2</sup> C Fm+ HV bus buffer with stronger 15 mA local side drive to support multiple Fm+ slaves
	PCA9617A	I <sup>2</sup> C Fm+ 0.8 V LV VLT bus repeater
Static Offset (All sides)	PCA9515A	I <sup>2</sup> C Fm bus repeater
	PCA9516A	I <sup>2</sup> C Fm 5-channel hub
	PCA9518A	I <sup>2</sup> C Fm expandable 5-channel hub
Voltage translator (doesn't isolate capacitance)	GTL2000	22-bit I <sup>2</sup> C Fm+ VLT
	GTL2002	2-bit I <sup>2</sup> C Fm+ VLT
	GTL2003	8-bit I <sup>2</sup> C Fm+ VLT
	GTL2010	10-bit I <sup>2</sup> C Fm+ VLT
	PCA9306	Dual I <sup>2</sup> C/SMBus Fm+ VLT
	NVT2001	1-bit I <sup>2</sup> C Fm+ VLT
	NVT2002	2-bit I <sup>2</sup> C Fm+ VLT for I <sup>2</sup> C/SMBus applications
	NVT2003	3-bit I <sup>2</sup> C Fm+ VLT for two power supply applications
	NVT2004	4-bit I <sup>2</sup> C Fm+ VLT for SPI applications
	NVT2006	6-bit I <sup>2</sup> C Fm+ VLT
	NVT2008	8-bit I <sup>2</sup> C Fm+ VLT
	NVT2010	10-bit I <sup>2</sup> C Fm+ VLT

## Decode table


	Bus Speed		Features
Sm	100 kHz Standard-mode I <sup>2</sup> C-bus	LV	Supply voltage <2.3 V
Fm	400 kHz Fast-mode I <sup>2</sup> C-bus	TP	Totem-pole (push-pull)
Fm+	1 MHz Fast-mode Plus I <sup>2</sup> C-bus	QB	Quasi-bidirectional
HSm	3.4 MHz High Speed-mode I <sup>2</sup> C-bus	OD	Open drain
UFm	5 MHz Ultra Fast-mode I <sup>2</sup> C-bus	CS	Current source
		INT	Interrupt
+	AEC-Q100 compliance	RST	Reset
GPIO	General Purpose I/O Expander	OE	Output enable
TS	Thermal Sensor	Latch	Input latch
RTC	Real Time Clock	PU	Pull-up resistors
LCD	Liquid Crystal Display	PU/PD	Pull-up/pull-down resistors
DAC	Digital Analog Converter	HV	Outputs >10 V
ADC	Analog Digital Converter	VLT	Voltage Level Translator – 2 Supplies
		COG	Chip on Glass




LCD drivers		
Segment driver	PCA/PCF85162	I <sup>2</sup> C Fm 128-segment LCD driver
	PCA/PCF85176	I <sup>2</sup> C Fm 160-segment LCD driver
	PCA/PCF85134	I <sup>2</sup> C Fm 240-segment LCD driver
	PCA/PCF8536	I <sup>2</sup> C Fm 320-segment LCD driver with LED back-light control, programmable frame frequency
	PCA/PCF8537	I <sup>2</sup> C Fm 352-segment LCD driver, programmable frame frequency, charge pump, VLCD temperature compensation
	PCA9620	I <sup>2</sup> C Fm 480-segment LCD driver, programmable frame frequency, charge pump, VLCD temperature compensation
	PCA/PCF8576D	I <sup>2</sup> C Fm 160-segment COG LCD driver
	PCA8576F <sup>2)</sup>	I <sup>2</sup> C Fm 160-segment COG LCD driver
	PCA/PCF85133	I <sup>2</sup> C Fm 320-segment COG LCD driver, selectable frame frequency
	PCA85233 <sup>2)</sup>	I <sup>2</sup> C Fm 320-segment COG LCD driver, selectable frame frequency
	PCA/PCF85132	I <sup>2</sup> C Fm 640-segment COG LCD driver, programmable frame frequency
	PCA85232	I <sup>2</sup> C Fm 640-segment COG LCD driver, programmable frame frequency
	PCA/PCF8538 <sup>1)</sup>	I <sup>2</sup> C Fm 918-segment COG LCD driver, programmable frame frequency, charge pump, VLCD temperature compensation
Character driver	PCF2113	I <sup>2</sup> C Fm 1/2-line, 12-character, 120-icon LCD driver, charge pump, VLCD temperature compensation
	PCF2116	I <sup>2</sup> C Sm 1/2-line, 24 characters per line, or 2/4 line, 12 characters per line, charge pump
	PCF2119	I <sup>2</sup> C Fm 1/2-line, 16-character, 160-icon LCD driver, charge pump, VLCD temperature compensation
	PCA/PCF2117 <sup>2)</sup>	I <sup>2</sup> C Fm 1/2-line, 20-character, 200-icon LCD driver, programmable frame frequency, charge pump, VLCD temperature compensation
Graphic driver	PCA/PCF8539 <sup>2)</sup>	I <sup>2</sup> C Fm 18 x 100-pixel LCD driver, programmable frame frequency, charge pump, VLCD temperature compensation
	PCF8531	I <sup>2</sup> C Fm 34 x 128-pixel LCD driver, charge pump, VLCD temperature compensation
	PCF8811	I <sup>2</sup> C Fm 80 x 128-pixel LCD driver, programmable frame frequency, charge pump, VLCD temperature compensation

<sup>1)</sup> release H1 2013 - <sup>2)</sup> release H2 2013

A/D-D/A converters		
8-bit ADC	PCF8591	I <sup>2</sup> C Sm 4-channel ADC and 1-channel DAC

EEPROMs		
2-kbit	PCA9500	I <sup>2</sup> C Fm 256 x 8-bit EEPROM
	PCA9501	I <sup>2</sup> C Fm 256 x 8-bit EEPROM
	PCF85103C	I <sup>2</sup> C Sm 256 x 8-bit EEPROM (No programming time control output with ALT address)
	PCF8582C	I <sup>2</sup> C Sm 256 x 8-bit EEPROM
	PCF8570	I <sup>2</sup> C Sm 256 x 8-bit RAM
4-kbit	PCF8594C	I <sup>2</sup> C Sm 1024 x 8-bit EEPROM
	SL3S4001	I <sup>2</sup> C Fm 3.6K bit EEPROM with dual Gen2 RFID interface
8-kbit	PCA24S08A	I <sup>2</sup> C Fm 1024 x 8-bit EEPROM with access protection
DIP switch	PCA8550	I <sup>2</sup> C Fm 4-bit 1-of-2 mux & 5-bit EEPROM
	PCA9558	I <sup>2</sup> C Fm 5-bit MP/1-bit latch & 6-bit EEPROM with 2K EEPROM and 8-bit GPIO
	PCA9559	I <sup>2</sup> C Fm 5-bit mux/1-bit latch & 6-bit EEPROM
	PCA9560	I <sup>2</sup> C Fm 2 x 5-bit mux/1-bit latch & 6-bit EEPROM
	PCA9561	I <sup>2</sup> C Fm 4 x 6-bit mux & 6-bit EEPROM

Bridge and bus controllers		
Bridge	SC16IS740	I <sup>2</sup> C Fm/SPI-to-UART bridge with IrDA
	SC16IS741	I <sup>2</sup> C Fm/SPI-to-UART bridge with IrDA
	SC16IS750	I <sup>2</sup> C Fm/SPI-to-UART bridge with IrDA and GPIO
	SC16IS752	I <sup>2</sup> C Fm/SPI-to-DUART bridge with IrDA and GPIO
	SC16IS760	I <sup>2</sup> C Fm/SPI-to-UART bridge with IrDA and GPIO
	SC16IS762	I <sup>2</sup> C Fm/SPI-to-DUART bridge with IrDA and GPIO
	SC16IS850L	1.8 V I <sup>2</sup> C Fm/SPI-to-UART bridge with IrDA
	SC18IM700	UART-to-I <sup>2</sup> C Fm master bridge with GPIO
	SC18IS600	SPI-to-I <sup>2</sup> C Fm master bridge, 4 M with GPIO
	SC18IS602	I <sup>2</sup> C Fm slave-to-SPI master bridge
Controller	PCF8584	I <sup>2</sup> C Sm bus controller with bus snoop
	PCA9564	I <sup>2</sup> C Fm bus controller
	PCA9661	1-channel I <sup>2</sup> C Fm+ bus controller with 4 K-byte buffer
	PCA9663	3-channel I <sup>2</sup> C Fm+ bus controller with 4 K-byte buffer per channel
	PCA9665	I <sup>2</sup> C Fm+ bus controller with 68-byte buffer
	PCA9665A	I <sup>2</sup> C Fm+ bus controller with 68-byte buffer and restart condition fix
	PCU9661	1-channel U <sup>2</sup> C Fm bus controller with 4 K-byte buffer
	PCU9669	1-channel Fm+ and 2-channel U <sup>2</sup> C Fm bus controller with 4 K-byte buffer per channel

Demo boards		
e-Tools	OM6270	SPI/I <sup>2</sup> C-to-UART bridge demo (SC16IS750)
	OM6271	SPI-to-I <sup>2</sup> C-master bridge demo (SC18IS600)
	OM6272	UART-to-I <sup>2</sup> C-master bridge demo (SC18IM700)
	OM6273	SPI/I <sup>2</sup> C-to-DUART/IrDA/GPIO demo (SC16IS752)
	OM6274	I <sup>2</sup> C-to-SPI-master bridge demo (SC18IS602)
	OM6275	I <sup>2</sup> C 2005-1 evaluation board with PC controller
	OM6276	PCA9633 demo board
	OM6277	PCA9564 evaluation board
	OM6278	I <sup>2</sup> C 2002-1A evaluation board with PC controller
	OM6281	PCA9698 daughter card for I <sup>2</sup> C 2005-1
	OM6282	PCA9633 daughter card for I <sup>2</sup> C 2005-1
	OM6285	I <sup>2</sup> C 2002-1A evaluation board without PC controller board
	OM6290	LCD driver evaluation board: PCF8576D, PCF2119, PCF8531, PCA9633
	OM6292	PCA21125, PCF8562 demoboard
	OM6293	PCA9600 daughter card for I <sup>2</sup> C 2005-1
	OM6297	PCF2123, PCF8562 demoboard
	OM11051	PCF2127A demo board
	OM11056	Two x PCF8885 evaluation board
	OM11057	PCF8885/86 capacitive sensor and PCF8536 LCD/LED driver
	OM11057A	OM11057 add-on board with high sensitivity slider
	OM11059A	PCF85063A evaluation board
	OM13260	I <sup>2</sup> C Fm+ development board (RoHS)
	OM13401	PCA9617A bus buffer board (RoHS)
	OM13303	GPIO target board (RoHS)
	OM13399	Bridge board (RoHS)
	OM13285	PCA9629 demo board
	OM13320	I <sup>2</sup> C Fm+ development kit (RoHS)

Our I<sup>2</sup>C-bus website ([www.nxp.com/interface](http://www.nxp.com/interface)) is a valuable resource for device information and training programs. It gives you direct access to a comprehensive handbook, application notes, information about evaluation kits and training materials, links to application and design support, and more.

The I<sup>2</sup>C Fm+ development board and daughter cards make it easy to program new peripherals and are a quick way to learn about the I<sup>2</sup>C-bus protocol.

OM13320 Fm+ Demonstration Kit which includes the OM13260 Fm+ Development Board with two OM13303 GPIO Target Boards and one each of the the OM13399 Bridge and OM13401 PCA9617A bus buffer daughter boards

OM13285 PCA9629 stepper motor demonstration board

OM11057 PCF8885/86 touch switch with PCF8536 LCD/LED driver

OM6275  
I<sup>2</sup>C 2005-1 evaluation board



OM6278  
I<sup>2</sup>C 2002-1A evaluation board



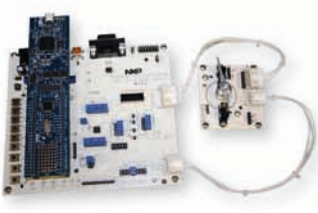
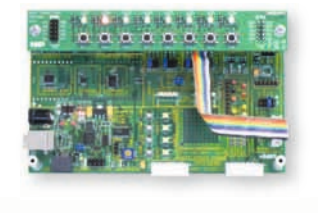
OM6277  
PCA9564 evaluation board



OM6293  
PCA9600 daughter card for I<sup>2</sup>C 2005-1



OM6276  
PCA9633 demo board





[www.nxp.com/interface](http://www.nxp.com/interface)

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