Smart, simple solutions for the 12 most common design concerns

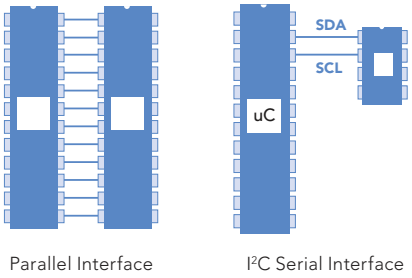
NXP I²C-bus solutions 2014

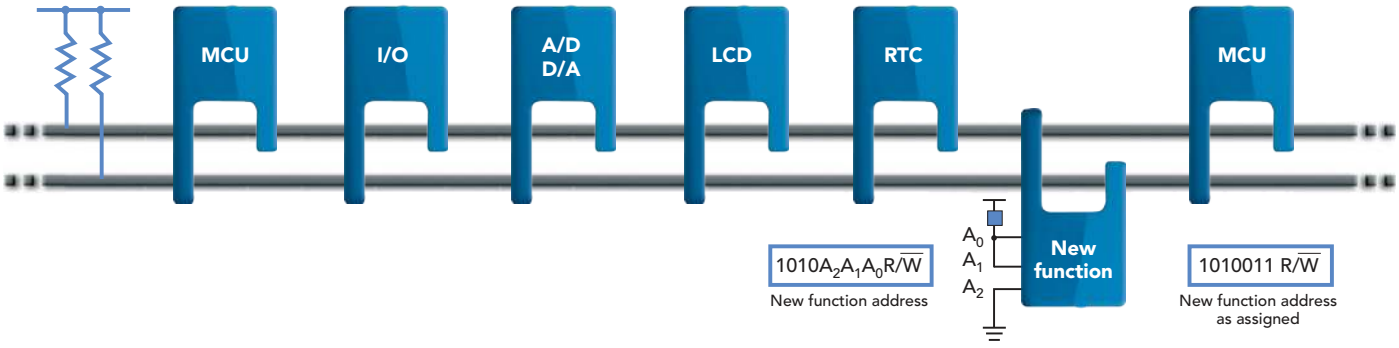
I²C-bus: The serial revolution

By replacing complex parallel interfaces with a straightforward yet powerful serial structure, the I²C-bus revolutionized chip-to-chip communications.

Invented by NXP (Philips) more than 30 years ago, the I²C-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 I²C-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.





I²C-bus devices are available in a wide range of functions. Each slave device has its own I²C-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

S	slave address	W	A	data	A	data	A	P

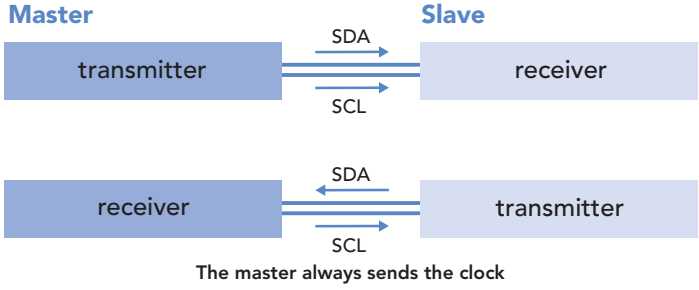
< n data bytes >

Read data

S	slave address	R	A	data	A	data	Ā	P

< n data bytes > last data byte

S = Start condition R/W = read/write
A = Acknowledge Ā = Not acknowledge P = Stop condition



NXP's I²C peripherals portfolio is grouped into twelve families, one for each of the most common, everyday design concerns.

General Purpose Input Output (GPIO) expanders
Add different types of inputs and outputs

Sensors and voltage management
Digital temperature information

Black-and-white LCD display drivers
Monochrome, character, shapes, dots

Clocks / RTCs
Digital time, watchdog and/or calendar

Multiplexers and switches
Add advanced I²C networking to allow more devices, backup, hot-swap

Tiny serial ADCs / DACs
Analog control and audio

Bus buffers and voltage translators
Extenders, hubs, and repeaters to support extra devices, longer distances, bus-voltage translation, or hazardous conditions

I²C-controlled DIP switches
EEROMs / RAM combined with general-purpose outputs

Intelligent Stepper Motor Controllers
Easy and versatile control

Capacitive Sensor
Switch action without contact

Bridge ICs, bus controllers
Add extra, fully featured I²C masters

Blinkers, dimmers, drivers
For complete LED control, including LCD backlighting

More information
www.nxp.com/interface

I²C-bus product summary

GPIO Expander		
4-bit	PCA9536	4-bit I²C Fm TP GPIO with PU
	PCA9537	4-bit I²C Fm TP GPIO with INT and RST
	PCA9570	4-bit 1 MHz LV TP GPO
8-bit	PCA8574	8-bit I²C Sm QB GPIO with INT and PU
	PCF8574	8-bit I²C Fm QB GPIO with INT and PU
	PCA8574A	8-bit I²C Fm QB GPIO with INT and PU (Alternate address)
	PCF8574A	8-bit I²C Sm QB GPIO with INT and PU (Alternate address)
	PCA9500	8-bit I²C Fm QB GPIO with PU and 2-K EEPROM
	PCA9501	8-bit I²C Fm QB GPIO with INT, PU and 2-K EEPROM
	PCA9502	8-bit I²C Fm/SPI TP GPIO with INT and RST
	PCA9534	8-bit I²C Fm TP GPIO with INT
	+ PCA9538	8-bit I²C Fm TP GPIO with INT and RST
	PCA9538A	8-bit I²C Fm LV TP GPIO with INT and RST
	PCAL9538A	8-bit I²C Fm LV TP/OD GPIO with INT, RST, latch and PU/PD
	PCA6408A	8-bit I²C Fm LV VLT TP GPIO with INT and RST
	PCAL6408A	8-bit I²C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD
	PCA9554	8-bit I²C Fm TP GPIO with INT and PU
	PCA9554A	8-bit I²C Fm TP GPIO with INT and PU (alternate address for PCA9554)
	PCA9554B	8-bit I²C Fm LV TP GPIO with INT and PU
	PCAL9554B	8-bit I²C Fm LV TP/OD GPIO with INT, latch and PU/PD (PU default)
	PCA9554C	8-bit I²C Fm LV TP GPIO with INT and PU (alternate address for PCA9554B)
	PCAL9554C	8-bit I²C Fm LV TP/OD GPIO with INT, latch and PU/PD (PU default) (alternate address for PCAL9554B)
	PCA9557	8-bit I²C Fm TP GPIO with RST
	PCA9571	8-bit 1 MHz LV TP GPO
	PCA9574	8-bit I²C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD
	PCA9621	8-bit I²C Fm+ 65 mA OD GPO with RST
	PCA9670	8-bit I²C Fm+ QB GPIO with RST and PU
	PCA9672	8-bit I²C Fm+ QB GPIO with INT, RST and PU
	PCA9674	8-bit I²C Fm+ QB GPIO with INT and PU
	PCA9674A	8-bit I²C Fm+ QB GPIO with INT and PU (Alternate address)
16-bit	PCA8575	16-bit I²C Fm QB GPIO with INT and PU
	PCF8575	16-bit I²C Fm QB GPIO with INT and PU
	PCF8575C	16-bit I²C Fm OD GPIO with INT
	PCA9535	16-bit I²C Fm TP GPIO with INT
	PCA9535C	16-bit I²C Fm OD GPIO with INT
	PCA9535A	16-bit I²C Fm LV TP GPIO with INT
	PCAL9535A	16-bit I²C Fm LV TP/OD GPIO with INT, latch and PU/PD
	+ PCA9539	16-bit I²C Fm TP GPIO with INT and RST
	PCA9539R	16-bit I²C Fm TP GPIO with INT and RST (state machine only)
	PCA9539A	16-bit I²C Fm LV TP GPIO with INT and RST
	PCAL9539A	16-bit I²C Fm LV TP/OD GPIO with INT, RST, latch and PU/PD
	PCA6416A	16-bit I²C Fm LV VLT TP GPIO with INT and RST
	PCAL6416A	16-bit I²C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD
	PCA9555	16-bit I²C Fm TP GPIO with INT and PU
	PCA9555A	16-bit I²C Fm LV TP GPIO with INT and PU
	PCAL9555A	16-bit I²C Fm LV TP/OD GPIO with INT, latch and PU/PD (PU default)
	PCA9575	16-bit I²C Fm LV VLT TP/OD GPIO with INT, RST, latch and PU/PD
	PCA9671	16-bit I²C Fm+ QB GPIO with RST and PU
	PCA9673	16-bit I²C Fm+ QB GPIO with INT, RST and PU
	PCA9675	16-bit I²C Fm+ QB GPIO with INT and PU
40-bit	PCA9505	40-bit I²C Fm TP GPIO with INT, RST, OE and PU
	PCA9506	40-bit I²C Fm TP GPIO with INT, RST and OE
	PCA9698	40-bit I²C Fm+ TP/OD GPIO with INT, RST, OE and PU

Stepper Motor Controller		
1 motor controller	PCA9629	I²C Fm+ Stepper Motor Controller with TP GPIO with INT and RST
	PCA9629A	Improved I²C Fm+ Stepper Motor Controller with TP GPIO with INT and RST

Capacitive Sensor		
8-channel touch switch	+ PCA/PCF8885	I²C Fm+ Touch / Proximity Sensor for up to 28 keys

Temp sensors		
Local	LM75B	I²C Fm TS local with ± 2 °C accuracy and SMBus time-out
	SE95	I²C Fm TS local with ± 1 °C accuracy (NRND)
	SE98A	I²C FmDDR TS, no SPD, +/- 1°C accuracy and SMBus time-out
	PCT2075	I²C Fm+ TS with +/- 1oC accuracy and SMBus time-out
	PCT2202	I²C HSm TS, 1.8 V, +/- 1°C accuracy and SMBus time-out
Local and EEP-ROM	SE97B	I²C Fm DDR TS local with ± 1 °C accuracy, 2K SPD and SMBus time-out
Local and remote	NE1617A	I²C Fm TS local with ± 2 °C accuracy and remote with ± 3 °C accuracy
	SA56004	I²C Fm TS local with ± 2 °C accuracy and remote with ± 1 °C accuracy

LED controllers		
Dimmer (2 PWM, 25 mA / 5 V)	PCA9530	2-channel I²C Fm OD LED dimmer with RST
	PCA9531	8-channel I²C Fm OD LED dimmer with RST
	PCA9532	16-channel I²C Fm OD LED dimmer with RST
	PCA9533	4-channel I²C Fm OD LED dimmer
Blinker (2 PWM, 25 mA / 5 V)	PCA9550	2-channel I²C Fm OD LED blinker with RST
	PCA9551	8-channel I²C Fm OD LED blinker with RST
	PCA9552	16-channel I²C Fm OD LED blinker with RST
	PCA9553	4-channel I²C Fm OD LED blinker
Controller (PWM / Ch, 25 mA / 5 V)	PCA9632	4-channel I²C Fm+ low-power TP LED controller
	PCA9633	4-channel I²C Fm+ TP LED controller with OE
	PCA9634	8-channel I²C Fm+ TP LED controller with OE
	+ PCA9635	16-channel I²C Fm+ TP LED controller with OE
	+ PCA9685	16-channel I²C Fm+ TP LED controller with 12-bit PWMs and OE
Controller (PWM/Ch, 57 mA / 20 V)	+ PCA9955A	16-channel I²C Fm+ 20 V CS LED controller
	PCA9956A	24-channel I²C Fm+ 20 V CS LED controller
	PCU9955A	16-channel I²C UFm 20 V CS LED controller
	PCU9956A	24-channel I²C UFm 20 V CS LED controller
Controller (PWM / Ch, 57 mA / 40 V)	+ PCA9952	16-channel I²C Fm+ HV CS LED controller with OE
	+ PCA9955	16-channel I²C Fm+ HV CS LED controller
Controller (PWM / Ch, 100 mA / 20 V)	PCA9655A	16-channel I²C Fm+ 20 V OD LED Controller
	PCU9655A	16-channel I²C UFm 20 V OD LED Controller
Controller (PWM / Ch, 100 mA / 40 V)	PCA9624	8-channel I²C Fm+ HV OD LED controller with OE
	PCA9622	16-channel I²C Fm+ HV OD LED controller with OE
	PCA9626	24-channel I²C Fm+ HV OD LED controller with OE
	PCU9656	24-channel I²C UFm HV OD LED controller with OE
LED flash	SSL3252	I²C Fm 500 mA source dual LED flash with torch mode

Real-time clocks		
Low-power	PCA8802	I²C Fm RTC for One Time Password generation and smart cards
	PCF85063	I²C Fm / Tiny RTC with 30s, 60s interrupt
	PCF85063A	I²C Fm / Tiny RTC with Alarm and 30s, 60s interrupt
	PCF85263A	I²C Fm / Tiny RTC with Alarms, time stamp and battery back-up switch
	PCF85363A	I²C Fm / Tiny RTC with Alarms, time stamp and battery back-up switch + 64Byte RAM
	PCF8523	I²C Fm+ Ultra low-power RTC with loss of main power detection and automatic battery back-up
	PCF8563	I²C Fm low-power clock/calendar
Automotive High temperature	+PCA85063A	I²C Fm / Tiny RTC with Alarm and 30s, 60s interrupt -40°C…+105°C
	+PCA8565	I²C Fm High temperature clock/calendar -40°C…+125°C
	+PCA2129T	I²C Fm High-accuracy, low voltage RTC with time stamp
Temperature compensated high accuracy	PCF2127(A)	I²C Fm High-accuracy, low-voltage RTC with time stamp and 512x8 RAM
	PCF2129(A)	I²C Fm High-accuracy, low voltage RTC with time stamp

Muxes and switches		
2-channel	PCA9540B	2-channel I²C Fm mux
	PCA9542A	2-channel I²C Fm mux with INT
	PCA9543A/B	2-channel I²C Fm switch with INT and RST
2-to-1 demux	PCA9541A/01	2 to 1 I²C Fm demux with INT and RST (channel 0 default)
	PCA9541A/03	2 to 1 I²C Fm demux with INT and RST (no channel default)
4-channel	PCA9544A	4-channel I²C Fm mux with INT
	PCA9545A/B/C	4-channel I²C Fm switch with INT and RST (B Alternate address)
	PCA9546A	4-channel I²C Fm switch with RST
	PCA9646	4-channel I²C Fm+ No Offset buffer/switch with RST
8-channel	PCA9547	8-channel I²C Fm mux with RST (channel 0 default)
	PCA9548A	8-channel I²C Fm switch with RST
Arbiter	PCA9641	2 masters to shared slave I²C Fm+ arbiter with INT and RST (no channels selected at default)

Bus buffers		
Incremental Offset	PCA9510A	I²C Fm Incremental Offset hot-swap bus buffer (no RTA)
	PCA9511A	I²C Fm Incremental Offset hot swap-bus buffer
	PCA9512A	I²C Fm Incremental Offset VLT hot swap bus buffer
	PCA9513A	I²C Fm Incremental Offset hot-swap bus buffer (92 µA CS)
	PCA9514A	I²C Fm Incremental Offset hot-swap bus buffer (0.8 V offset)
Differential Driver with Static Offset (1 side)	PCA9614	I²C Fm+ VLT differential (4 wire) bus buffer
	PCA9615	I²C Fm+ VLT differential (4 wire) hot-swap bus buffer
	PCA9616	I²C Fm+ 0.8V LV VLT differential (4 wire) hot-swap bus buffer with INT (2 wire)
Amplifier	P82B715	I²C Fm HV bus extender
No Offset	PCA9525	I²C Fm (1 MHz) No Offset bus repeater
	PCA9605	I²C Fm+ No Offset bus repeater
	PCA9646	4-channel I²C Fm+ No Offset buffer / switch with RST
Static Offset (1 side)	P82B96	I²C Fm HV bus buffer
	PCA9507	I²C Fm VLT DDC buffer with accelerator
	PCA9508	I²C Fm VLT hot-swap bus repeater
	PCA9509	I²C Fm 1.0V LV VLT bus buffer with current source
	PCA9509A	I²C Fm 0.8V LV VLT bus buffer with current source
	PCA9509P	I²C Fm 0.8V LV VLT bus buffer
	PCA9517A	I²C Fm 0.9V LV VLT bus repeater
	PCA9519	4-channel version of PCA9509
	PCA9527	I²C Fm DDC VLT buffer with accelerator and CEC
	PCA9600	I²C Fm+ HV bus buffer
	PCA9601	I²C Fm+ HV bus buffer with stronger 15 mA local side drive to support multiple Fm+ slaves
	PCA9617A	I²C Fm+ 0.8 V LV VLT bus repeater
Static Offset (All sides)	PCA9515A	I²C Fm bus repeater
	PCA9516A	I²C Fm 5-channel hub
	PCA9518A	I²C Fm expandable 5-channel hub
Voltage translator (doesn't isolate capacitance)	GTL2000	22-bit I²C Fm+ VLT
	GTL2002	2-bit I²C Fm+ VLT
	GTL2003	8-bit I²C Fm+ VLT
	GTL2010	10-bit I²C Fm+ VLT
	PCA9306	Dual I²C/SMBus Fm+ VLT
	NVT2001	1-bit I²C Fm+ VLT
	NVT2002	2-bit I²C Fm+ VLT for I²C/SMBus applications
	NVT2003	3-bit I²C Fm+ VLT for two power supply applications
	NVT2004	4-bit I²C Fm+ VLT for SPI applications
	NVT2006	6-bit I²C Fm+ VLT
	NVT2008	8-bit I²C Fm+ VLT
	NVT2010	10-bit I²C Fm+ VLT

Decode table

	Bus Speed		Features
Sm	100 kHz Standard-mode I²C-bus	LV	Supply voltage <2.3 V
Fm	400 kHz Fast-mode I²C-bus	TP	Totem-pole (push-pull)
Fm+	1 MHz Fast-mode Plus I²C-bus	QB	Quasi-bidirectional
HSm	3.4 MHz High Speed-mode I²C-bus	OD	Open drain
UFm	5 MHz Ultra Fast-mode I²C-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	PCA8561 [1]	I²C Fm 72-segment low-power LCD driver in HVQFN32 package
	PCA/PCF85162	I²C Fm 128-segment LCD driver in TSSOP48 package
	PCA85262	I²C Fm 128-segment LCD driver with higher frame frequency in TSSOP48 package
	PCF8551 [1]	I²C Fm 144-segment low-power LCD driver with programmable frame frequency in TSSOP48 package
	PCA/PCF85176	I²C Fm 160-segment LCD driver in TSSOP56 or TQFP64 package
	PCA85276	I²C Fm 160-segment LCD driver with higher frame frequency in TSSOP56 package
	PCF8553 [1]	I²C Fm 160-segment low-power LCD driver with programmable frame frequency in TSSOP56 package
	PCA8546	I²C Fm 176-segment LCD driver with programmable frame frequency in TSSOP56 package
	PCA8547	I²C Fm 176-segment LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation in TQFP64 package
	PCA/PCF85134	I²C Fm 240-segment LCD driver in LQFP80 package
	PCA8543	I²C Fm 240-segment LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation in LQFP80 package
	PCF8545	I²C Fm 320-segment LCD driver with programmable frame frequency in TSSOP56 package
	PCA/PCF8536	I²C Fm 320-segment LCD driver with programmable frame frequency and LED backlight PWM control in TSSOP56 package
	PCA/PCF8537	I²C Fm 352-segment LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation in TQFP64 package
	PCA9620	I²C Fm 480-segment LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation in LQFP80 package
	PCA/ PCF8576D	I²C Fm 160-segment COG LCD driver
	PCA8576F	I²C Fm 160-segment COG LCD driver with higher frame frequency and higher VLCD
	PCA/PCF85133	I²C Fm 320-segment COG LCD driver with selectable frame frequency
	PCA85233	I²C Fm 320-segment COG LCD driver with higher selectable frame frequency
	PCA8530 [1]	I²C Fm 408-segment COG LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation
	PCA/PCF85132	I²C Fm 640-segment COG LCD driver with programmable frame frequency
	PCA85232	I²C Fm 640-segment COG LCD driver with higher programmable frame frequency
	PCA/PCF8538	I²C Fm 918-segment COG LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation
Character drivers	PCF2113	I²C Fm 2 x 12 characters + 120-icon COG LCD driver with charge pump, VLCD temperature compensation
	PCF2116	I²C 2 x 24 characters COG LCD driver with charge pump
	PCF2119	I²C Fm 2 x 16 characters + 160-icon COG LCD driver with charge pump, VLCD temperature compensation
	PCF21219	I²C Fm 2 x 16 characters + 160-icon COG LCD driver with higher frame frequency, charge pump, VLCD temperature compensation
	PCA2117	I²C Fm 2 x 20 characters + 200-icon COG LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation
Graphic driver	PCA8539	I²C Fm 18 x 100-pixel COG LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation
	PCF8531	I²C Fm 34 x 128-pixel COG LCD driver with charge pump, VLCD temperature compensation
	PCF8811	I²C Fm 80 x 100-pixel COG LCD driver with programmable frame frequency, charge pump, VLCD temperature compensation

[1] release H2 2014

A/D-D/A converters		
8-bit ADC	PCF8591	I²C Fm 4-channel ADC and 1-channel DAC

EEPROMs		
2-kbit	PCA9500	I²C Fm 256 x 8-bit EEPROM
	PCA9501	I²C Fm 256 x 8-bit EEPROM
	PCF85103C	I²C Sm 256 x 8-bit EEPROM (No programming time control output with ALT address)
	PCF8582C	I²C Sm 256 x 8-bit EEPROM
	PCF8570	I²C Sm 256 x 8-bit RAM
4-kbit	PCF8594C	I²C Sm 1024 x 8-bit EEPROM
	SL3S4001	I²C Fm 3.6K bit EEPROM with dual Gen2 RFID interface
8-kbit	PCA24S08A	I²C Fm 1024 x 8-bit EEPROM with access protection
	NT3H1101FHK	I²C Fm 888 bytes EEPROM with dual interface NFC tag IC with power harvesting and field detect
16-kbit	NT3H1201FHK	I²C Fm 1904 bytes EEPROM with dual interface NFC tag IC with power harvesting and field detect
DIP switch	PCA8550	I²C Fm 4-bit 1-of-2 mux & 5-bit EEPROM
	PCA9558	I²C Fm 5-bit MP/1-bit latch & 6-bit EEPROM with 2K EEPROM and 8-bit GPIO
	PCA9559	I²C Fm 5-bit mux/1-bit latch & 6-bit EEPROM
	PCA9560	I²C Fm 2 x 5-bit mux/1-bit latch & 6-bit EEPROM
	PCA9561	I²C Fm 4 x 6-bit mux & 6-bit EEPROM

Bridge and bus controllers		
Bridge	SC16IS740	I²C Fm/SPI-to-UART bridge with IrDA
	SC16IS741	I²C Fm/SPI-to-UART bridge with IrDA
	SC16IS750	I²C Fm/SPI-to-UART bridge with IrDA and GPIO
	SC16IS752	I²C Fm/SPI-to-DUART bridge with IrDA and GPIO
	SC16IS760	I²C Fm/SPI-to-UART bridge with IrDA and GPIO
	SC16IS762	I²C Fm/SPI-to-DUART bridge with IrDA and GPIO
	SC16IS850L	1.8 V I²C Fm/SPI-to-UART bridge with IrDA
	SC18IM700	UART-to-I²C Fm master bridge with GPIO
	SC18IS600	SPI-to-I²C Fm master bridge, 4 M with GPIO
	SC18IS602	I²C Fm slave-to-SPI master bridge
Controller	PCF8584	I²C Sm bus controller with bus snoop
	PCA9564	I²C Fm bus controller
	PCA9661	1-channel I²C Fm+ bus controller with 4 K-byte buffer
	PCA9663	3-channel I²C Fm+ bus controller with 4 K-byte buffer per channel
	PCA9665	I²C Fm+ bus controller with 68-byte buffer
	PCA9665A	I²C Fm+ bus controller with 68-byte buffer and restart condition fix
	PCU9661	1-channel UFm bus controller with 4 K-byte buffer
	PCU9669	1-channel Fm+ and 2-channel UFm bus controller with 4 K-byte buffer per channel

Demo boards		
Bridges	OM6270	SPI/I²C to UART Bridge Demoboard (SC16IS750 / SC16IS760)
	OM6271	SPI to I²C Master Bridge Demoboard (SC18IS600)
	OM6272	UART to I²C Master Bridge Demoboard (SC18IM700)
	OM6273	SPI/I²C to Dual UART/IRDA/GPIO Demoboard (SC16IS752/SC16IS762)
	OM6274	I²C to SPI Master Bridge Demoboard (SC18IS602)
Fm+ Universal	OM13257	Universal Temp Sensor Daughter card for Fm+ Demo board
	OM13303	GPIO Target Board for Fm+ Demo board with LED indicators and switches
	OM13320	Fm+ Demonstration Kit, including GPIO Target Board, Buffer Board and Bridge Board
	OM13488	Fm+ Demonstration Kit Universal 8-bit GPIO daughter card
	OM13489	Fm+ Demonstration Kit Universal 16-bit GPIO daughter card
	OM13491	Breakout Board Panel A VSSOP8,XQFN8,HWSON8,MSOP8
	OM13492	Breakout Board Panel B various 6, 8, &10-pin packages
	OM13493	Breakout Board Panel C DHVQFN 24, 20, 16, 14
	OM13494	Breakout Board Panel D HVQFN 14, 16, 20, 24
	OM13495	Breakout Board Panel E TSSOP 14, 16, 20, 24
	OM13496	Breakout Board Panel F-TSSOP28,XQFN16,QSOP16,XFBGA16
	OM13497	Breakout Board Panel G-HTSSOP28,VFBGA24,XFBGA24
I²C-2005 Board	OM6275	I²C 2005-1 Eval Board
	OM6281	PCA9698 Daughter Card for I²C 2005-1
	OM6282	PCA9633 Daughter Card for I²C 2005-1
	OM6293	PCA9600 Daughter Card for I²C 2005-1
I²C-2002 Board	OM6278	I²C 2002-1A Eval Board
	OM6285	I²C-2002-1A Eval Board w/o controller
LCD Driver	OM6290	LCD driver evaluation board: PCF8576D, PCF2119, PCF8531, PCA9633
	OM6292	PCA21125, PCF8562 demo board
	OM13500	PCA9620 demo board
	OM13500A	PCF8537 and PCA8537 demo board
	OM13501	PCF8538 and PCA8538 demo board
	OM13501A	PCF8538 and PCA8538 evaluation board
	OM13502 [1)]	PCA2117 demo board
	OM13503 [1)]	PCA8539 demo board
Touch and Capacitive Sensor	OM11056	2 x PCF8885 Evaluation board: 16 channel touch switch for design support
	OM11057	PCF8885/PCF8886 capacitive sensors and PCF8536 LCD/LED driver demoboard
	OM11057A	OM11057 add-on board with high sensitivity slider
RTC	OM11059A	PCF85063TP & PCF85063ATL evaluation board
	OM13510	PCF85263 evaluation board
	OM13511	PCF8523 evaluation board
	OM13513	PCF2127 & PCF2129AT evaluation board
	OM13514	PCF85363 evaluation board
	OM13515	PCF85063AT evaluation board
USB	OM13518	USB-I²C-bus dongle
Misc	OM13285	PCA9629 I²C stepper motor demoboard & kit
	OM13312	SA636DK Evaluation Demo Board
	OM13313	TDA5051A PLM Demo Board Kit
	OM13314	TDA5051A Master/Slave Lighting demo kit
	OM13480	NVT4555UK Demo Board, NVT4555UK SIM Card Level Translator with LDO
	OM13485	NVT4556 demo board SIM Card level translator with I²C-bus control and supply voltage LDO
	OM13534	SA605DK at 45MHz RF; 455kHz IF demo board
	OM13535	SA602AD + SA604AD at 45MHz RF; 455kHz IF demo board
	OM13533	SA636BS at 240MHz RF; 10.7MHz IF demo board
Voltage Level Translator	OM13315	NVT2001GM demoboard, single channel bi-directional voltage level translator
	OM13317	NVT2008PW demoboard, eight channel bi-directional voltage level translator
	OM13318	NVT2002DP demoboard, dual channel bi-directional voltage level translator
	OM13319	NVT2003DP demoboard, three channel bi-directional voltage level translator
	OM13323	NVT2006PW demoboard, six channel bi-directional voltage level translator
	OM13324	NVT2010PW demoboard, ten channel bi-directional voltage level translator
LED Driver	OM6276	PCA9633 Demo Board
	OM6277	PCA9564 Eval Board
	OM13269	PCA9632 LED 4 ch demoboard
	OM13321	PCA9956A LED Dimmer 24-channel Constant Current Demo Board I²C Fm+
	OM13327	PCA9634 LED 8 ch demoboard
	OM13329	PCA9952 demoboard, LED Dimmer 16-channel constant current demoboard I²C Fm+ (with output enable)
	OM13330	PCA9955 demoboard, LED Dimmer 16-channel constant current demoboard I²C Fm+
	OM13331	PCU9955 demoboard, LED Dimmer 16-channel constant current demoboard 5 MHz UFM
	OM13332	PCA9685 demoboard, 16-channel voltage source with 12 bit PWM demoboard I²C Fm+
	OM13333	PCA9635 demoboard, 16-channel voltage source with 8 bit PWM demoboard I²C Fm+
	OM13482	PCU9956A LED Dimmer 24-channel Constant Current Demo Board I²C 5 MHz UFM
	OM13483	PCA9955A 16-channel I²C Fm+ constant current LED driver demo board
	OM13484	PCU9955A 16-channel I²C UFm constant current LED driver demo board

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OM6275
I²C 2005-1 evaluation board

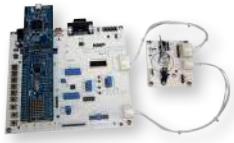
OM6278
I²C 2002-1A evaluation board

OM6277
PCA9564 evaluation board

OM6293
PCA9600 daughter card for
I²C 2005-1

OM6276
PCA9633 demo board

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

Our I²C-bus website (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 I²C Fm+ development board and daughter cards make it easy to program new peripherals and are a quick way to learn about the I²C-bus protocol.

www.nxp.com/interface

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