

# CYPRESS Clock Generators, Sensor, SOC & Transceiver

RoHS Compliant This product is RoHS compliant.



Cypress Analog ICs

## CLOCK GENERATORS

Cypress's broad portfolio of silicon-based clock generators and buffers offers the best in class performance in jitter, power, speed, integration, and package. The portfolio includes single- and multi-PLL programmable clock synthesizers, programmable skew, programmable XO, VCXO, EMI reduction clocks, zero delay, and fanout buffers.

### EMI Reduction

Cypress's proprietary spread spectrum clock technology helps reduce system EMI without needing mechanical solutions such as shielding and ferrite beads. Cypress's spread spectrum clock generators have configurable spread percentages as well as linear and Lexmark modulation profiles to optimize system performance.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cypress Part No.	Package	Operating Voltage		Output Frequency		Core Voltage	No. of PLL	No. of Outputs	Input Signal Type	Temperature Range (°C)	Price Each		
			Min.	Max.	Min.	Max.						1	25	50
727-CY25100SXCF	CY25100SXCF	SOIC-8	3.13	3.45	3	200	3.3	1	2	Xtal/Ref-in CMOS	0 to 70	3.15	2.54	2.45
727-CY25100SXIF	CY25100SXIF	SOIC-8	3.13	3.45	3	200	3.3	1	2	Xtal/Ref-in CMOS	-45 to +85	3.69	3.16	3.06
727-CY25560SXC	CY25560SXC	SOIC-8	2.97	3.6	25	100	3.3	1	1	Xtal/Ref-in CMOS	0 to 70	1.73	1.68	1.63
727-CY25560SXI	CY25560SXI	SOIC-8	2.97	3.6	25	100	3.3	1	1	Xtal/Ref-in CMOS	-45 to +85	2.34	2.04	1.97
727-CY25562SXC	CY25562SXC	SOIC-8	2.97	3.6	50	200	3.3	1	1	Xtal/Ref-in CMOS	0 to 70	1.42	1.42	1.38
727-CY25568SXC	CY25568SXC	SOIC-16	2.97	3.6	4	128	3.3	1	4	Xtal/Ref-in CMOS	0 to 70	2.10	1.89	1.78
727-CY25811SXC	CY25811SXC	SOIC-8	2.97	3.6	4	32	3.3	1	1	Xtal/Ref-in CMOS	0 to 70	1.37	1.11	1.07
727-CY25812SXC	CY25812SXC	SOIC-8	2.97	3.6	4	64	3.3	1	1	Xtal/Ref-in CMOS	0 to 70	1.78	1.44	1.39
727-CY25812ZXC	CY25812ZXC	TSSOP-8	2.97	3.6	4	64	3.3	1	1	Xtal/Ref-in CMOS	0 to 70	2.05	1.80	1.64
727-CY25814SXC	CY25814SXC	SOIC-8	2.97	3.6	4	128	3.3	1	1	Xtal/Ref-in CMOS	0 to 70	1.85	1.50	1.45
727-CY25814SXI	CY25814SXI	SOIC-8	2.97	3.6	4	128	3.3	1	1	Xtal/Ref-in CMOS	-45 to +85	2.75	2.21	2.13

### Programmable

Programmable timing solutions combine the convenience of field programming with the customary high performance of Cypress's timing products.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cypress Part No.	Package	Operating Voltage		Output Frequency		Core Voltage	No. of PLL	No. of Outputs	Input Signal Type	Temperature Range (°C)	Price Each		
			Min.	Max.	Min.	Max.						1	25	50
727-CY22050KFZXC	CY22050KFZXC	TSSOP-16	3.13	3.45	0.08	200	3.3	1	6	Xtal Inside	0 to 70	2.54	2.29	2.17
727-CY22150FZXI	CY22150FZXI	TSSOP-16	3.13	3.45	0.08	166.6	3.3	1	6	Xtal Inside	-45 to +85	3.47	3.39	3.27
727-CY22150KFZXC	CY22150KFZXC	TSSOP-16	3.13	3.45	0.08	200	3.3	1	6	Xtal Inside	0 to 70	2.70	2.43	2.31
727-CY22381FXC	CY22381FXC	SOIC-8	3.13	3.45	0	200	3.3	3	3	Xtal Inside	0 to 70	3.80	2.85	2.76
727-CY22381FXI	CY22381FXI	SOIC-8	3.13	3.45	0	166	3.3	3	3	Xtal Inside	-45 to +85	3.74	3.63	3.51
727-CY22392FXC	CY22392FXC	TSSOP-16	3.13	3.45	0	200	3.3	3	6	Xtal Inside	0 to 70	4.20	3.15	3.05
727-CY22392FXI	CY22392FXI	TSSOP-16	3.13	3.45	0	166	3.3	3	6	Xtal Inside	-45 to +85	4.84	4.71	4.54
727-CY223931FXI	CY223931FXI	TSSOP-16	3.13	3.45	0	166	3.3	3	6	Xtal Inside	-45 to +85	6.40	5.76	5.47
727-CY22393FXC	CY22393FXC	TSSOP-16	3.13	3.45	0	200	3.3	3	6	Xtal Inside	0 to 70	5.14	3.90	3.77
727-CY22393FXI	CY22393FXI	TSSOP-16	3.13	3.45	0	166	3.3	3	6	Xtal Inside	-45 to +85	6.92	5.73	5.55
727-CY22394FXI	CY22394FXI	TSSOP-16	3.13	3.45	0	375	3.3	3	5	Xtal Inside	-45 to +85	4.84	4.71	4.54
727-CY22395FXC	CY22395FXC	TSSOP-16	3.13	3.45	0	200	3.3	3	5	Xtal Inside	0 to 70	5.85	5.15	4.84
727-CY22801KFXI	CY22801KFXI	SOIC-8	3.14	3.47	1	166.6	3.3	1	3	Xtal Inside	-45 to +85	2.63	2.29	2.22
727-CY2291FX	CY2291FX	SOIC-20	3.0	5.5	0.077	90	3.3/5.0	3	8	Xtal Inside	0 to 70	3.04	2.67	2.51
727-CY2292FXC	CY2292FXC	SOIC-16	3.0	5.5	0.077	90	3.3/5.0	3	6	Xtal Inside	0 to 70	2.70	2.03	1.96
727-CY2292FXI	CY2292FXI	SOIC-16	3.0	5.5	0.077	80	3.3/5.0	3	6	Xtal Inside	-45 to +85	3.07	2.68	2.59
727-CY2292FZX	CY2292FZX	TSSOP-16	3.0	5.5	0.077	80	3.3/5.0	3	6	Xtal Inside	0 to 70	2.48	2.41	2.33

### Set-Top Box with VCXO

727-CY24713KSXC	CY24713KSXC	SOIC-8	3.13	3.45	4.9152	27	3.3	1	3	Xtal Inside	0 to 70	3.42	3.08	2.92
-----------------	-------------	--------	------	------	--------	----	-----	---	---	-------------	---------	------	------	------

### Two Outputs PCI-Express

727-CY24293ZXC	CY24293ZXC	TSSOP-16	3.0	3.6	25	200	3.3	1	2	Xtal/Ref-in CMOS	0 to 70	2.70	2.43	2.28
----------------	------------	----------	-----	-----	----	-----	-----	---	---	------------------	---------	------	------	------

## CAPACITIVE BUTTON CONTROLLER

The CY8CMBR2044 incorporates several innovative features to save time, money, and can quickly enable a capacitive touch sensing UI in your next design. It does not require any software tools or coding because system configuration is done using hardware. These features enable a broader audience of designers to implement capacitive buttons without learning new tool sets and developing code. In addition, this device is enabled with Cypress's revolutionary SmartSense auto tuning algorithm. SmartSense ends the need to manually tune the UI during development as well as the required retuning during production ramp. This saves valuable engineering time, test time, production yield loss, and speeds the time to volume.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cypress Part No.	Package	Operating Voltage		CapSense I/Os	No. of GPOs	Operating Temp.	PWM	Slider Segments	SmartSense Enabled	Proximity Sensing	Price Each		
			Min.	Max.								1	25	50
727-8CMBR204424LKXI	CY8CMBR2044-24LKXI	QFN-16	1.71	5.5	4	4	-40 to +85	No	No	Yes	No	2.20	1.90	1.85

### Evaluation Kit

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cypress Part No.	Description	Price Each
727-CY3280-MBR	CY3280-MBR	CapSense Express™ evaluation kit with SmartSense™ auto tuning and features up to 4 CapSense buttons and 4 LEDs/GPOs.	43.89

## WIRELESSUSB™ NL DEVELOPMENT KIT

The CY3668 WirelessUSB NL development kit provides a generic platform for developing wireless applications based on the WirelessUSB NL, enCoRe II and enCoRe V devices. The out-of-box examples that come with this kit also demonstrates the new enhanced agile HID protocol for secure and reliable wireless data transfers.

### Kit Contains:

- CY3668 bridge/keyboard development boards (2)
- NL modules (2)
- CY3668- enCoRe II module (1)
- CY3668-enCoRe V modules (2)
- 3.3-V LCD (2)
- Power adaptor (2)
- Quick Start Guide
- Resource CD which includes, PSoC Designer, PSoC Programmer, Projects and documentation.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cypress Part No.	Description	Price Each
727-CY3668	CY3668	Wireless USB 2.4GHz Development Kit	540.00

## USB TRANSCIEVER

Cypress' TX2UL is the world's smallest USB 2.0ULPI transceiver. TX2UL is suitable for use in any application that already has a USB controller but requires a ULPI transceiver. TX2UL supports a high variable input voltage range of 3.0V-5.775V, and is configurable to input frequencies of 13, 19.2, 24, 26MHz. Along with its ultra small size (2.14 x 1.76mm), TX2UL consumes only 5µA 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.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cypress Part No.	Package	Operating Voltage		I/O Options	Data Transfers	Temperature Range (°C)	Price Each		
			Min.	Max.				1	25	50
727-CY7C68003-24LQXI	CY7C68003-24LQXI	QFN-24	1.8	3.3	ULPI, 8-Bit Uni- or Bi-Directional	Bulk, Interrupt, Isochronous	-40 to +85	1.80	1.56	1.44

## USB 2.0 TO UART BRIDGE CONTROLLER

Cypress CY7C64225 USB-to-UART Bridge Controller is a fully integrated USB-to-UART Bridge that provides a simple way of updating RS-232 based devices to USB with a minimal number of components. The CY7C64225 includes a USB 2.0 Full-Speed controller, a UART transceiver, internal regulator, internal oscillator and internal EEPROM in a 28-pin SSOP package. The internal EEPROM can be used to program customer specific information for OEM applications. This is done in-system via USB. Royalty free Virtual COM Port (VCP) device drivers are provided by Cypress Semiconductor. This allows the device to appear as a COM port to PC applications. All UART signals including the handshaking and control signals are implemented.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Cypress Part No.	Package	Operating Voltage		Data Rate (Mbps)	UART Baud Rate	Temperature Range (°C)	Price Each		
			Min.	Max.				1	25	100
727-CY7C64225-28PVXC	CY7C64225-28PVXC	SSOP-20	3	5.25	12, 480	300-115200	0 to 70	3.74	3.23	2.55

