



FEATURE SUMMARY	KEY CUSTOMER BENEFITS
Crystal-less USB operation recovered the USB clock and eliminates the external crystal	Reduces PCB area and BOM costs with the industry's most highly-integrated solution
Internal voltage regulator supplies up to 150 mA and eliminates the external regulator	
In-system programming memory enables product customization and eliminates external EEPROM	
Small package options as small as 4 mm x 4 mm QFN for space-constrained applications	
UART, I²C/SMBus, SPI and I²S options supports all serial formats with fast transfer rates up to 12 Mbit/s	Configurable, high-performance serial modules enable communication with a wide range of devices
Up to 16 GPIOs supports alternate functions such as suspend indicators, RS-485 transceiver control, configurable clock output, toggle LED on data traffic, count pulses or edges and playback control	Adds flexibility to simplify your design and shorten development time
Available VIO supply enables communication with devices operating down to 1.8 V	
Royalty-free software drivers supports all major operating systems such as Windows, Mac, Linux and Android In-system programmable for easy configuration via USB connection	Drop-in, easily begin communications





No External Crystal



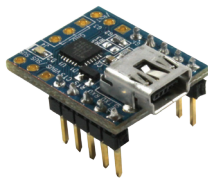
No External Regulator



No External EEPROM

SMART INTERFACE USB BRIDGES	PART NUMBER	COMMUNICATIONS	DRIVER TYPE	MAX TRANSFER RATE	GPIO PINS	5 V VOLTAGE REGULATOR OUTPUT	CRYSTAL- LESS USB	IN-SYSTEM PROG.	PACKAGE
 	CP2102*	USB-to-UART	Virtual COM Port (VCP), USBXpress	1 Mbit/s	—	3.3 V 100 mA output	Yes	Flash	5 x 5 mm QFN28
	CP2103*	USB-to-UART	Virtual COM Port (VCP), USBXpress	1 Mbit/s	4	3.3 V 100 mA output	Yes	Flash	5 x 5 mm QFN28
	CP2104	USB-to-UART	Virtual COM Port (VCP), USBXpress	2 Mbit/s	4	3.45 V 100 mA output	Yes	EPROM	4 x 4 mm QFN24
	CP2105	USB-to-2 x UART	Virtual COM Port (VCP), USBXpress	2 Mbit/s	5	3.45 V 100 mA output	Yes	EPROM	4 x 4 mm QFN24
	CP2108	USB-to-4 x UART	Virtual COM Port (VCP), USBXpress	2 Mbit/s	16	3.3 V 150 mA output	Yes	Flash	9 x 9 mm QFN64
	CP2109*	USB-to-UART	Virtual COM Port (VCP), USBXpress	1 Mbit/s	—	3.45 V 100 mA output	Yes	EPROM	5 x 5 mm QFN28
	CP2110	USB-to-UART	Human Interface Device (HID)	1 Mbit/s	10	3.45 V 100 mA output	Yes	EPROM	4 x 4 mm QFN24
	CP2112	USB-to-SMBus/I ² C	Human Interface Device (HID)	0.4 Mbit/s	8	3.45 V 100 mA output	Yes	EPROM	4 x 4 mm QFN24
	CP2114	USB-to-I ² S	USB Audio	1 Mbit/s	12	3.45 V 100 mA output	Yes	EPROM	5 x 5 mm QFN32
	CP2130	USB-to-SPI	WinUSB, LibUSB	12 Mbit/s	11	3.45 V 100 mA output	Yes	EPROM	4 x 4 mm QFN24

*For new designs, customers should design-in using the lower-cost CP2104



**CP2104 Mini
Evaluation Board**

Order parts and evaluation kits, find support,
white papers and data sheets at
www.silabs.com/usb-bridge