

| Feature | CP2101 ^a | CP2102 ^a | CP2103 |
|--|-----------------------|------------------------------|------------------------------|
| USB Descriptor EEPROM size (bytes) | 512 | 1024 | 1024 |
| Transmit buffer size (bytes) | 512 | 640 | 640 |
| Receive buffer size (bytes) | 512 | 576 | 576 |
| Number of data bits supported | 8 | 5, 6, 7 and 8 | 5, 6, 7 and 8 |
| Number of stop bits supported | 1 | 1, 1.5 ^b and 2 | 1, 1.5 ^b and 2 |
| Parity types supported | Odd, Even, None | Odd, Even, Mark, Space, None | Odd, Even, Mark, Space, None |
| Supported baud rates | 300 bps to 921.6 kbps | 300 bps to 1 Mbps | 300 bps to 1 Mbps |
| Line break transmission | - | Supported | Supported |
| Baud rate aliasing ^c | - | Supported | Supported |
| Non-standard baud rates ^c | - | Supported | Supported |
| Customizable USB Receive Timeout ^c | - | Supported | Supported |
| Custom Data Lock feature | - | Supported | Supported |
| Configurable I/O (1.8V to V _{DD}) using V _{IO} pin | - | - | Supported |
| Configurable I/O (V _{DD} to 5V) using external pull-up | - | - | Supported |
| GPIO signals for status and control ^d | - | - | Four pins |
| Dynamic Suspend feature ^d | - | - | Supported |
| RS-485 mode with bus transceiver control ^d | - | - | Supported |
| Ordering Part Number (5x5 mm 28-pin QFN) [GM suffix indicates Lead-Free] | CP2101 CP2101-GM | CP2102-GM | CP2103-GM |

Features common to all CP210x Devices:

- Integrated USB transceiver and clock; no external resistors or crystal required
- Integrated EEPROM to store USB descriptor details (VID, PID, custom strings etc)
- On-chip voltage regulator (3.3V output) and on-chip power-on reset circuit
- USB Full Speed function controller (12 Mbps)
- All handshaking and modem interface signals available; Hardware or X-On/X-Off handshaking
- Virtual COM Port driver^e
(http://www.silabs.com/tgwWebApp/public/web_content/products/Microcontrollers/USB/en/mcu_vcp.htm)
- USBXpress direct driver^e (<http://www.silabs.com/products/microcontroller/usbxpress.asp>)

Documentation:

- CP2101/2/3 Data Sheets (<http://www.silabs.com/products/microcontroller/guide.asp>)
- Application Notes (<http://www.silabs.com/products/microcontroller/applications.asp>)
 - AN144: CP210x Device Customization Guide
 - AN220: C8051F32x and CP210x USB Driver Customization
 - AN197: Serial Communications Guide for the CP210x
 - AN169: USBXpress Development Kit User's Guide
 - AN205: CP210x Baud Rate Support
 - AN223: Port Configuration and GPIO for CP210x

^a CP2101 and CP2102 are pin compatible with each other

^b 1.5 Stop bits supported only with a 5-bit data word

^c See AN205 for more details

^d See AN223 for more details

^e These drivers are compatible with all CP2101/2/3 devices

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