Silicon Labs’ new CP21xx USB bridge ICs eliminate software complexity and driver compatibility issues, providing a cost-effective, small-footprint turnkey solution for adding USB and human interface device (HID)-USB connectivity to applications such as personal medical devices, cellular and cordless phones, smart card and flash card readers, personal digital assistants, MP3 players, bar code readers, wireless modems and industrial control systems.

With the rapid proliferation of USB and HID-USB in the embedded world, developers are looking for painless, economical ways to embed USB connectivity in their designs. A leading supplier of USB connectivity solutions, Silicon Labs developed the CP21xx bridge family so that designers can add USB to microcontroller-based applications without the cost and complexity of developing sophisticated USB software. The CP21xx ICs require no USB expertise to deploy, enabling developers to focus time and resources on end applications.

**CP21xx FEATURES**
- USB 2.0 Compliant, full-speed (12 Mbps)
- No external crystal required
- Up to 1024 Bytes of EEPROM or EPROM
- User programmable custom Baud rates
- Supports all modem interface signals
- Baud rates up to 2 Mbps
- Industrial temperature range -40 to 85 °C
- SMBus master device (CP2112)
- HID class support, no driver installation needed (CP2112)

**APPLICATIONS**
- USB to RS-232 converters
- USB to Dual RS-232 converters
- USB to RS-422/RS-285 converters
- Upgrade of legacy RS-232 devices
- PDA USB interface cable
- Cellular phone USB interface cable
- Barcode readers in Point-of-Sale terminals
- Portable medical equipment
- PC peripherals
- Barcode readers in Point-of-Sale terminals
- Industrial connectivity (CP2112)
Silicon Labs offers several single-chip connectivity bridge solutions to support USB to serial protocols as well as specialized bridges for human interface device (HID) class applications. Complete tools are provided to help designers throughout the entire project enabling USB connectivity to be easily added to any MCU in our portfolio. These solutions offer hardware and software platforms to easily set up and configure, compile and debug a project. Full documentation and a broad range of third-party compilers and development tools are available.

- Easily implement USB in your designs
- Pre-programmed with all the necessary USB software
- No need to be familiar with the USB specification
- Seamless compatibility with most operating systems
- Evaluation kits available to support your design

### USB Bridges: [www.silabs.com/usb](http://www.silabs.com/usb)

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>EEPROM (BYTES)</th>
<th>RAM (BYTES)</th>
<th>DIGITAL PORT I/O PINS</th>
<th>SERIAL BUS</th>
<th>INTERNAL OSC</th>
<th>TEMP. RANGE</th>
<th>OTHER</th>
<th>PACKAGE</th>
<th>EVAL KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP2104</td>
<td>UART to USB Bridge</td>
<td>1024</td>
<td>1152</td>
<td>4</td>
<td>UART, USB 2.0</td>
<td>•</td>
<td>–40 to 85 °C</td>
<td>Volt Reg, RS-485, Split V&lt;sub&gt;DDIO&lt;/sub&gt;</td>
<td>QFN24</td>
<td>CP2104EK</td>
</tr>
<tr>
<td>CP2105</td>
<td>UART to Dual USB Bridge</td>
<td>296</td>
<td>608</td>
<td>5</td>
<td>UART, USB 2.0</td>
<td>•</td>
<td>–40 to 85 °C</td>
<td>Volt Reg, RS-485, Split V&lt;sub&gt;DDIO&lt;/sub&gt;</td>
<td>QFN24</td>
<td>CP2105EK</td>
</tr>
<tr>
<td>CP2110</td>
<td>HID USB to UART Bridge</td>
<td>343</td>
<td>960</td>
<td>10</td>
<td>UART, USB 2.0</td>
<td>•</td>
<td>–40 to 85 °C</td>
<td>Volt Reg, RS-485, Split V&lt;sub&gt;DDIO&lt;/sub&gt;</td>
<td>QFN24</td>
<td>CP2110EK</td>
</tr>
<tr>
<td>CP2112</td>
<td>USB to SMBus Bridge</td>
<td>194</td>
<td>512</td>
<td>8</td>
<td>USB 2.0, SMBus</td>
<td>•</td>
<td>–40 to 85 °C</td>
<td>Volt Reg</td>
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<td>CP2112EK</td>
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