Single-Chip HID USB to UART Data Transfer

- Integrated USB transceiver; no external resistors required
- Integrated clock; no external crystal required
- Integrated 343-byte one-time programmable ROM for storing customizable product information
- On-chip power-on reset circuit
- On-chip voltage regulator: 3.45 V output

USB Peripheral Function Controller

- USB Specification 2.0 compliant; full-speed (12 Mbps)
- USB suspend states supported via SUSPEND pins

HID Interface

- Standard USB class device requires no custom driver
- Windows 7, Vista, XP, Server 2003, 2000
- Win CE 6.0, 5.0, and 4.2
- Mac OS-X
- Linux
- Open access to interface specification

Windows and MAC HID-to-UART Libraries

- APIs for quick application development
- Supports Windows 7, Vista, XP, Server 2003, 2000
- Supports Mac OS X

Supply Voltage

- Self-powered: 3.0 to 3.6 V
- USB bus powered: 4.0 to 5.25 V
- I/O voltage: 1.8 V to V_{DD}

UART Interface Features

- Flow control options:
  - Hardware (CTS / RTS)
  - No flow control
- Data formats supported:
  - Data bits: 5, 6, 7, and 8
  - Stop bits: 1, 1.5, and 2
  - Parity: odd, even, mark, space, no parity
- Baud rates: 300 bps to 1 Mbps
- 480 Byte receive and transmit buffers
- RS-485 mode with bus transceiver control
- Line break transmission

GPIO Interface Features

- 10 GPIO pins with configurable options
- Usable as inputs, open-drain or push-pull outputs
- Configurable clock output for external devices
  - 24 MHz to 47 kHz
- RS-485 bus transceiver control
- Toggle LED upon transmission
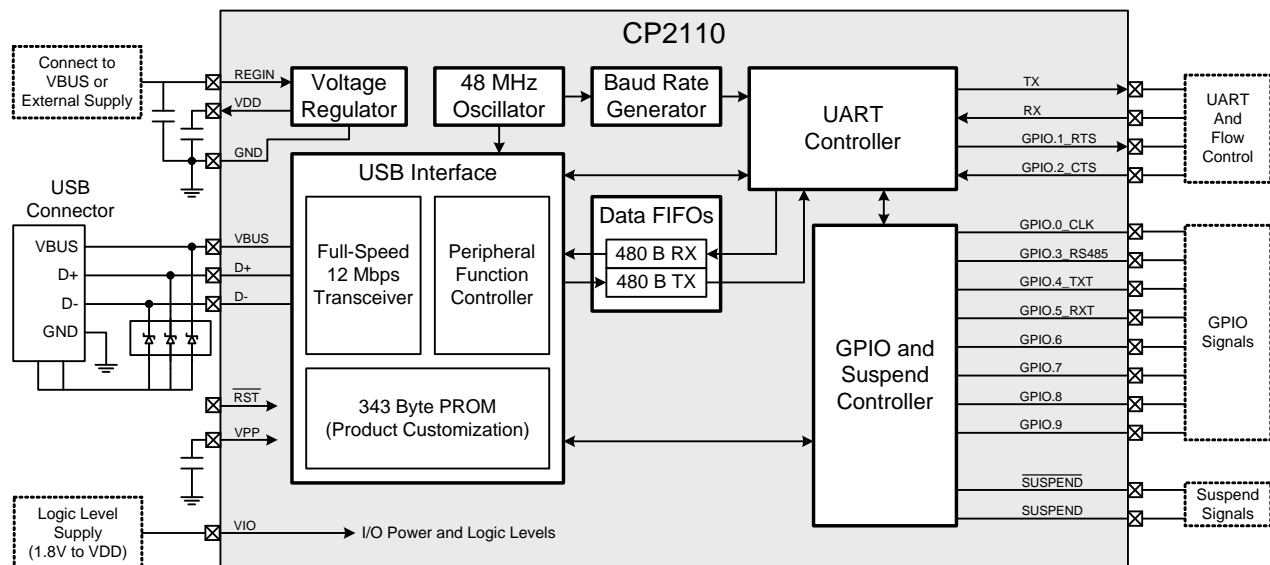- Toggle LED upon reception

Ordering Part Number

- CP2110-F01-GM

Package

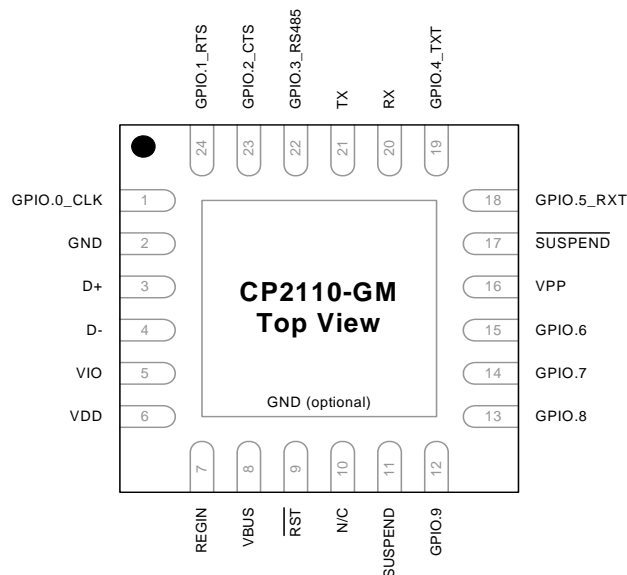- RoHS-compliant 24-pin QFN (4 x 4 mm)

Temperature Range: –40 to +85 °C

Selected Electrical Specifications

–40 to +85 °C unless otherwise specified.

Parameter	Conditions	Min	Typ	Max	Units
Input Voltage Range (REGIN)		3.0	—	5.25	V
Regulator Output Voltage	Output Current = 1 to 100 mA*	3.3	3.45	3.6	V
VBUS Detection Input Threshold		2.5	—	—	V
Bias Current		—	—	120	µA
*Note: The maximum regulator supply current is 100 mA. This includes the supply current of the CP2110.					

Package Information

QFN-24 Pinout Diagram (Top View)

CP2110EK Evaluation Kit

The CP2110EK allows a complete evaluation and customization of the CP2110 USB-to-UART bridge including all GPIO functions, flow control, RS485 transceiver control and transmit and receive LEDs.

- Includes Windows and Mac libraries
- USB cable and serial cable
- CD ROM with complete documentation