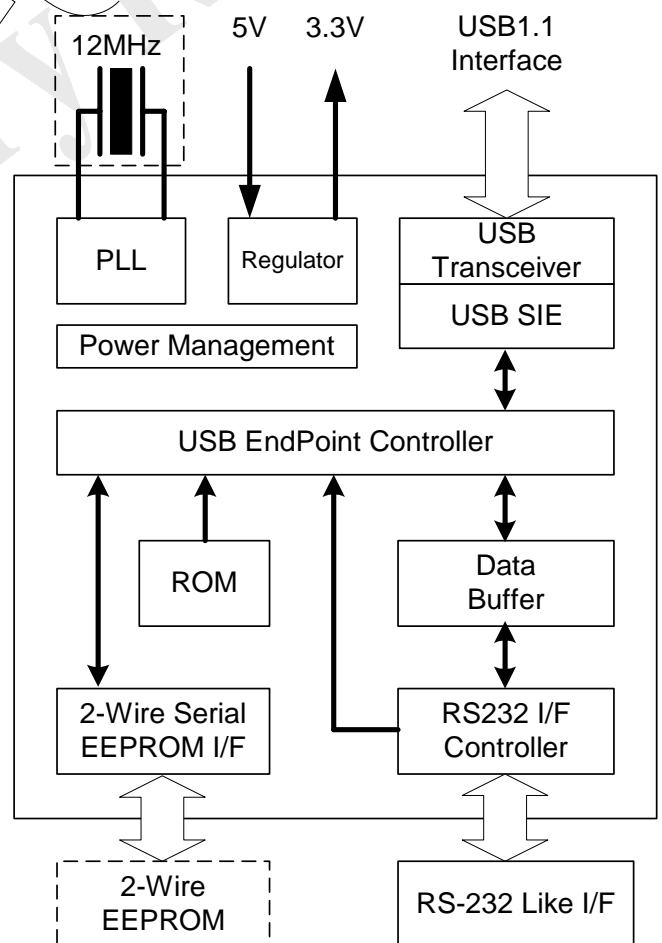# PL-2303X-Edition
USB to Serial Bridge Controller

OVERVIEW

The PL-2303X is a low cost and high performance USB-to-Serial Bridge Controller. The PL-2303X provides a convenient solution for connecting an RS-232 like full-duplex asynchronous serial device to any Universal Serial Bus (USB) capable host. The PL-2303X highly compatible drivers could simulate the traditional COM port on most operating systems allowing the existing applications based on COM port to easily migrate and be made USB ready. The PL-2303X is exclusively designed for mobile and embedded solutions in mind, providing a small footprint that could easily fit in to any connectors and handheld devices. With very small power consumption in either operating or suspend mode, the PL-2303X is perfect for bus powered operation with plenty of power left for the attached devices. Flexible signal level requirement on the RS-232 like serial port side also allows the PL-2303X to connect directly to 5V, 3.3V, or 2.5V devices. PL-2303X Rev.C integrates embedded clock and OTP to save external crystal and EEPROM. Customers can design with effective BOM cost and compact PCB size.

FEATURES

- Full compliance with the USB Specification v1.1
- On chip USB 1.1 transceiver, 5V→3.3V regulator, and 12 MHz crystal oscillator
- Support RS-232 like serial interface
  - Full-duplex transmitter and receiver (TXD and RXD)
  - Six MODEM control pins (RTS, CTS, DTR, DSR, DCD, and RI)
  - Parity error, frame error, and serial break detection
  - Programmable baud rate from 75 bps to 6 Mbps
- Extensive flow control mechanism
  - Adjustable high/low watermark level
  - Automatic flow control with CTS/RTS/ XON/XOFF
- Configurable 256-byte outbound buffer and 256-byte inbound buffer or 128-byte outbound buffer and 384-byte inbound buffer
- Support remote wake-up from MODEM input signals
- Rev.A supports 2 GPIO pins
- Rev.C supports 4 GPIO pins
- Rev.C supports embedded clock and OTP
- Package type: SSOP28 / QFN32

BLOCK DIAGRAM

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