PL-2303HX-Edition (Rev D) USB to Serial Bridge Controller
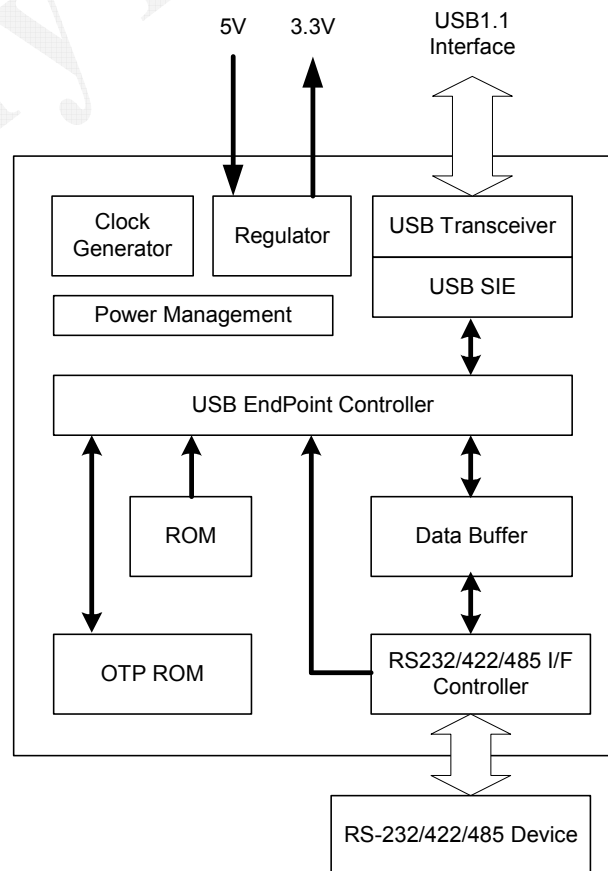
OVERVIEW

The PL-2303HX is a low cost and high performance USB-to-Serial Bridge Controller. The PL-2303HX provides a convenient solution for connecting an RS-232 full-duplex asynchronous serial device to any Universal Serial Bus (USB) capable host. The PL-2303HX 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-2303HX 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-2303HX is perfect for bus power operation with plenty of power left for the attached devices. Flexible signal level requirement on the RS-232 serial port side also allows the PL-2303HX to connect directly to 3.3V ~ 1.8V devices. PL-2303HX integrates on-chip clock generator and OTP ROM 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 and 5V➔3.3V regulator
- Supports RS-232 serial interface with Programmable baud rate from 75 bps to 12 Mbps (Rev D)
- Supports RS422/RS485 interface (Rev D)
- Integrates on-chip Clock Generator (Rev D)
- On-chip OTP (One Time Programming) ROM for startup device configurations like product string and serial number string (Rev D)
- Extensive flow control mechanism like adjustable high/low watermark level, automatic hardware or software flow control, and inbound data buffer overflow detection
- Configurable 256-byte outbound buffer and 256-byte inbound buffer; or 128-byte outbound buffer and 384-byte inbound buffer
- Supports remote wake-up from MODEM input signals
- Supports up to 8 GPIO pins (Rev D) - 4 General Purpose I/O pins & 4 Auxiliary General Purpose I/O
- Package type: SSOP28 / QFN32

BLOCK DIAGRAM

Prolific Technology Inc.