

## PL2503 USB2.0 to Serial Bridge Controller

## **OVERVIEW**

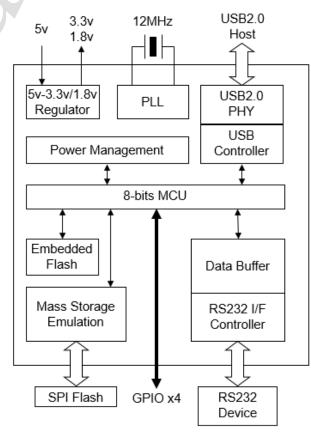
PL2503 is a low cost and high performance USB2.0(HS)-to-Serial Bridge Controller. PL2503 provides a convenient solution for connecting an RS-232 full-duplex asynchronous serial device to any Universal Serial Bus (USB) capable host. Fully compliant with USB 2.0 High-Speed, Prolific offers highly compatible virtual COM port (VCP) drivers for broad OS support (Windows, Mac, Linux, Android), allowing seamless migration of COM port-based applications. It also works with inbox USB CDC-ACM driver for driverless VCP functionality in many OSes, offering a versatile solution for diverse serial connectivity needs. Environmentally conscious, the PL2503 can work as USB Mass Storage Device with external SPI Flash, allowing vendors to store driver, applications and documents directly, eliminating the need for CD-ROMs.

With very small power consumption in either operating or suspend mode, PL2503 is perfect for bus powered operation with plenty of power left for the attached devices. Flexible signal level requirement on the RS-232 serial port side also allows PL2503 to connect directly to 3.3V~1.8V devices. PL2503 integrates embedded flash to save external EEPROM. Customers can design with effective BOM cost and compact PCB size.

## **FEATURES**

- Full compliance with the USB Specification v2.0
- Support USB CDC/Virtual COM class driver
- On chip USB 2.0 PHY, 5V to 3.3V/1.8V regulator
- Support external SPI flash to behave as USB Mass Storage Device
- Support RS-232 serial interface with Programmable baud rate from 75bps to 6Mbps
- On-chip flash for the startup device configurations of VID, PID, Product String, Manufacture String and Serial Number String.
- Extensive flow control mechanism
- Adjustable high/low watermark level
- Automatic flow control with CTS/RTS/XON/XOFF
- Support remote wake-up from MODEM input signals
- 2 LED pin for link status indication
- Supports 4 GPIO pins
- Package type: LQFP48

## **BLOCK DIAGRAM**



Prolific Technology Inc.