

PL2543 USB2.0 to Quad UART Bridge Controller



OVERVIEW

The PL2543 is a high performance USB2.0 to Quad UART bridge controller of PL2303 series family. The PL2543 provides 4 channels UART solution supporting RS232/422/485 serial device to any USB host. The USB interface is fully compliant to the USB2.0 (High-Speed) specification. It supports not only in-box CDC(Communication Device Class) driver, also Prolific proprietary robust driver of Windows/Mac/Linux OSes that 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 PL2543 supports UART baud rate from 5bps to 24Mbps. By taking advantage of USB bulk transfer mode and large data buffers, PL2543 is capable of achieving higher throughput compared to traditional UART (Universal Asynchronous Receiver Transmitter) ports.

FEATURES

- USB2.0(High-Speed) Specification compliant
- USB-IF certified TID 6180
- Royalty-free USB to Virtual COM Port drivers for Windows, Mac, Linux, and Android
- Support CDC/V-COM USB class driver
- Support Battery Charger (BC1.2) detection
- On-chip 5v to 3.3v/1.2v regulator
- Individual IN/OUT FIFO buffer per port
- Programmable baud rate from 5bps to 24Mbps
- 4 channels UART operation simultaneously
- Support RS232/RS422/RS485
- Hardware/Software flow control
- Adjustable high/low watermark level
- On-chip MTP for USB device, configuration, and serial number descriptors customization
- 11 GPIOs for custom applications
- Support PWM and access LED
- -40°C to 85°C operating temperature
- Package type: QFN64

BLOCK DIAGRAM

