

PL2303GR

USB to RS485 Bridge Controller

OVERVIEW

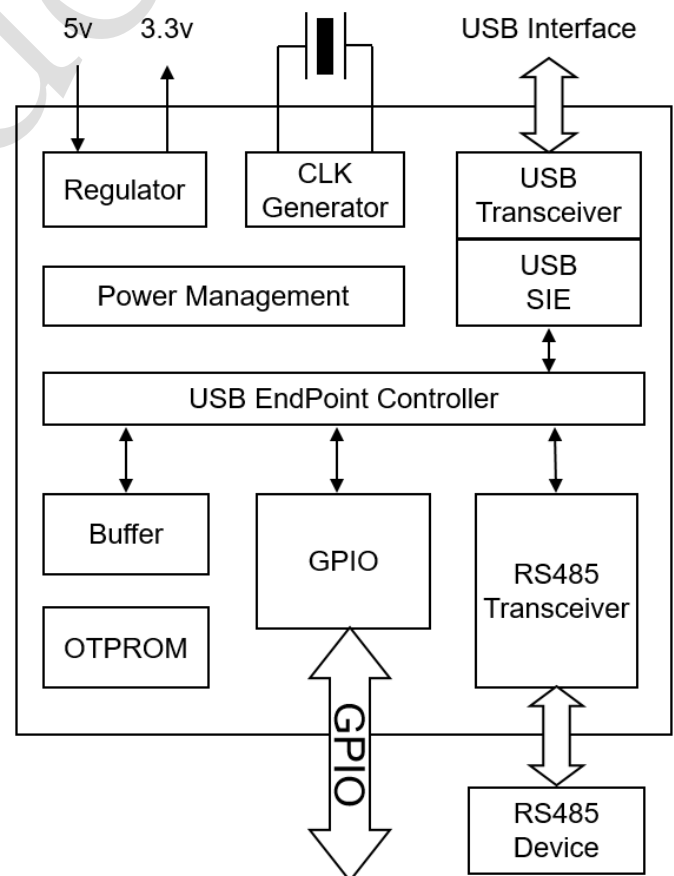
The PL2303GR is a low cost and high performance USB-to-RS485 Bridge Controller with built-in RS485 transceiver. The PL2303GR provides a convenient solution for connecting an RS-485 half-duplex asynchronous serial device to any Universal Serial Bus (USB) capable host. The PL2303GR highly compatible drivers 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 PL2303GR integrates a high baud rate RS-485 transceiver that meets the EIA/TIA-485 communications interface specifications. The RS-485 transceiver build in TVS protection for bus terminals of $\pm 15\text{kv}$ contact discharge and $\pm 18\text{kv}$ air-gap discharge. It provides the bipolar output to the transmitters, and makes the transmitters to deliver the RS-485 output voltage levels. Under normal operation, PL2303GR operates at very low power consumption with guaranteed data rate up to 10Mbps.

FEATURES

- Full Compliant with USB Specification v2.0 (Full-Speed)
- On-chip USB 1.1 transceiver and 5V to 3.3V regulator
- On-chip 96MHz Clock Generator
- Built-in RS485 Transceiver
 - Follow EIA/TIA-485 standards
 - Full UART RS485 interface pins (A, B)
 - Flexible baud rate support up to 10Mbps
 - Software flow control
- Supports OTPROM (One-Time Programmable ROM) for USB device descriptors. OTPROM can be programmed directly through USB port.
- Each IC has unique ID(for Serial Number)
- 1024-byte bi-directional data buffers (768-byte receive/256-byte transmit).
- Package type: SSOP28

BLOCK DIAGRAM



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