

## PL2303TB

# USB to Serial and GPIO Bridge Controller

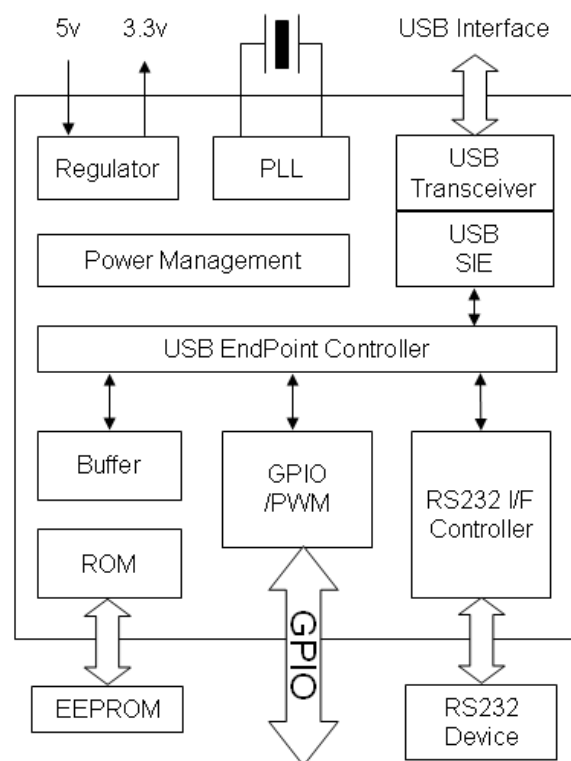
### OVERVIEW

The PL2303TB is a low cost and high performance USB-to-Serial/GPIO Bridge Controller. The PL2303TB provides a convenient solution for connecting an RS-232 like full-duplex asynchronous serial device and GPIO to any Universal Serial Bus (USB) capable host. The PL2303TB 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 PL2303TB supports up to 12 GPIO pins including RS232 accessing LED, PWM and multiple clock output functions. With very small power consumption in either operating or suspend mode, the PL2303TB is perfect for bus powered operation with plenty of power left for the attached devices.

### FEATURES

- Full Compliant with USB Specification v2.0 (Full-Speed)
- On chip USB 1.1 transceiver, 5V to 3.3V regulator, and 12 MHz crystal oscillator
- Supports 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 6,000,000 bps
- Supports 48/24/12/6/3/1.5 MHz clock output using GP0/GP1 pins
- Supports TXD-RXD Access LED display control using PI\_0/PI\_1 pins
- Supports USB Selective Suspend (Run-Time Power Management)
- Supports Pulse-Width Modulation (PWM) output on DTR\_N, DCD\_N, DSR\_N, & CTS\_N pins with frequency around 370Hz to 47KHz and duty cycle from 1/256 to 255/256.
- Optional external EEPROM for startup device configurations
- Small footprint 28-pin SSOP IC package
- Pin compatible with PL2303TA and PL-2303HxD

### BLOCK DIAGRAM



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