

## PL23B3 USB HID to Serial Bridge Controller

## **OVERVIEW**

The PL23B3 is a low cost and high performance USB-to-Serial Bridge Controller. The PL23B3 provides a convenient small-factor solution for connecting an RS232-like full-duplex asynchronous serial device (TXD/RXD only) to any USB host.

The PL23B3 adapts to standard USB HID class driver which is popular by most operating systems. No customization driver is needed to be installed. Prolific provide user friendly DLL/API for Operation System(OS) so that customers can develop applications software easily.

By taking advantage of USB bulk transfer mode and large data buffers, PL23B3 is capable of achieving higher throughput compared to traditional UART (Universal Asynchronous Receiver Transmitter) ports. The flexible baud rate generator of PL23B3 also could be programmed to generate any rate between 1 bps to 115 kbps.

## **FEATURES**

- Full Compliant with USB Specification v2.0 (Full-Speed)
- Full Compliant with USB HID class driver
- On-chip USB 1.1 transceiver and 5V to 3.3V regulator
- On-chip 96MHz Clock Generator
- USB Human Interface Device (HID) class:
  - No driver installation needed for Windows, Mac, Linux, and Android.
  - Provides HID-to-I2C SDK (DLL libraries) for application development.
- Full-duplex transmitter and receiver (TXD / RXD)
  - Programmable baud rate from 1bps to 115kbps
  - Works with existing PC COM Port software applications(TXD / RXD)
- 1024-byte bi-directional data FIFO buffers (768-byte receive/256-byte transmit).
- Package type: SOP8 / QFN16

## **BLOCK DIAGRAM**

