

PL23D3

USB HID to SPI Bridge Controller

OVERVIEW

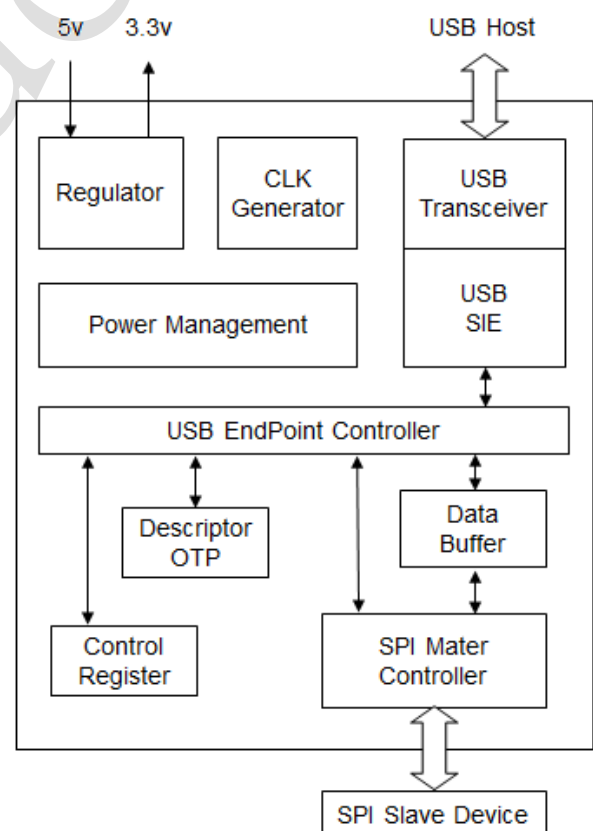
The PL23D3 is a high performance single-chip USB HID to SPI bridge controller for connecting various SPI interface devices to any Universal Serial Bus (USB) capable host. The PL23D3 implements the standard USB Human Interface Device (HID) device class which is natively supported in most operating systems; so the PL23D3 does not need any custom driver installation. The operating system or USB host communicates with the PL23D3 through HID application software developed based on Prolific Windows/Mac/Linux DLL libraries.

The PL23D3 is designed to support a wide-range of SPI domain including portable, embedded, industrial, consumer devices. With very small power consumption in either operating or suspend mode, the PL23D3 is perfect for self-powered operation and can reserve power for the attached SIP devices. Flexible signal voltage option allows the PL23D3 to connect directly to SPI devices with 5V~1.8V signals.

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-SPI SDK (DLL libraries) for application development.
- USB HID to SPI specification support
 - Supports SPI Master mode.
 - Supports clock rate up to 6MHz.
 - Supports two Chip Select lines.
- 1024-byte bi-directional data buffers (768-byte receive/256-byte transmit).
- Package type: QFN16

BLOCK DIAGRAM



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