

# PL2561

## USB2.0 HID to UART/SPI/I<sup>2</sup>C Bridge Controller

### OVERVIEW

The PL2561 is a high performance USB2.0 high-speed to UART/SPI/I2C bridge controller of PL2303 series family. The PL2561 provides 3 serial channels to USB host. The USB interface is fully compliant to the USB2.0 (High-Speed) specification. The PL2561 adapts to standard USB HID class driver which is popular by most operating systems. No customization driver is needed to be installed.

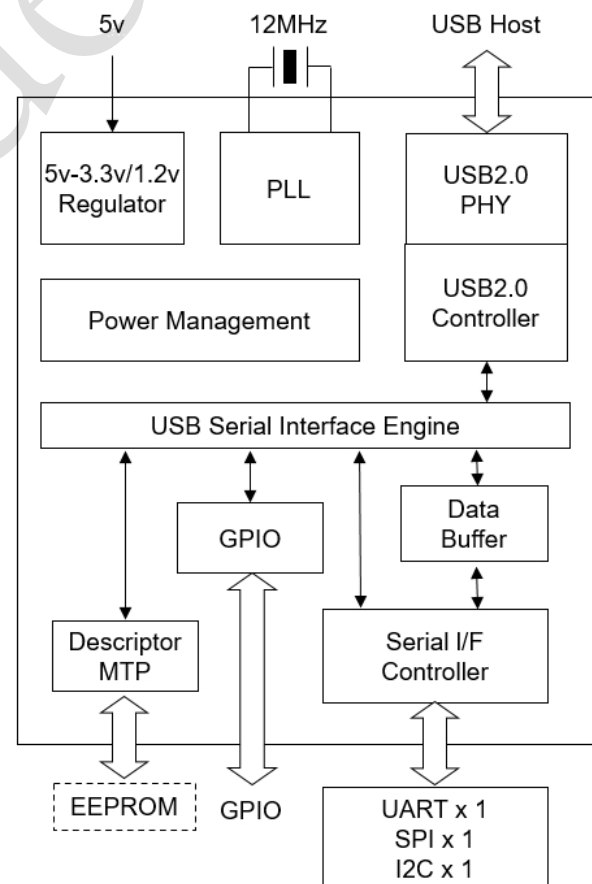
The PL2561 supports UART baud rate from 5 bps to 12 Mbps, SPI speed up to 32MHz, I2C up to 1Mbps and I3C. Prolific provide user friendly DLL/API for Operation System(OS) so that customers can develop applications software easily.

The PL2561 supports HID-over-I2C protocol to connect peripherals such as mouse, keyboard, touch panel and touchpad. It helps peripherals to directly communicate to USB HID class driver and makes it works as a normal USB HID class device.

### FEATURES

- USB2.0(High-Speed) Specification compliant
- Support USB Libusb/HID class
- On-chip 5v to 3.3v/1.2v regulator
- Support HID-over-I<sup>2</sup>C Protocol for HID peripherals
- Support UART/SPI/I<sup>2</sup>C simultaneously
- UART baud rate up to 12Mbps
- Support I3C and I<sup>2</sup>C/SPI master
- I<sup>2</sup>C Master supports up to Fast Mode Plus as 1MHz
- SPI speed up to 32MHz
- On-chip MTP for chip configuration, and serial number and USB descriptor customization
- Support unique ID (for serial number)
- Total 2 GPIOs can be used
- -40°C to 85°C operating temperature
- Package type: QFN32

### BLOCK DIAGRAM



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