

PL2551

USB2.0 General Purpose Device Controller

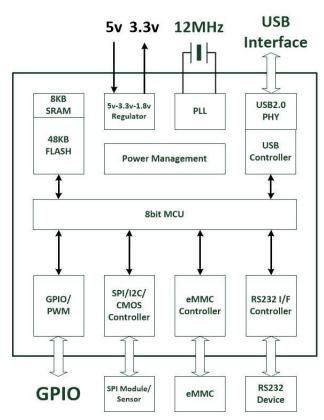
OVERVIEW

The PL2551B integrated circuit is a single chip Hi-Speed USB 2.0 General-Purpose Microcontroller (MCU). It provides customer a cost-effective and time-to-market USB device controller solution. With diversity of IO ports, it can easily interface with various external devices such as motion sensor, keyboard, mouse, modem, CMOS sensor, etc. Flexible endpoint configuration including its buffer partition allows users to easily establish control of isochronous in/out (ISO), bulk-in/out or interrupt in/out (INT) pipes to communicate with USB host. In addition, it is possible to configure the chip as a composite or a compound device. The PL2551B is designed to be flexible, high performance and easy-to-use so that customers can easily implement to their products.

FEATURES

- Universal Serial Bus Specification 2.0 Compliant
- Support with eMMC Specification rev4.5
- Support USB composite device
- Auto detection and switch between USB class
- Support Virtual COM driver as PL2303 operation
- Embedded 8-bits microcontroller with programmable CPU speed
- Embedded 48KB Flash to store the program code and data memory
- Embedded 8KB SRAM for program cache space
- Embedded 4K SRAM FIFO controller to configure each endpoint's buffer partition
- Support In System Programming (ISP) function
- Provide Flash data protection mode to protect data read/write functions
- 24 general purpose I/O (GPIO) pins
 - Provide CMOS Sensor interface which is compliant with ITU-R BR601/656
 - Support I2C for multi-slave control up to 1MHz
 - Support SPI Master/Slave up to 10MHz
 - 4 PWM pins for LED/fan control
- On-chip 5V-3.3V-1.8V regulator
- PKG : LQFP48 / LQFP64

BLOCK DIAGRAM





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