

# PL-2507

## Hi-Speed USB to IDE Bridge Controller

### OVERVIEW

The PL-2507 is a single chip USB2.0-IDE bridge controller, which is designed to perform a seamless protocol transfer between the USB and ATA interfaces.

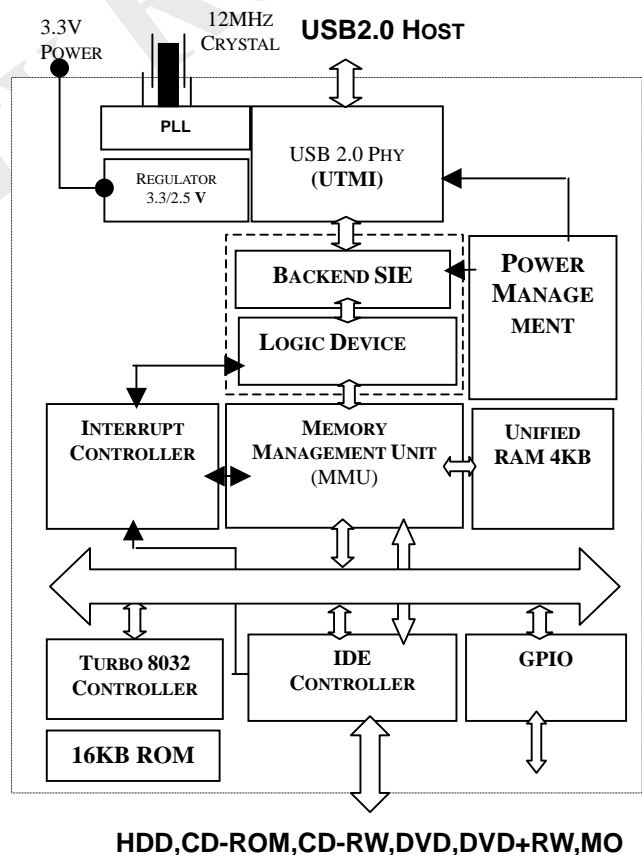
It will work with full function at full speed or high speed USB transfer mode. The operating speed mode is determined by the capability of the host/hub to which it is connected. The PIO mode 0 to mode 5, Multi Word DMA mode 0 to mode 2, and Ultra DMA mode 0 to mode 4 are implemented to support difference IDE devices. The chip will communicate with the connected device to select the proper mode to obtain the best performance,

The chip is implemented according to the USB Bulk-Only Mass Storage Class specification ver 1.0. Since the default driver is supported by most the OS, no additional driver is needed.

### FEATURES

- Universal Serial Bus Specification 2.0 Compliant
- USB Mass Storage Class Bulk-Only Transport Specification Compliant
- AT Attachment with Packet Interface Extension(ATA/ATAPI) Compliant
- ATA interface support PIO mode 0 ~ 4, Multiword DMA mode 0 ~ 2, and UltraDMA mode 0 ~ 4 to work with ATA/ATAPI devices
- Integrate full speed and high speed transceiver
- 5 V tolerant inputs, 3.3 V output drive
- Sufficient 4K bytes data buffer for both the downstream and upstream data transfer in optimized performance
- Support external serial EEPROM to customize vender/product related information
- Support multiple LUN (optional)
- Additional General Purpose IO pins for further customization
- On-chip 3.3v to 2.5v regulator to supply the power of 0.25 process core circuit
- Inexpensive LQ100 and LQ64 packaging available

### BLOCK DIAGRAM



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