Overview

The JMicron JM20329 is the single chip solution to bridge between USB host and SATA device. The highly integrated Hi-Speed USB and SATA Phys technology provides a cost-effective solution to apply USB to SATA device enclosure. The USB adheres the Mass Storage Class Bulk-Only Transport Specification. The embedded command parser supports both ATA and ATAPI command set with LBA48 addressing capability.

Features

- Compliance with Gen1i/Gen1m of Serial ATA II Electrical Specification 2.5
- Support SATA II Asynchronous Signal Recovery (Hot Plug) feature
- Compliance with USB 2.0 electrical specification
- Support USB High-Speed and Full-Speed Operation
- Compliance with USB Mass Storage Class, Bulk-Only Transport Specification
- Support ATA/ATAPI PACKET command set
- Support ATA/ATAPI LBA48 addressing mode
- Support 12MHz external crystal
- Support external NVRAM for Vender Specific VID/PID of USB Device Controller
  - 48 pin package support SPI interface EEPROM for External NVRAM
- Embedded 5V to 3.3V and 1.8V voltage regulator
- 48 LQFP and 48 QFN package
  - Support 14 GPIO on 48 LQFP
- Embedded two hardware PWM
  - Two PWM output are located on HDDA and Reserve[2] pins
- Embedded 2K bytes data FIFO for USB data transfer
- Embedded high performance 8-bit MCU
- Support 4K sectors HDD command
Functional Block Diagram

SATA Device

SATA Physical Layer
SATA Link Layer
SATA Transport Layer
Register Files

FIFO

USB 2.0 PHY

FIFO

Register Files

USB Host

Application

Product Information

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<th>Description</th>
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<tr>
<td>JM20329</td>
<td>Hi-Speed USB to SATA Bridge</td>
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Design Kit

1. JM20329 Data Sheet
2. JM20329 Design Guide
3. Application EVB

Contact Information

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