JMB356 eSATA+1394A/B + USB20 to Dual SATA Host Adapter

Description

The JMB356 is single chip solution to bridge between USB 2.0 host or 1394 host and SATA device. The highly integrated USB 2.0, 1394A/B and SATA Phys technology provides a cost-effective solution to apply SATA to SATA device or USB to SATA device or 1394 to SATA device enclosure. The USB adheres to the Mass Storage Class Bulk-Only Transport Specification. The embedded command parser supports both ATA and ATAPI command set with LBA48 bit addressing capability. The 1394 adheres to SBP-2 specification. And SBP-2 acceleration hardware is embedded to off-load CPU and easy firmware control.

Features

➢ Compliance with Gen1i/Gen1m of Serial ATA II Electrical Specification 2.6

➢ 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 Asynchronous Transfers at 100/200 and 400 Mb/s for 1394a

➢ Support 1394A/B SBP-2 Acceleration Feature to optimize performance

➢ Compliance with IEEE Std 1394-1995, IEEE 1394a-2000 and IEEE 1394b-2002 Specifications

➢ Support ATA/ATAPI PACKET command set

➢ Support ATA/ATAPI LBA48 addressing mode

➢ Supports Dual LUN for USB/1394/eSATA

➢ Supports Hardware RAID for RAID0 (striping) and RAID1 (mirror) over USB/1394/eSATA

➢ Supports AES-128/256 for data encryption over USB/1394/eSATA (S version)

➢ Support 30MHz external crystal

➢ Support external NVRAM for Vender Specific VID/PID of USB/1394 Device Controller

➢ Design for Win2000, WinXP, WinVista, Win7, MAC 10.x or later version.

➢ 0.13um CMOS technology

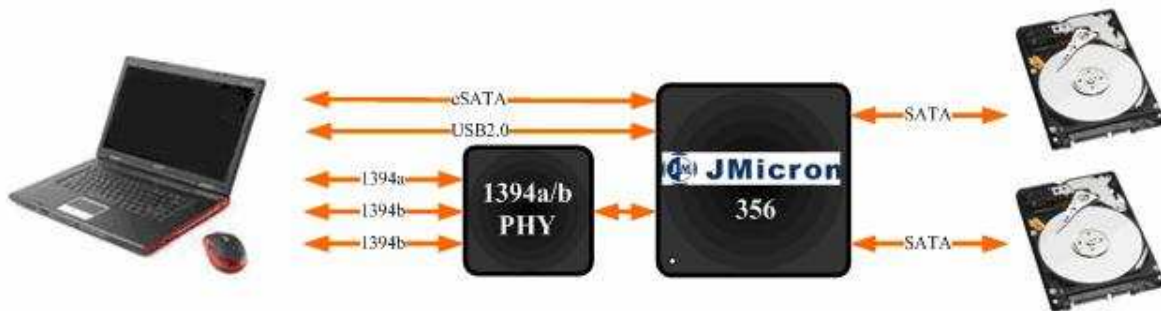➢ 100 LQFP package (14x14)

➢ 24 GPIOs

Function Block Diagram
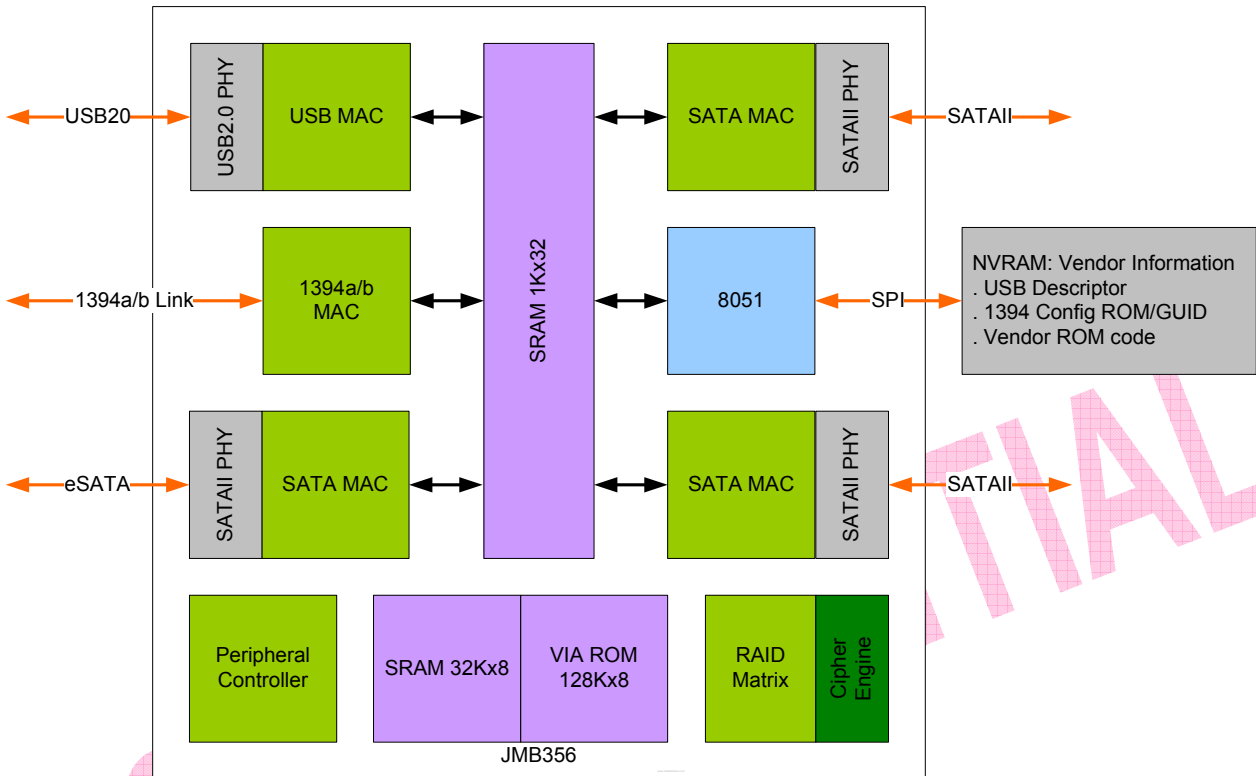
Applications

Adapt to SATA disk.

Adapt to IDE disk.

Deliverables

- ➢ Data sheet
- ➢ Design guide
- ➢ Application EVB board

Contact Information

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