



# JMB352U

## High-Speed USB & SATA II Combo to Dual SATA II Port Multiplier(1 to 2) Bridge



### Description

The JMB352U is a bridge controller, which translates the communication protocol between SATA II 3.0G. This chip integrated 60MIPS 8051, and provide eSATA II 3.0G to dual SATA II 3.0G port multiplier applications in a single chip.

In this chip, the SATA controller could be configured as host or device. The 3-port SATA II 3.0G controllers further supports the eSATA to dual SATA communication. Integrated these two technologies, the user could perform JMB352U to the following applications.

- eSATA to dual SATA bridge port multiplier application
- One-button system backup application for above applications. (With SATA Vender Software Application)

### Features

- Compliance with Serial ATA International Organization: Serial ATA Revision 2.6
- Compliance with Gen1i, Gen1m, Gen2i and Gen2m of Serial ATA International Organization: Serial ATA Revision 2.6
- Support SATA 1.5G/3.0G Speed Negotiation
- Support SATA II Asynchronous Signal Recovery (Hot Plug) feature
- Support SATA Host/Device controller configuration
- Support USB HID Interrupt Transfer
- Support ATA/ATAPI PACKET command feature set
- Support SATA 30MHz or 40MHz external crystal

### Quick Reference

|                    |                       |
|--------------------|-----------------------|
| Signal Bit Rate    | 3.0 Gbps              |
| Power Supply       | 3.3V and 1.2V         |
| GPIO Support       | UP to 9               |
| ESD Protection     | 2000 V                |
| Package            | 64-pin LQFP           |
| RAID Level Support | JBOD, Port Multiplier |
| SATA Port          | 3                     |
| USB Port           | 1                     |



- Integrated 60MIPS 8051 microprocessor with 64k-byte mask ROM
- Support one-button system backup operation
- Support one-button disk copy
- Support external NVRAM for customer VID/PID, Manufacture and Product String.

|                     |  |
|---------------------|--|
| <p>Applications</p> | <ul style="list-style-type: none"> <li>• Mass storage devices</li> <li>• Optical storage</li> <li>• Storage system</li> <li>• Port Multiplier</li> </ul> |
|---------------------|--|

### Functional Block Diagram

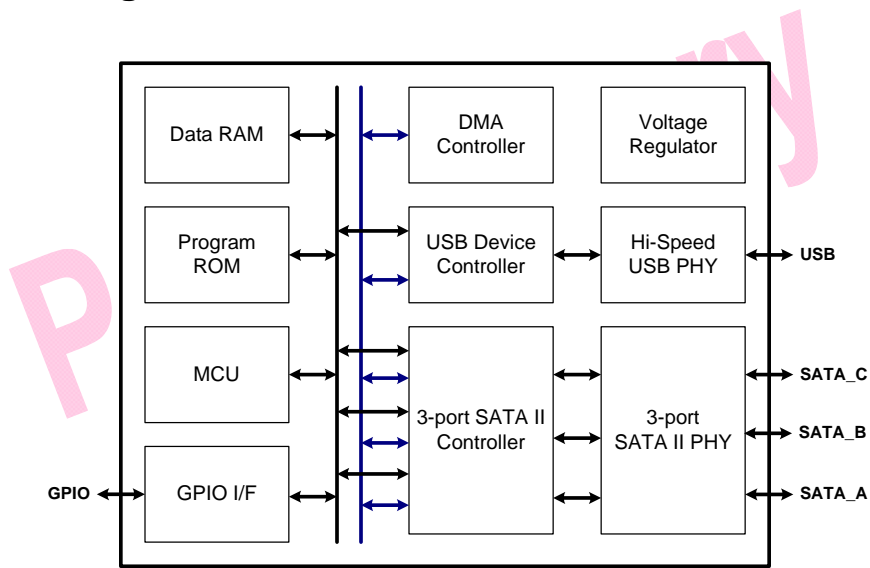


Fig. 1 Functional Block Diagram of JMB352U

### Applications

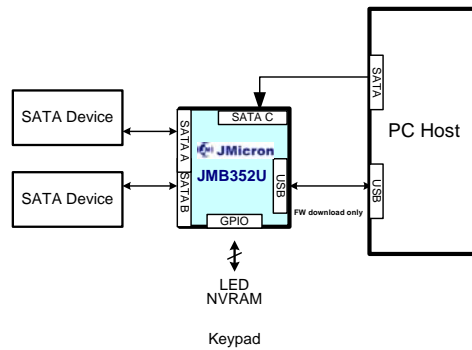


Fig. 2 eSATA to dual SATA port multiplier application

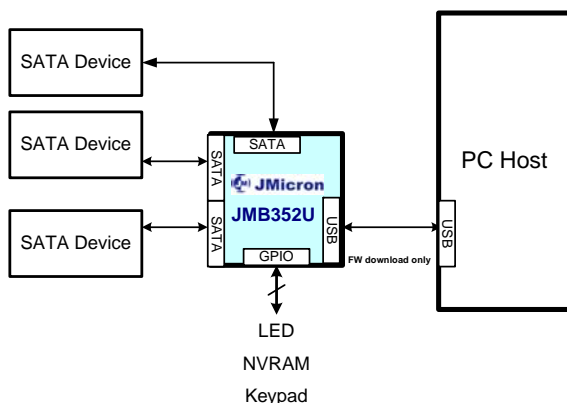


Fig. 3 Hi-Speed USB to SATA with 3 LUN bridge application

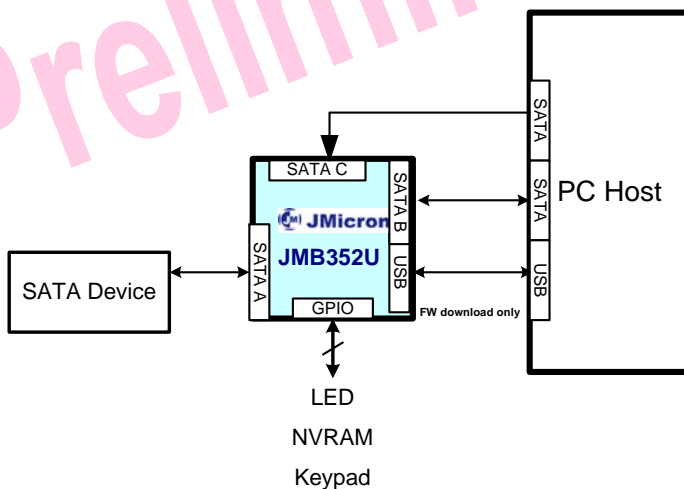


Fig. 4 Dual eSATA(Port B & Port C) & Hi-Speed USB to SATA application

Product Information

| Name   | Description            |
|--------|------------------------|
| JMB352 | Serial ATA Bridge Chip |

Design Kit

|   |                     |
|---|---------------------|
| 1 | JMB352 Data Sheet   |
| 2 | JMB352 Design Guide |
| 3 | Application EVB     |

Contact Information

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