JMB572 Port Multiplier Chip

Overview

JMicron JMB572 is a single chip. It integrated three independent SATA channels and a micro-processor. With proper setting, the chip can be configured as 1 to 2- ports Serial ATA II Port Multiplier or a 2 to 1-port Serial ATA II Port Selector.

JMB572 contains 15 GPIOs which can be configured as various standard interfaces. It also has the capability to load external firmware code to extend its functionality.

Compliance, Features

Compliance

- Compliant with ***Serial ATA Port Multiplier Spec. Revision 1.2***
- Compliant with ***Serial ATA Port Selector Spec. Revision 1.0***
- Compliant with ***Serial ATA PHY Electrical Spec. Revision 1.0***
- Compliant with ***Serial ATA High Speed Serialized AT Attachment Spec. Revision 3.1***

General

- Integrated 3-port SATA III PHY
- Integrated PLL for SATA III interface
- Total three independent SATA channel
- Integrated uP, PROM and SRAM for firmware programming
- 1.2V core and 3.3V I/O power supply
- Available in 48-pin QFN package

SATA

- Supports 3-port 6.0Gbps SATA III interface
- Output swing control and automatic impedance calibration for SATA III PHY
- Supports asynchronous signal recovery
- Supports spread spectrum clocking
- Supports partial / slumber power saving mode
- Automatically speed negotiation
- Supports BIST and loopback mode
- Supports staggered spin-up (Optional)
- Supports Hot-Plug
- Supports asynchronous notification
- Supports ATAPI drives
- Supports command-based and FIS-based switching
- Supports PM aware and non-PM aware host
- Supports executing host loaded firmware code

GPIO

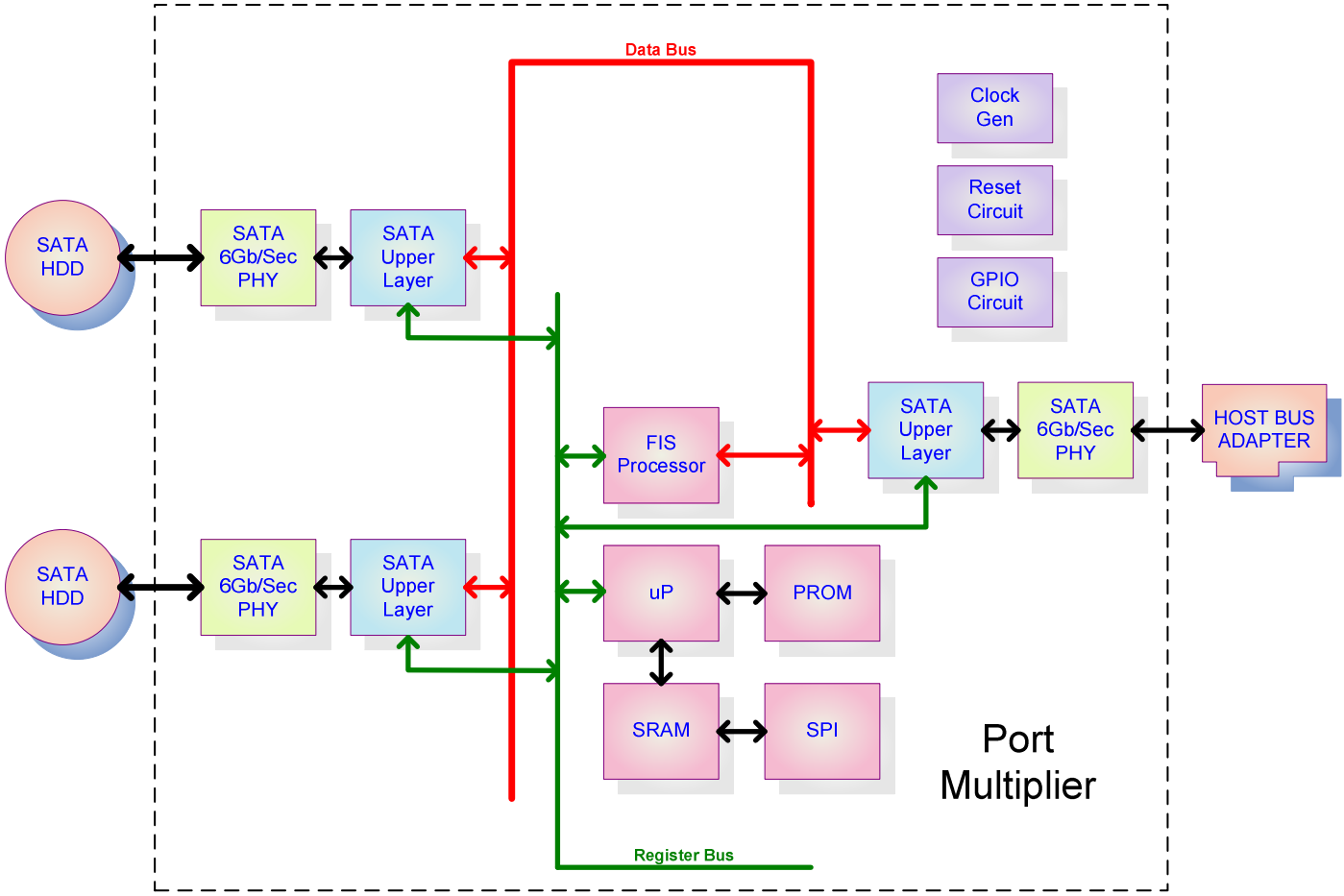
- Supports 15 GPIOs
- Supports SPI interface

Functional Description

JMB572 integrates three high-speed Serial I/O's, three SATA upper layers, a microprocessor, SRAM, PROM and other control logic into the chip. JMB572 can work as 1 to 2- ports Port Multiplier or 2 to 1- ports Port Selector with internal embedded firmware without extra external flash needed. But it also can use external flash interface and with proper firmware programming to extend its capability.

Block Diagram

Figure Function View of JMB572



Supporting Document

1	Product Brief
2	Data Sheet
3	Application Schematic

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