

# **JMS576**

## USB 3.1 Gen1 to SATA 6Gb/s

## **Bridge Controller**

### Overview

JMS576 is a USB 3.1 Gen1 to SATA 6Gb/s bridge controller with Integrated USB Type-C<sup>TM</sup> Multiplexer & Device CC control logic for USB Type-C<sup>TM</sup> storage solution. It has high performance and low power consumption by advanced low power process. It can support external SPI NVRAM for Vendor VID/PID of USB 2.0/USB 3.1 Gen1 device controller. There are 10 GPIOs to do customization for various applications. It supports software utilities for downloading the upgraded firmware code under USB 2.0/USB 3.1 Gen1.

JMS576 complies with both USB Mass Storage Class Bulk-Only Transport (BOT) Specification and USB Attached SCSI Protocol (UASP) Specification. It has both robust system compatibilities and low BOM cost with two layers of PCBA.

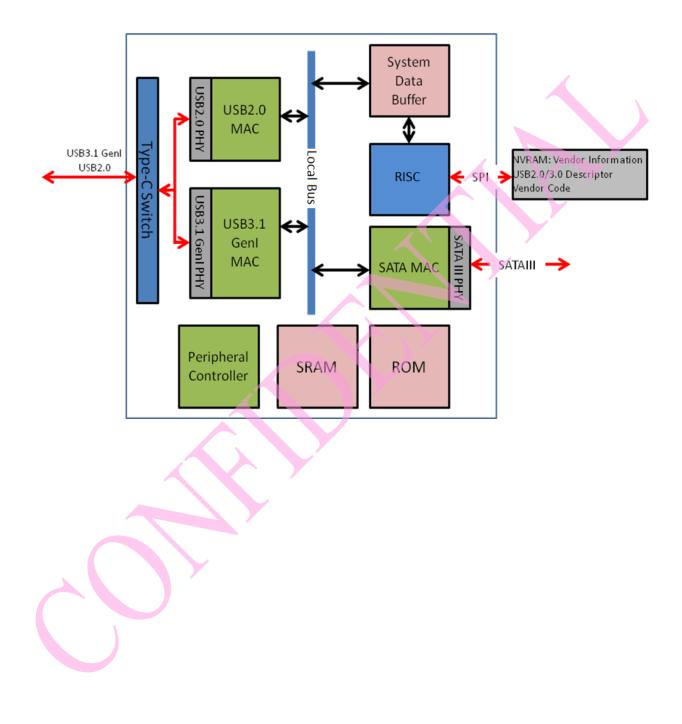


#### Features

- ▶ Integrated USB Type-C<sup>TM</sup> Multiplexer & Device CC control logic
- Complies with Gen2i/Gen2m of Serial ATA II Electrical Specification 2.6
- Complies with Gen3 of Serial ATA III Electrical Specification 3.2
- Complies with USB 3.1 Gen1 Specification, USB Mass Storage Class, Bulk-Only Transport Specification
- Complies with USB Attached SCSI Protocol (UASP) Specification
- Supports USB Super-Speed/High-Speed/Full-Speed Operation
- Supports USB 2.0/USB 3.1 Gen1 power saving mode
- Supports SHA-1/SHA-256 for IEEE-1667 digest calculation
- Supports external SPI NVRAM for Vendor VID/PID of USB 2.0/USB 3.1 Gen1 device controller
- Supports ATA/ATAPI PACKET command set
- > 10 GPIOs for customization
- Provides hardware control PWM
- Provides software utilities for downloading the upgraded firmware code under USB 2.0/USB 3.1 Gen1
- Design for Windows 7, Windows 10 and MAC 10.10.5 or later version
- Supports 30MHz external crystal
- Embedded 5V to 1.2V voltage regulator
- Embedded 5V to 3.3V linear voltage regulator (LDO)
- QFN48 6x6 package



### **Block Diagram**





# Application





### Package Information (QFN48 6x6)

