



JMS561 USB3.0 to Dual SATA GenIII Ports Bridge Chip

Overview

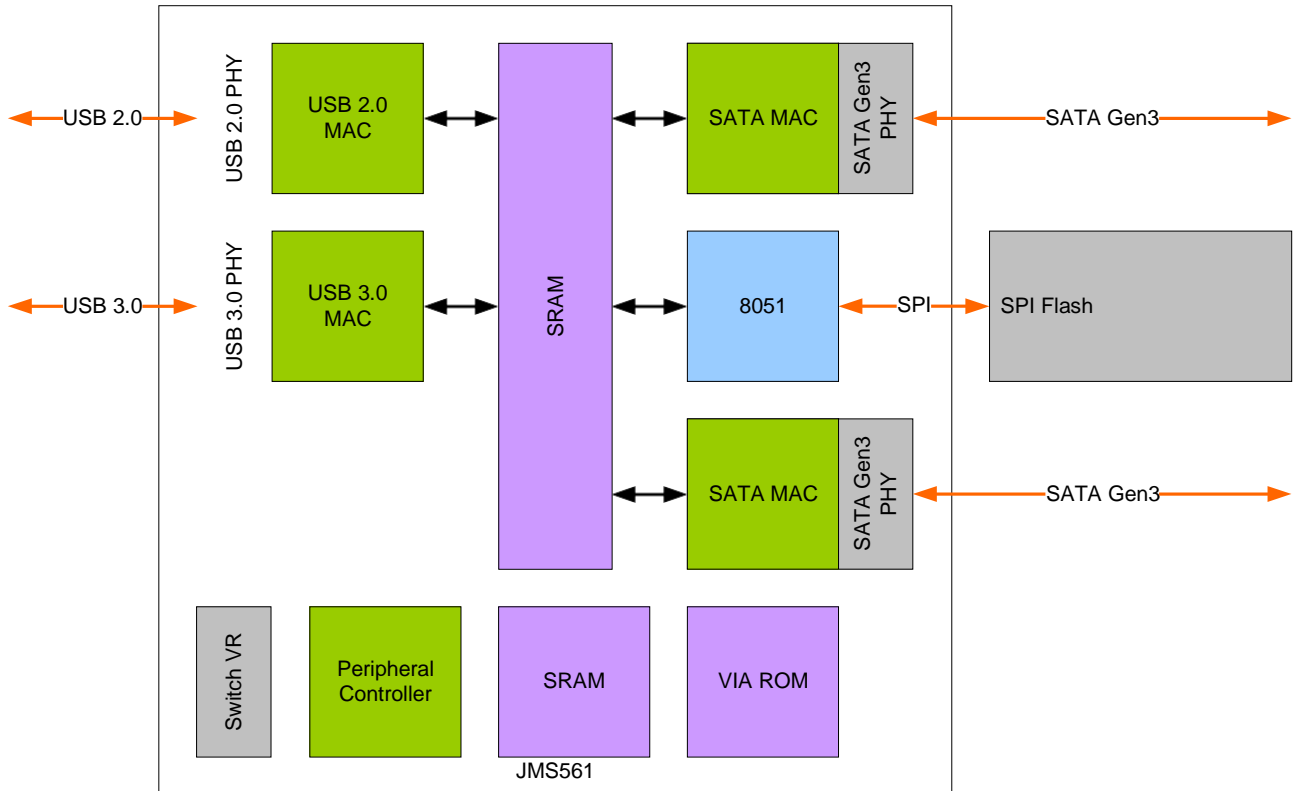
JMicron JMS561 is a Super Speed to Dual SATA GenIII Ports bridge chip. It integrated three independent SATA channels and a micro-processor. With proper setting, the chip can be configured as 1 to 2- ports Serial ATA III Port Multiplier or hardware striping & mirror. The JMS561 is able to reach a data transmission rate above 400M bytes per second when paired with an SSD module using JMicron's JMF667 SSD controller. The readings were measured by IOMeter, a gauge for storage device performance, with a variety of queue depths and worker number settings, on a platform with an xHCI host on an Intel Panther Point C1 stepping PC, running Windows 8 Build 8315 Core 2. Enabling USB Attached SCSI Protocol (UASP) on the JMS561, increased the data transmission rate by as much as 30%.

JMS561 has passed the USB-IF test procedure for USB3.0 products and it won the Windows Hardware Certification approval.

Features

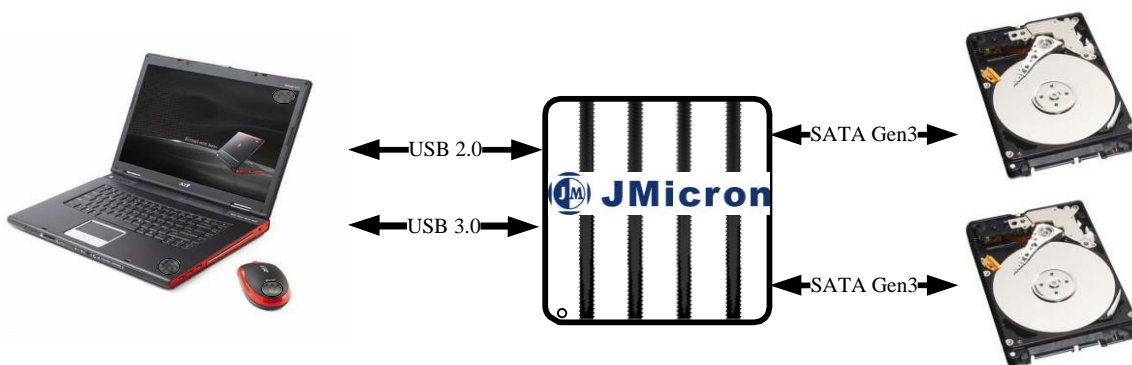
- Complies with Serial ATA International Organization: Serial ATA Revision 3.1
- Complies with Universal Serial Bus 3.0 Specification Revision 1.0
- Complies with USB Mass Storage Class Bulk-Only Transport (BOT) Rev. 1.0 Specification
- Complies with USB Attached SCSI Protocol (UASP) Rev. 1.0 Specification
- Supports USB Super-Speed/High-Speed/Full-Speed Operation
- Supports USB 2.0/USB 3.0 power saving mode
- Supports multi LUNs for USB 2.0/USB 3.0
- Supports port multiplier for eSATA
- Supports hardware RAID0 (striping) and RAID1 (mirror) over USB 2.0/USB 3.0/eSATA
- Flexible GPIOs for customized functions
- Provides a hardware control PWM
- Provides software utilities for downloading the upgraded firmware code under USB2.0/USB3.0/eSATA
- Design for Windows XP, Windows 7, Windows 8, MAC 10.3 or later versions
- 30MHz external crystal
- An embedded 2.5V to 1.3V voltage regulator
- An embedded 5.0V to 3.3V voltage regulator
- QFN 64 package

Block Diagram



Applications

USB 2.0 and USB 3.0 to two SATA Gen3 HDDs



USB 2.0, USB 3.0 and eSATA 6G to one SATA Gen3 HDD

