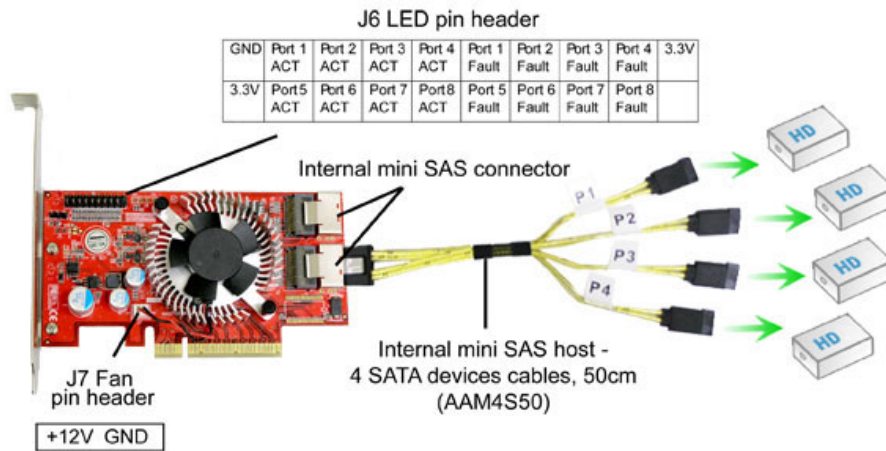


## INTRODUCTION

This latest PCIe controller supports connecting up to eight SAS or SATA devices via two internal mini SAS (SFF-8087) connectors. Each SATA connection supports throughput up to 6Gbps when installed into PCI-Express 2.0 slots with 8 or more lanes. The small form factor of this controller allows it to fit into both standard height and low profile slots in many Desktop, small form factor system, rack mount system and various computing equipment. By combining with Addonics family of mini SAS connector bridge, the two internal mini SAS ports on this controller can be easily converted to external mini SAS (SFF-8088) for external storage application.

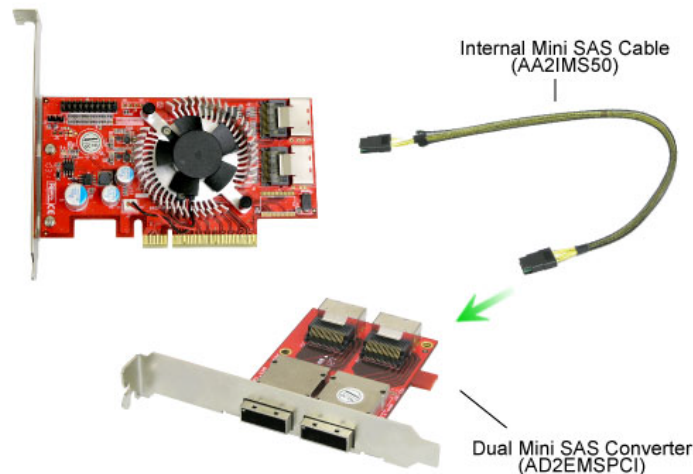


### Connecting to hard drives via internal mini SAS cable

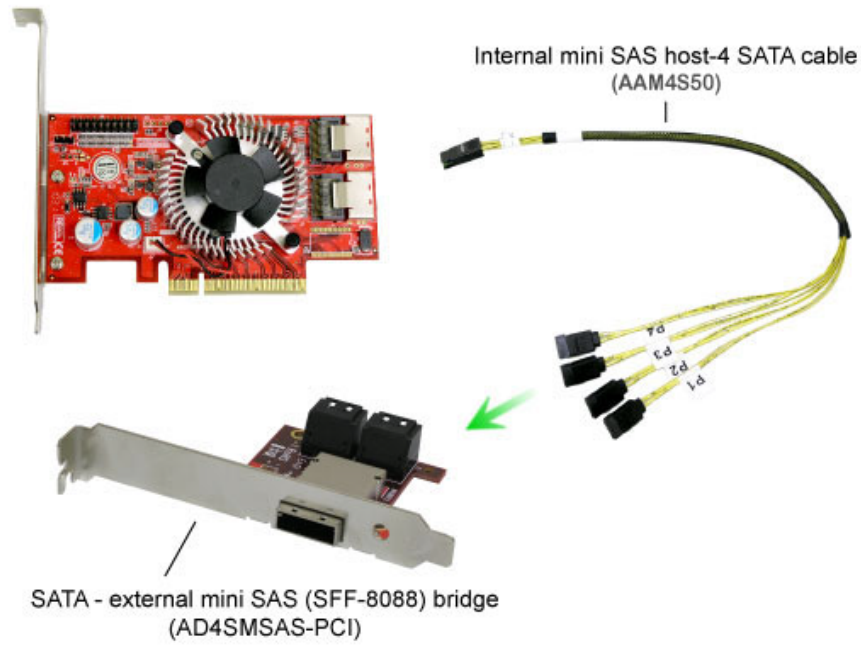


### Converting the internal mini SAS port to external mini SAS connectors (SFF-8088)

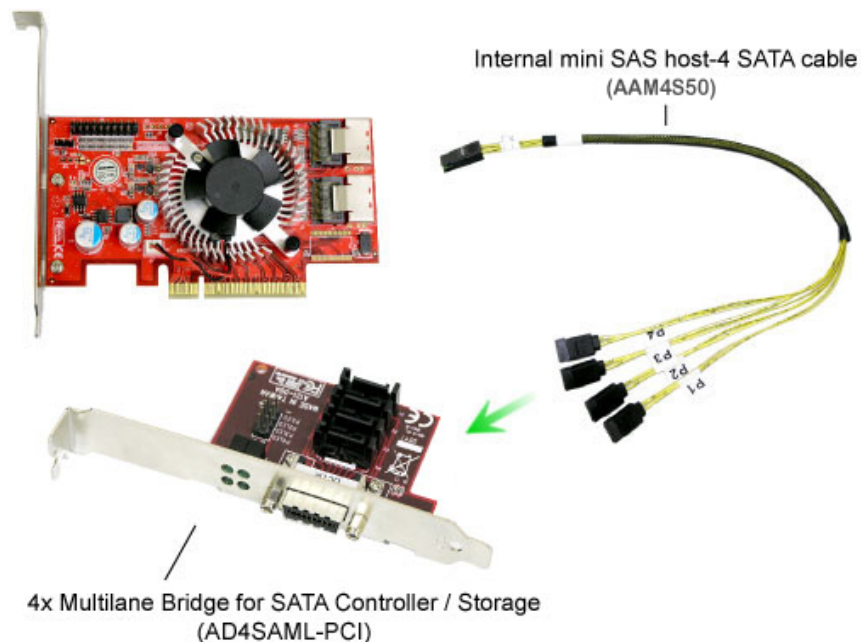
Option 1 - use internal mini SAS cable (model AA1IMS50) and Dual Mini SAS converter. Requires two cables to convert to two external SAS ports



Option 2 - use an internal mini SAS host - 4 SATA cable (model AA4SM50) and SATA - external mini SAS bridge



Option 3 - use an internal mini SAS host - 4 SATA cable (model AA4SM50) and 4x multilane bridge for SATA controller (model AD4SAML-PCI)



## FEATURES

- Eight internal SATA/SAS ports via two internal mini SAS connectors (SFF-8087)
- Supports 6 Gbps, 3 Gbps & 1.5 Gbps SAS or SATA hard drive
- PCI-Express 8 lane compatible (also fits into PCI-Express 16 Lane or the graphic card slot)
- Up to 600 MBytes/sec (6 Gbps) per port
- Fits standard height Desktop case, low profile PC, rack mount system and various computing equipment
- Includes low Profile PCI bracket
- Efficiently cooling by Active Heat Sink with Blast Fan
- Comptaible with the following Addonics Port Multiplier AD5HPMSXA, AD5HPMRXA-E and AD5HPMREU for individual drive setting
- Non-RAID, drives appears as independent drives to the system
- Hot swap support - drive can be removed and added without system shut down or restart\*
- Simple plug and play
- Completely with drivers for 64bit / 32bit Windows 7, Windows 8, Vista, XP, 2000 and above

\* Hot swapping hard drive has been tested on Windows OS only

## SPECIFICATIONS

- 40 Gbps transfer rate PCIe 2.0 8x interface card
- Two SFF-8087 connectors
- Marvell 88SE9480 chip
- Compliant with PCI Express Specification, Revision 2..0
- Supports main board PCI Express 2.0 x8 and x16 host slot
- Serial Attached SCSI – 2.0 (SAS-2.0) specification compliant.
- Serial ATA Revision 3.0 (6 Gbps) specification compliant.
- Supports auto-detection of SAS or native SATA device.
- Supports PCIe Power Management: D0, D1, D3\_cold, D3\_hot.
- Supports SAS Multiplexing.
- Supports SSC with independent control of each PHY.
- Supports wide SAS ports.
- Supports SAS Protocol (SSP), initiator and target mode.
- Supports SAS Management Protocol (SMP), initiator mode.
- Supports SATA Tunneling Protocol (STP), initiator mode including
- Non-zero offset and non-sequential data delivery
- ATA and ATAPI command
- Native Commands Queuing (NCQ)
- Supports Host mode and Device mode of operation
- Dimension (W x L x H): 64.4 x 124 x 17 mm (~ 2.54 x 4.88 x .67 in.)
- Weight: 85g (~ 3 oz)
- Operating temperature and humidity: 0 - 60 degree C, 5 - 90% RH
- Storage Temperature and humidity: -20 - 70 degree C, 0 - 95 % RH non-condensing
- Fully RoHS compliant

### System Requirement

- PC/AT or Compatible System
- One free PCI-Express 8 lanes slot or 16 lanes slot (same as the PCI-Express graphic card slot)
- Pentium or greater
- Minimum 32 MB RAM
- 10 MB minimum free hard disk space
- One of the following operating systems: Windows 2000 and later release