

## A3803-PMC Serial Attach SCSI (SAS) Host Bus Adapter (HBA)



### KEY APPLICATIONS

- High Performance workstations
- VME and cPCI Single Board Computers (SBC's)
- Direct Attached Storage (DAS)
- Storage Area Networking (SAN)

### Point-to-point connections for greater performance and reliability; and the choice of drive connect.

The Astek A3803-PMC doubles the performance of today's dual channel Ultra320 SCSI HBAs with aggregate I/O port bandwidth of 2.4GBps and full duplex capability. These adapters are ideal for today's data centers and leverage existing SCSI infrastructure for investment protection and ease of migration. The serial interface allows point-to-point connection offering higher performance, increased aggregate bandwidth, higher availability with dual ported drives, and enhanced reliability compared to parallel SCSI. The A3803-cPCI supports 3 and 1.5 Gbps SAS and SATA hard disk drives.

### PRODUCT FEATURES

- 3Gbps per port, 8 ports
- Connects to both SAS and SATA hard disk drives
- 64-bit, 133MHz PCI-X
- LSI Logic's Fusion-MPT™ featuring over 140,000 I/O's per second
- Supports all major OSs
- 1 year limited warranty

### OS Independent Hardware RAID (0,1)

Integrated RAID (IR) provides the reliability and performance benefits of disk mirroring (RAID 1) and striping (RAID 0). Integrated Mirroring™ (IM) provides data protection for the system boot volume by simultaneously writing redundant data across two to six disks. Integrated striping yields enhanced performance by aggregating the bandwidth of up to six disk drives. IR is OS-Independent and does not require the use of special device drivers.

### A3803-PMC Ordering Information

|              |  |
|--------------|--|
| A3803-PMC-05 | Two-x4 SFF-8470 Front Panel RoHS Compliant |
|--------------|--|



## Technical Specifications

|                             |  |  |
|-----------------------------|--|--|
| <b>Host Bus Type</b>        | 64-bit/133MHz PCI-X, backward compatible to PCI  |  |
| <b>Compliance</b>           | PCI 2.2, PCI-X 1.0a, PCI-X 2.0 mode 1, IEEE 1386.1, VITA-39  |  |
| <b>Data Transfer</b>        | 132MB/s (PCI 32-bit bus @33MHz)<br>264MB/s (PCI 64-bit bus @33MHz)<br>528MB/s (PCI 64-bit bus @66MHz)<br>800MB/s (PCI-X 64-bit bus @100MHz)<br>1056MB/s (PCI-X 64-bit bus @133MHz) |  |
| <b>Modes</b>                | Bus master DMA   |  |
| <b>PCI Voltage</b>          | +3.3V +/- 5%   |  |
| <b>PCI Power</b>            | 7.5 Watts excluding transceivers   |  |
| <b>SAS Bus</b>              | Eight 3Gbps SAS/SATA ports   |  |
| <b>SAS Bandwidths</b>       | Single lane – 300 MBps<br>Wide Port (2 lanes) – 600 MBps<br>Wide Port (4 lanes) – 1200 MBps  | Single SAS Lane – 600 MBps<br>Wide Port (2 lanes) – 1200 MBps<br>Wide Port (4 lanes) – 2400 MBps |
| <b>Connectors</b>           | <b>External</b>  | <b>Internal</b>  |
| <b>A3803-PMC-(01/05/51)</b> | Two- x4 SFF-8470   | none   |
| <b>A3803-PMC-02</b>         | none   | x8 lanes routed to P4  |
| <b>A3803-PMC-03</b>         | One – x4 SFF-8470  | x4 lanes routed to P4  |
| <b>Form Factor</b>          | 5.87" x 2.91", 150 mm x 75 mm PMC Mezzanine Card   |  |
| <b>Protocols</b>            | SCSI, IP   |  |
| <b>Device Support</b>       | Thousands of SAS WWIDs, more than 256 target disks with SAS fan-out expanders  |  |
| <b>Agency Approval</b>      | CE, Canada, FCC class A, UL Registered   |  |
| <b>Environments</b>         | <b>Operating</b>   | <b>Storage</b>   |
| <b>Temperature</b>          | 0° to 55° C  | -40° to +85° C   |
| <b>Relative Humidity</b>    | 5 to 90% non-condensing  | 5 to 90% non-condensing  |

## WARRANTY

Astek host adapters are assembled and tested in world-class facilities to assure superior product reliability and performance. Astek's host adapters carry a three-year limited warranty.

For more information please visit the Astek web site at:

[www.astekcorp.com](http://www.astekcorp.com)

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## Software Support

| OS Support               | Versions  |
|--------------------------|---|
| <b>Windows</b>           | 2000, Server 2003 32-bit and 64-bit (x86 and AMD64), XP |
| <b>RedHat Linux</b>      | RHEL 3  |
| <b>SuSE Linux</b>        | 9   |
| <b>Novel NetWare</b>     | 5.1, 6.5  |
| <b>Sun Sparc Solaris</b> | 2.8, 2.9, 2.10  |
| <b>VxWorks</b>           | 5.5,6.x   |