

4-Port Serial Attached SCSI / Serial ATA Adaptor



APPLICATIONS

The SC PMC/SA1-U is a high performance intelligent Serial Attached SCSI and Serial ATA adaptor suitable for any PMC Host Board including VME Bus, Compact PCI® and Multibus II. Simultaneously supporting up to 4 full-duplex devices (or expanders) within a single width PMC form factor, the SC PMC/SA1-U is ideal for fast data storage access in high bandwidth low latency

applications. Utilizing the LSI Logic® LSISAS1064 SAS/SATA Controller, the SC PMC/SA1-U supports SSP, SMP, STP and SATA protocols - the controller also includes an ARM926 I/O processor to offload the host processor of I/O management. To simplify the board's integration, many popular industry standard operating systems are supported.

HIGHLIGHTS

- 4-Port SAS/SATA interfaces
 - 1.5 Gbits/s and 3.0 Gbits/s SAS
 - 1.5 Gbits/s and 3.0 Gbits/s SATA
 - Narrow or wide ports
 - Integrated RAID support
- 2 Mbytes Boot Flash EPROM
- 32 Kbytes NVRAM for SCSI parameters
- I/O connections via front panel SFF 8484 4i connector
- PMC (PCI Mezzanine Card) format:
 - Single size CMC (Common Mezzanine Card)
 - 33/66 MHz, 32/64-bit PCI interface
 - 3.3V signaling
- Extended temperature version available:
 - -25°C to +70°C (E-Series)
 - -40°C to +85°C (K-Series)
- Software support for Windows® 2000, Windows® XP, Windows® Server 2003, Linux®
- For use with VMEbus, CompactPCI and Multibus II PMC Host Boards

SAS/SATA Interface

- 4 independently configurable interfaces:-
 - SAS 1.0 at 1.5 Gbits/s and 3.0 Gbits/s
 - SATA 1.0a at 1.5 Gbits/s and 3.0 Gbits/s
- SSP, SMP, STP and SATA protocols
- 2, 3 and 4 lane SAS Wide Ports supported
- up to 2.4 Gbytes/s bandwidth
- drives expanders up to 122 devices
- integrated mirroring and striping RAID options
- I/O connections via front panel SFF 8484 4i connector

Advanced I/O Controller

- utilizes LSI Logic LSISAS1064 serial drive controller
- integrates the ARM926 RISC processor core:-
 - offloads host by managing I/O
 - Fusion-MPT™ architecture

PMC Interface

- complies with PCI Specifications 3.0
- supports 33 and 66 MHz PCI clock rates:-
 - 3.3V signaling interface
- 32/64-bit interface:-
 - up to 528 Mbytes/s zero wait state transfer rate with 66 MHz/64-bit PCI interface
- bus mastering capability

Boot Flash

- 2 Mbytes, 8-bits wide Flash EPROM
- stores SCSI configuration parameters
- in circuit programmable

NVRAM

- 32 Kbytes
- stores integrated RAID journal
- no battery required

Software Support

- support for Windows 2000, Windows XP, Windows Server 2003, Linux

Electrical Specification

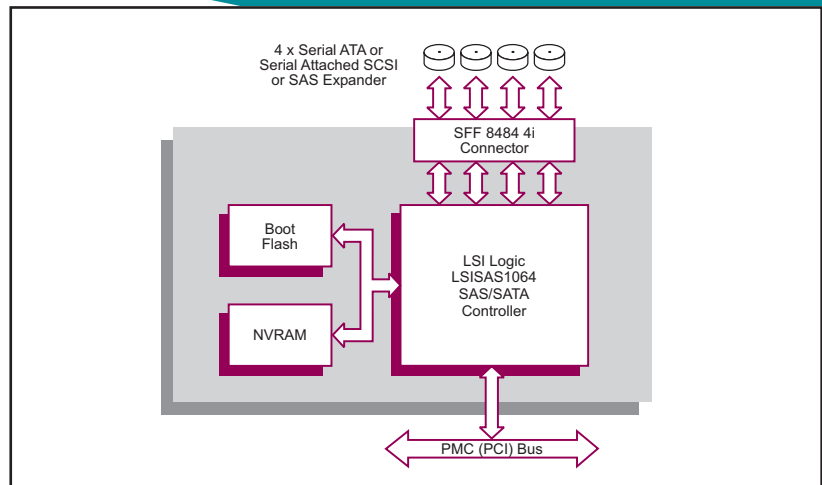
- requires 3.3V supply only:-
 - all voltages to be within $\pm 5\%$
 - power consumption less than 5.0W
- 5V, +12V and -12V not utilized

Environmental Specification

- operating temperatures:-
 - 0°C to +55°C (N-Series)
 - -25°C to +70°C (E-Series)
 - -40°C to +85°C (K-Series)
- 10% to 90% relative humidity (operating and storage):-
 - K-Series includes humidity sealant
- -40°C to +85°C (storage)

Mechanical Specification

- single size CMC (Common Mezzanine Card) 75mm x 150mm
- 10mm height stack module
- IEEE 1386-2001 compliant



ORDERING INFORMATION

Order Number	Product Description (Hardware)
SC PMC/SA1-00U	4-Port Serial Attached SCSI / Serial ATA Adapter with I/O via front panel
CB SA1/001-10	1m cable, to 4 SATA/SAS drive connectors (plus 4 power connectors)
CB SA1/002-10	1m cable, to 4 SATA drive connectors (no power connectors)
CB SA1/003-10	1m cable, to SFF-8484 (multilane) connector

For extended temperature, E or K-Series, please contact your local sales office