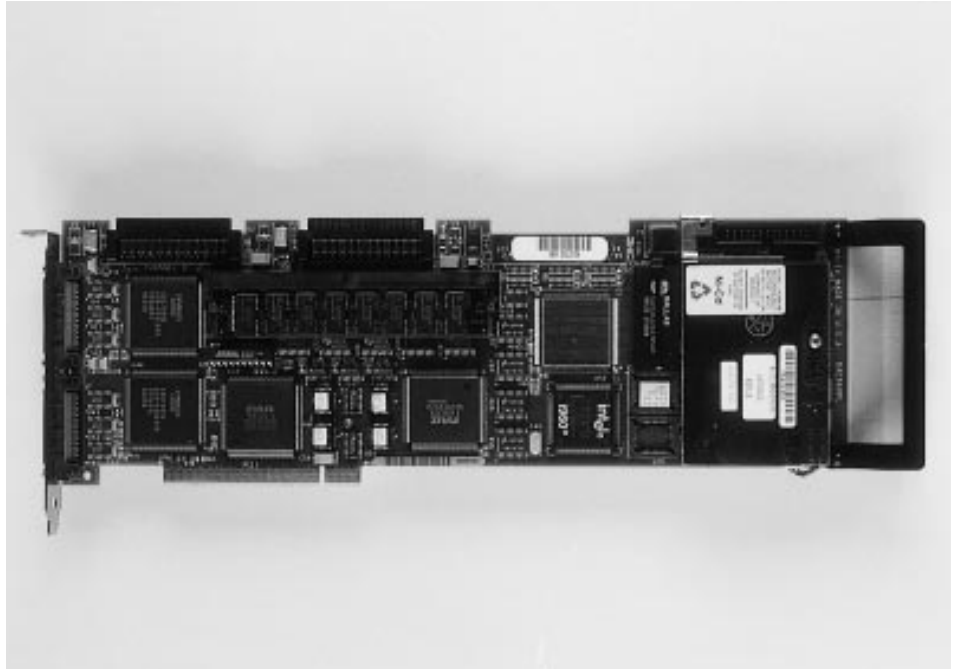# PCI SCSI-II RAID Controller

- Fast & Wide SCSI-II (20 MB/s)
- Two I/O Channels
- Support For:
  – RAID 0 Striping
  – RAID 1 Mirroring
  – RAID 5 Striping w/Distributed Parity
  – Other Combinations 0/1 & Spanning
- Flash Firmware and Programmable BIOS
- Up to 32 MB Write Back Cache w/Standard SIMMs
- 24 Hour Battery Backup
- External Device Support For Both Channels on Card
- Automatic Drive Failure Detection
- Hot Spare Option
- Complete Menu Based Utilities and Diagnostics
- All Supported OS Drivers Included
- Three Year Warranty
- Industry Standard SAF-TE Interface
- High Performance With Industry Standard Compability
- Supports Up to 14 Drives in Either Internal or External Configurations
- With Release 3.0 of the Firmware, Up to 28 Drives Supported
- Provides Increased:
  – Performance
  – Redundancy
  – Performance/Availability
  – Flexibility
- Easy to Support and Upgrade
- Low Cost Performance
- Protects Cached Data in the Event of a Power Failure
- Drive Two External Peripheral Boxes While Occupying One I/O Slot
- Constant Monitoring of Disk Array and Instant Notification of Drive Problems at the System Console and at the Drive Via Failure Indicators
- Release 3.0 of the Firmware Supports Auto Rebuild When New Drive Inserted For Hot-Swap Chassis

- Spare Drive Available to Instantly Replace Existing Drive in Event of Failure Ensures No Unscheduled Down Time
- Controller is Easy to Install and Configure With Minimum Time Investment
- Easy Installation and Integration Into OS Environment
- Low Risk Purchase
- Standard Wireless Environmental Monitoring

HIGHER I/O PERFORMANCE & PROTECTION AGAINST DATA LOSS

High performance servers require faster disk subsystems and protection against data loss. To meet these needs, Intel offers a two channel, SCSI-II RAID (Redundant Array of Inexpensive Disks) controller to complement the OEM line of scaleable servers. Intel's PCI disk array controller, based on the Intel i960® microprocessor, provides a high performance hardware RAID solution.

CONTACT:
Local Intel Sales Office
WWW: http://developer.intel.com

intel®

The controller supports data striping for performance, mirroring for data redundancy, and distributed striping with parity for the highest data availability at minimal cost.

Designed for transaction processing, network server, application server, and multi-user UNIX* environments, Intel's disk array controller can improve data throughput, balance I/O performance, and ensure availability of critical data. Best of all, the disk array controller has been tested and certified with major network operating system environments (single and multiple processor) to ensure the quality and reliability you expect from Intel.

FAMILY OF PLATFORMS AND ACCESSORIES

The PCI SCSI-II RAID controller is one of many accessories designed specifically for the OEM server line of platforms. Intel is offering several servers designed to meet the specific needs of the entry, mid-range, and high-end server markets. Intel also offers hardware and software solutions to manage servers remotely during routine and emergency situations.

COMPATIBILITY AND SUPPORT FOR OEMs

Intel is committed to exceptional product support and provides a wide range of services, including an extensive BBS and a comprehensive FaxBack* service. Additionally, every Intel server and accessory card comes with a three year factory warranty and has several options available for extended coverage and service.

BOARD FEATURES

CPU	i960 JF 32-bit microprocessor
Cache	
Size options	4, 8, 16, 32 MB (4 MB standard)
Type	1 x DRAM X36 SIMM
Write options	Write-through, Write-back
Battery backup	24 hours
SCSI	
Type	Fast & Wide SCSI-II
Channels	2 (max 7 devices per channel)
Connectors	2 internal
	2 external 68 pin ultra high density, 8mm
Controller	NCR 53C720
Peak Transfer	
Bandwidth	20 MB/s per channel
Bus	PCI
BIOS/Firmware	Flash EEPROM (16K x 8)
RAID Levels	0 - Block striping, no redundancy
	1 - Mirroring
	5 - Block striping with rotated XOR redundancy
	6 - Striping & mirroring

Fault Tolerance	Drive failure detection
	Hot replacement w/capable chassis
	Hot spare
	On-line rebuilding of replacement drive

ENVIRONMENT (SYSTEM LEVEL)

Ambient Temperature:
  Operating/Non-Operating +10°C to +35°C/-40°C to +70°C
Relative Humidity:
  Operating/Non-Operating 85% @35°C/95% @35°C
Altitude:
  Operating/Non-Operating to 10,000 ft./50,000 ft.
Static Discharge:
  25 Kv no component damage

REGULATIONS

EMI/RFI	FCC Class B
	CISPR 22 Class B

SOFTWARE

OS Support	Novell NetWare*
	SCO UNIX & ODT
	Windows* NT
	IBM OS/2
	Banyan* VINES*
	DOS
	UNIX System V
	UnixWare* System V
Tools:	Configuration Utility
	Diagnostics
	GAM Utility

OTHER FEATURES

User definable rebuild priority, Variable stripe width
Multi-Threading, Elevator sorting, Scatter/Gather

ORDERING INFORMATION

PCIRAID	2 channel PCI RAID controller with battery back-up, 4 MB cache, fault & LED cable

For more information or the number of your nearest Intel sales office, call (800) 628-8686 (U.S. and Canada) or +441793403000 (Europe)