



NS-RC 2500F

4 Ultra160 Channels
(Up To 8 Ultra160)



	CHANNELS	PROFILE
2500F	4 Ultra160	Half-height
2500F-50	4 Ultra160	Board-only

OVERVIEW

The newest member of the NS-RC 2500F series is designed with Infortrend's 133MHz chipsets and PowerPC 750CXe CPU for fast, high-throughput RAID operation. I/Os are rapidly processed and distributed to array hard drives via a high-speed 64-bit data path in the maximum bandwidth of 1056MB/second. The result is a controller ready for future applications that require both high sustained data rates and fast I/O turnaround.

FEATURES

High Flexibility

All SCSI channels can be defined as either host or drive. This allows integrators a flexible deployment for connecting multiple host systems through independent channels.

Firmware upgrade can be performed on single or redundant controllers during active services. Controllers can shift I/Os temporarily allowing firmware on both controllers to be updated. In the unlikely event of controller

failure, a failed unit can be replaced with one running later version of firmware.

64 array partitions and 128 LUN's per controller are supported.

High Data Availability

The controller's advanced capabilities ensure the highest level of availability and fault-tolerance. The capabilities include: automatic drive failure detection and background rebuild, bad sector reassignment, auto failback/failover, multi-level RAID, to name a few.

When the controller detects a hard drive failure in a RAID 1, 3, or 5 logical drive, the disk array instantly replaces the failed disk with a hot-spare. Data is reconstructed into the hot-spare drive without interference to the host. In the absence of a hot-spare drive, users can hot-swap the failed drive with a new one and an automatic rebuild will begin.

The battery backup option protects write-back cache data from sudden power interruptions. The battery supplies auxiliary power to maintain cached data for up to 72 hours.

Bad Media Management

The controller is capable of detecting bad sectors on SCSI drives during disk reads or writes, recovering the data from parity fault, and performing bad sector reassignments. Bad sector management is fully transparent to host.

Ultra160-to-Ultra160
External RAID Controller
5.25" Drive Profile

Active-Active Redundancy

The controller supports active-active redundancy with a synchronized write-back cache. Each controller has a dedicated high-bandwidth channel for an exact replica of the counterpart's cached data. I/Os belonged to a failed controller can be automatically transferred to the surviving controller, and vice versa to the replacement making failover and failback totally transparent to host.

Zero-Down-Time Technology

The controller is designed from top to bottom to be hot-swappable. The docking connectors and special canister mechanism ensure joining and separating main board free of signal glitches and power surge.

With automatic failover/failback, auto rebuild, synchronized cache..., disk array operation is thoroughly protected from possible causes of downtime.

Board-Only Solutions for OEMs
NS-RC 2500F controllers are the ideal solutions for OEM customers who design their own backplanes. The controller board can be readily integrated with a cableless and hot-swappable enclosure design via the connection of all supported signals over docking connectors.

