RAIDDrive
PCI Express SSD

RAIDDrive is designed to break the throughput bottleneck in the storage subsystem by removing the bandwidth limitation of the SATA bus. The PCIe x8 interface used by RAIDDrive SSDs supports 2GB/sec bandwidth, more than ten times that of the SATA-II 3Gbps bus, and five times greater than the not yet available SATA-III bus.

Using patented RAID architecture and NAND flash memory, RAIDDrive is able to support burst read speeds of up to 1.4GB/sec. A turbocharged cache system with up to 1GB of DRAM cache enables burst write speeds as fast as 1.2GB/sec. RAIDDrive, which houses four discrete SATA SSDs, comes in a custom aluminum enclosure measuring 257 x 107 x 25.4 mm. Higher capacity RAIDDrive models use the RAIDDrive Expander - a separate PCIe card - to hold a total of eight SATA SSDs.

Features

- PCIe x8 link host interface
- Burst Speed (max) : Read 1.4GB/s, Write 1.2GB/s
- Supports up to 2TB
- Super Talent patent pending technology
- MTTF : >1,500,000 hours
- Dimension: RAIDDrive: 255 x 107 x 25.4 mm;
RAIDDrive Expander: 255 x 99 x 25 mm
- Operating Temp. : 0 to 70C
- Data Reliability : Built in EDC/ECC function

RAID Features

- RAID level 0 with RxS0-xxxxx
- RAID level 5 with RxS5-xxxxx
- Instant Availability and background initialization
- Greater than 2TB per volume set (64bit LBA support)
- Field-upgradeable firmware in flash ROM

Monitors / Indicators

- System status indication through global HDD activity/fault connector, alarm buzzer
- SMTP support for email notification
- SNMP support for remote manager
- Enclosure management (SES2, SMP and SGPIO) ready

Architecture

- Intel IOP348 1.2GHz I/O processor with SAS controller
- On-board DDR2 SDRAM cache with ECC protection
- Write back cache support
- Supports up to 8pcs SSD with RAIDDrive Expander
- NVRAM for RAID configuration & transaction log
- Redundant flash image for adapter availability

Operating Systems

- Windows® 7, Vista, Server 2003, XP, 2000
- Linux
- FreeBSD
- Novell® Netware 6.5
- Solaris® 10 x86/x86_64
- SCO Unixware® 7.1.4
- Mac OS X 10.x (EFI Bios Support)