

## Chapter 2 Features

Five operating modes:

JBOD	Just a Bunch of Drives
Non-RAID	Disk Spanning
RAID-0	Disk Striping
RAID-1	Disk Mirroring and Striping (RAID 0+1)
RAID-3	Disk Striping with Dedicated Parity
RAID-5	Multiple Block Striping with Interspersed Parity

- ✓ Comprehensive failure management including:
  - Automatic bad sector reassignment
  - Hot-swapping
  - Spare drive operation (Supports both Global Spare and Local Spare)
  - Background rebuilding (Rebuild priority selectable)
  - Verify-after-Write supported on normal writes, rebuild writes and/or RAID initialization writes
- ✓ Works with any operating system without additional software drivers.
- ✓ 5.25" drive profile allows easy integration into external subsystem enclosures or directly into the host system's drive bay.
- ✓ Up to five drive channels (optional 3-channel upgrade) for a total of 75 connected drives.
- ✓ Supports up to 15 SCSI IDs per channel.
- ✓ Three optional upgrade daughterboards:
  - DA-ACCY-DUS : 3 Ultra Wide, single-ended, SCSI channels
  - DA-ACCY-DUW : 2 Ultra Wide, differential, SCSI channels
  - DA-ACCY-DU2 : 3 Ultra2 Wide SCSI channels
- ✓ Up to 8 logical drives, each with independent RAID modes; up to 32 LUN per SCSI ID (multiple SCSI ID per channel are supported)
- ✓ Up to 8 partitions per logical drive
- ✓ Logical drive can be assigned a name for ease of identification
- ✓ Number of drives for each logical drive has no limitation

- ✓ Dynamic mapping of LUNs to logical drives. Two or more LUNs can be mapped to the same logical drive for redundant host operation.
- ✓ Concurrent/Background logical drive initialization.
- ✓ Performance optimization for Sequential or Random I/O.
- ✓ Allows multiple drive failure and concurrent multiple drive rebuild of a RAID (0+1) logical drive.
- ✓ Configuration of individual SCSI target parameters.
- ✓ Controller can be assigned a name for ease of identification.
- ✓ Prior to first disk access, it allows adjustment of delay time during controller initialization to enhance compatibility with slow-initial drives
- ✓ All channels are Ultra2-Wide SCSI-2 (backward compatible to SCSI-1) and can be configured as either a host or drive interface
- ✓ Two or more SCSI channels can be simultaneously set as host interface for redundant host system operation
- ✓ Compatible and will automatically match any SCSI hard disks with SCSI-1, SCSI-2 or (Ultra)-Wide-SCSI (1 or 2) specification.
- ✓ Full Ultra2-Wide-SCSI-2 implementation including Tagged Command Queuing and Multi-Threaded I/O
- ✓ Uses AMD 5x86CPU with all executable firmware downloaded into high-speed DRAM
- ✓ EDO DRAM supported for enhanced performance.
- ✓ Up to 128 Mbytes of intelligent Read-Ahead/Write-Back cache with optional battery backup.
- ✓ Optional battery backup module to protect data in Write-Back cache when a power failure occurs:
  - DA-ACCY-BA : battery backup module
  - DA-ACCY-BD : battery backup daughter board that connects to DA-ACCY-BA
- ✓ Firmware resides in easy-to-update flash memory
- ✓ Front panel LCD and push buttons for configuration and message display
- ✓ Modem supported on either of the COM port.
- ✓ Supports TELNET with PPP protocol for remote administration
- ✓ GUI RAID Manager and RS-232terminal interface for RAID management

- ✓ SAF-TE support
- ✓ Supports Fault-bus for enclosure management.