



**C R D - 5 4 4 0**

## **5.25" Half-height Ultra SCSI Four Channel CMD Viper-II™ RAID Controller**



CMD's CRD-5440 Ultra SCSI-to-SCSI RAID controller is the industry's best solution for building cost-effective disk array subsystems used with entry-level / mid-range servers and workstations. The CRD-5440 breaks new ground for the data storage reseller by providing a high performance, yet compact RAID 0, 1, 0+1, 4, and 5 controller at an extremely attractive price point. The CRD-5440 incorporates the same advanced "Viper II" architecture as CMD's high-end, high-performance CRD-5500 RAID controller in a 5.25" half-height peripheral form-factor enclosure. The CRD-5440 is designed for single or dual host applications requiring two to forty-five SCSI disk drives.

### **Key Benefits**

The CRD-5440 was designed specifically to provide an easy to integrate solution for small to medium capacity, desktop workstation and server applications requiring a RAID subsystem with

high performance and data integrity. Unlike bus-based RAID controllers or RAID software, the CRD-5440 requires no custom drivers or changes to the host operating system and does not use any host bus slots. The CRD-5440 is fully transparent and provides dramatically improved performance and reliability compared to bus-based RAID controller solutions without affecting host application compatibility or reliability.

### **Advanced Features**

- 40 MHz, 32-bit LR33310 RISC CPU (MIPS R3000 core)
- Proprietary CMD RAID ASICs for advanced features and highest performance
- Up to 256 MB of data cache using two industry-standard, 72-pin SIMM modules
- RAID Levels 0, 1, 0+1, 4, and 5
- All models include four (4) Ultra SCSI channels
- Disk Channels: Up to three Ultra SCSI Low Voltage Differential (LVD) or Single-Ended (SE), model dependent
- Host Channels: Up to three Ultra SCSI Low Voltage Differential (LVD) or Single-Ended (SE); or two Ultra SCSI High Voltage Differential (HVD), model dependent
- Built in LCD and serial port interface
- Compact 5.25" half-height peripheral form-factor simplifies integration into industry-standard enclosures

**GENERAL**

System Architecture	40 Mhz LR33310 32-bit RISC CPU — Internal 80 MB/sec, 36-bit DMA data path and XOR using CMD's custom ASIC RAID chipset
Host Bus Interface	Up to three 40 MB per second Ultra SCSI Low Voltage Differential (LVD) or Single-Ended (SE); or two 40 MB per second Ultra SCSI High Voltage Differential (HVD), model dependent*
Disk Bus Interface	Up to three 40 MB per second Ultra SCSI Low Voltage Differential (LVD) or Single-Ended (SE), model dependent* - Supports up to 45 SCSI disk drives represented as up to 32 LUNs
Command Queuing	32 commands per active host port (channel)
Cache	Up to 256 MB using two, industry-standard, 72-pin, 60 ns SIMM modules
Operating Systems Compatibility	Most operating systems supporting standard SCSI with a block size of 512 bytes and SCSI LUNs

\* Combined total of four host/disk channels

**ENVIRONMENTAL**

Temperature	5°C to 50°C operating, -40°C to +60°C non-operating ambient
Relative Humidity	10% to 85% non-condensing (operating), 5% to 90% non-condensing (non-operating)

**PHYSICAL**

Controller Size	8.6" deep, 5.75" wide, 1.7" high — Industry-standard, high density 68-pin SCSI connectors, standard 4-pin Molex power connector(s)
Power Required	5VDC @ 3 amps peak — 12VDC @ 1 amp peak
Warranty	Three years return to factory (for original purchaser)

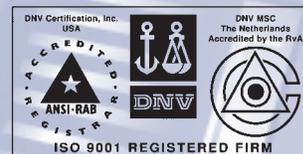
*Specifications subject to change without notice.*

**Ordering Information**

- CRD-005440-104 RAID controller in half-height with four (4) Ultra SCSI LVD / SE channels. May be configured in any combination of host and disk channels.
- CRD-005440-101 Same as CRD-005440-104 except channels are SE only.
- CRD-005440-102 Same as CRD-005440-104 except controller is a fixed two host HVD and two disk SE channel configuration.
- ORD-005440-104 OEM, board-only version of CRD-005440-104
- ORD-005440-101 OEM, board-only version of CRD-005440-101
- ORD-005440-102 OEM, board-only version of CRD-005440-102



*Note: Requirements and specifications for SIMMs used in the CMD products are available upon request, or see CMD's WEB site: [www.cmd.com](http://www.cmd.com).*



**Storage/RAID, Cluster/RAID**



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