

KEY FEATURES

MTD2000

- Dual-Port 20Gb/s InfiniBand HCA w/ PCI Express x8
- Dual Processor, Dual-Core Intel Xeon (Woodcrest) based server
- 8GB of DDR2 Memory
- 3U SAS storage chassis
- LSI Logic SAS 8480E RAID adapter
- 576GB of total storage (16 x 36GB, 15K RPM SAS HDDs)
- 4X copper InfiniBand Cable
- Optional SAS HDDs Expansion via MTD2000E

MTD2000E

- 3U SAS JBOD storage chassis expander
- 16 HDD supported
- SAS expansion cable
- Up to 126 disks can be supported with multiple MTD2000Es

KEY BENEFITS

- Native InfiniBand Storage Development Platform
- 20Gb/s InfiniBand storage I/O performance
- Block and File Level storage protocols
- Compatible with open-source software solutions
- Cost-effective commodity components

MTD2000 – 20Gb/s InfiniBand Storage Product Development Kit for Storage OEMs and System Integrators

Overview

The Mellanox MTD2000 Storage Product Development Kit (PDK) integrates all hardware and software required to implement a high performance InfiniBand block or file-level storage solution. The PDK is based on industry standard components including a dual processor, multi-core Xeon based server, InfiniBand 20Gb/s HCA, and Serial-Attached-SCSI (SAS) disk drives. This 3U platform comes pre-loaded with 576GB of disk storage, and can be expanded by connecting a single or multiple MTD2000Es, a 3U SAS JBOD storage chassis through a SAS expansion cable.



The MTD2000 PDK is compatible with open source file and block level storage protocols that run over InfiniBand interconnect. The platform has been proven compatible with the open source SCSI RDMA Protocol (SRP) Target software (also available on www.openfabrics.org) and NFS-RDMA server software (also available on www.sourceforge.net) that both run under the Linux operating system. OEM and system integrators can use the source code as a base to optimize performance, development value add features, integrate with customized management and file system applications and port to specific hardware components to provide a complete, differentiated InfiniBand storage solution to the market.



Delivered Performance

The MTD2000 PDK takes advantage of of 20Gb/s InfiniBand interconnect and delivers industry leading performance. The platform has been measured to deliver 1100MB/s of read and 1000MB/s of write performance to hard disks when using SRP for raw block storage access from a single initiator to the MTD2000 Storage PDK. When using the NFS-RDMA protocol, two clients reading from the MTD2000's cache delivers 1400MB/s of performance while RAID-5 write performance to hard disks delivers nearly 400MB/s of performance. Additional performance can be realized when attaching additional disks with the MTD2000E SAS JBOD chassis expander. For additional setup and configuration details, or for more information on how to start development, please contact your local Mellanox sales representative.



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