Coraid EtherDrive® HBAs

Ethernet SAN Server Adapters

Coraid EtherDrive server adapters and driver software enable server connectivity to EtherDrive storage arrays to deliver an affordably fast and scale-out Ethernet SAN.

The growth of server virtualization and cloud storage environments, has led to the need for more physical I/O (input/output) ports. Coraid meets the need with dual and quad port HBAs and Mezzanine cards that enable a fast and scalable Ethernet SAN.

EtherDrive Host Bus Adapter (HBA)

Coraid EtherDrive HBA and driver software for Linux, Oracle Solaris, Windows Server and VMware enable your x86 server to connect to EtherDrive SAN storage providing performance and scalability for virtual and cloud storage environments.

An Ethernet SAN is comprised of shared storage over Layer 2 Ethernet. Coraid EtherDrive HBA and software driver perform the translation of the disk requests to the EtherDrive storage array. EtherDrive LUNs appear as locally attached SCSI disks on the server host.

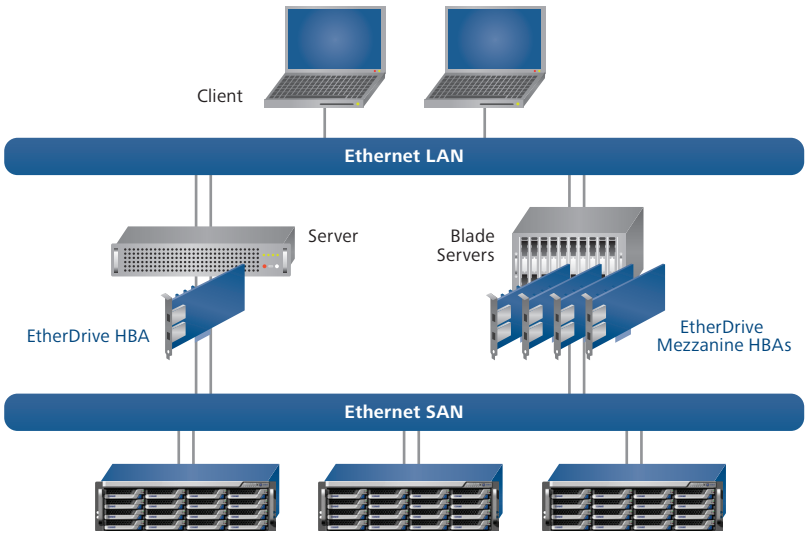
Fault Tolerance

Every EtherDrive HBA has at least two Ethernet ports. It is recommended that each port be connected to the SAN network. Having multiple connections to the SAN network provides network redundancy and enables higher bandwidth throughput.

MultiPathing is built into the EtherDrive HBA driver and requires no extra configuration. The EtherDrive HBA automatically detects all network paths to EtherDrive SAN storage. It then utilizes each path to load balance all data packets bound for EtherDrive SAN storage and if there is a network path failure it will automatically failover to a working network path.

KEY FEATURES AND BENEFITS

- 1 Gigabit and 10 Gigabit Ethernet SAN ports
- HBA software drivers available for leading operating systems
- Automatically discovers Ethernet SAN storage LUNs
- Provides network fault tolerance (path failover) without requiring port aggregation or bonding
- Utilizes all IO paths between the server and storage LUNs to provide extremely high throughput



EtherDrive SRX Storage Arrays

coraid
REDEFINING STORAGE

EtherDrive HBA Specifications

Coraid Part Number	EHBA-2-E-RJ45	EHBA-20-E-RJ45	EHBA-20-E-SFP	EHBA-20-E-CX4	EHBA-4-Etm	EHBA-20-KX4m	EHBA-2-NC360m	EHBA-4-NC364m	EHBA-20-C1810m
Description	Coraid Dual GigE HBA for RJ-45	Coraid Dual 10GigE HBA for 10GBase-T	Coraid Dual 10GigE HBA for SFP+	Coraid Dual 10GigE HBA for CX4	Coraid Quad GigE Mezzanine card for Dell M-series blade servers	Coraid Dual 10 GigE Mezzanine card for Dell M-series blade servers	Coraid Dual GigE Mezzanine card for HP c-Class blade servers	Coraid Quad GigE Mezzanine card for HP c-Class blade servers	Coraid Dual 10GigE Mezzanine card for IBM blade servers
Ports	Dual Port	Dual Port	Dual Port	Dual Port	Quad Port	Dual Port	Dual Port	Quad Port	Dual Port
Throughput	1GbE	10GbE	10GbE	10GbE	1GbE	10GbE	1GbE	1GbE	10GbE
Connector	RJ-45	RJ-45	SFP+	CX4	No	No	No	No	No
Cable	Category-5, 100 m	Category-6, 55 m Category-6a, 100 m	SFP+ twin axial, 10 m Dual LC fibre-optic, 300 m	8 pair, 100 ohm twin axial	None (backplane connection)	None (backplane connection)	None (backplane connection)	None (backplane connection)	None (backplane connection)
Bus type	PCIe 2.0 x4	PCIe 2.0 x8	PCIe 2.0 x8	PCIe 2.0 x8	PCIe 2.0 x4	PCIe 2.0 x8	PCIe 1.0 x4	PCIe 1.0 x4	PCIe 2.0 x8
Form Factor	Low profile MD2	Low profile MD2	Low profile MD2	Low profile MD2	SFF Mezzanine	SFF Mezzanine	SFF Mezzanine	SFF Mezzanine	CFFh Mezzanine
Linux									
CentOS 5.7 64-bit	✓	✓	✓	✓					
CentOS 6.2 64-bit	✓	✓	✓	✓					
RHEL 6.4 & 6.5	✓	✓	✓	✓					
SUSE Enterprise Server II	✓	✓	✓	✓					
Nexenta									
NexentaStor 3.1.2	✓	✓	✓	✓	✓	✓	✓	✓	✓
OpenStack									
Cinder	✓	✓	✓	✓					
Oracle Solaris									
Solaris 10 x86	✓	✓	✓	✓					
Solaris 11 x86	✓	✓	✓	✓					
Windows Server									
2003 32-bit	✓	✓	✓	✓	✓	✓	✓	✓	✓
2003 64-bit	✓	✓	✓	✓	✓	✓	✓	✓	✓
2008 SP2 32-bit	✓	✓	✓	✓	✓	✓	✓	✓	✓
2008 SP2 64-bit	✓	✓	✓	✓	✓	✓	✓	✓	✓
2008 R2 64-bit	✓	✓	✓	✓	✓	✓	✓	✓	✓
2008 R2 Server Core 64-bit	✓	✓	✓	✓	✓	✓	✓	✓	✓
2012 64-bit	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMware									
ESX 5.1 & 5.5	✓	✓	✓	✓	✓	✓	✓	✓	✓
Standards Compliance	802.3ae 10Gigabit and 802.3x Flow Control								
Ethernet SAN MTU Frame size	The network must be configured to transfer 9000 byte jumbo frames								
Operating Temperature	0°C/32°F to 55°C/131°F								
Relative Humidity	20%-90% (non-condensing)								
Support	Advanced Service Plan for 1 year, 3 years and 5 years, including warranty								

EtherDrive HBA Server Platform Support

For details regarding the server platforms supported by Coraid EtherDrive HBAs, see the table on the following page.

EtherDrive HBA Server Platform Support

Coraid Part Number	Supported Servers
EHBA-2-E-RJ45 Coraid Dual GigE HBA for RJ-45	Intel x86, AMD x86, Sun x86
EHBA-20-E-RJ45 Coraid Dual 10GigE HBA for 10GBase-T	Intel x86, AMD x86, Sun x86
EHBA-20-E-SFP Coraid Dual 10GigE HBA for SFP+	Intel x86, AMD x86, Sun x86
EHBA-20-E-CX4 Coraid Dual 10GigE HBA for CX4	Intel x86, AMD x86, Sun x86
EHBA-4-Etm Coraid Quad GigE Mezzanine card for Dell M-series blade servers	Dell PowerEdge M610, M610x, M520, M420
EHBA-20-KX4m Coraid Dual 10 GigE Mezzanine card for Dell M-series blade servers	Dell PowerEdge M915, M910, M820, M620
EHBA-2-NC360m Coraid Dual GigE Mezzanine card for HP c-Class blade servers	HP ProLiant BL685c-G7, BL685c-G6, BL685c-G5, BL680c-G7, BL680c-G5, BL620c-G7, BL495c-G6, BL495c-G5, BL490c-G7, BL490c-G6, BL465c-G7, BL465c-G6, BL465c-G5, BL460c-G7, BL460c-G6, BL460c-G5, BL460c, BL280c-G6, BL260c-G5, BL2x220c-G6, BL2x220c-G5
EHBA-4-NC364m Coraid Quad GigE Mezzanine card for HP c-Class blade servers	HP ProLiant BL685c-G7, BL685c-G6, BL680c-G7, BL680c-G5, BL620c-G7, BL495c-G6, BL495c-G5, BL490c-G7, BL490c-G6, BL465c-G7, BL465c-G6, BL465c-G5, BL460c-G7, BL460c-G6, BL280c-G6, BL2x220c-G6 HP Integrity BL890c-i2, BL870c, BL870c-i2, BL860c, BL860c-i2
EHBA-20-C1810m - Dual 10GigE Mezzanine card for IBM blade servers	IBM BladeCenter HS23, HS23E, HS22, HS22V, HX5

About Coraid

Coraid redefines storage with its breakthrough line of EtherDrive and EtherCloud solutions. Coraid delivers scale-out performance, Ethernet simplicity, and an elastic storage architecture to handle massive data growth. Designed from the ground up for virtualization and cloud architectures, Coraid's platform has been deployed by thousands of companies worldwide, including enterprises, government agencies, and private cloud-building organizations. For more information, visit www.coraid.com.

coraid 255 Shoreline Drive | Redwood City, CA 94065 USA | +1.650.517.9300 | info@coraid.com | www.coraid.com

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