# **Coraid EtherDrive® Storage Platform**

Modular Storage for Public Cloud Service Providers and Large Enterprise Private Clouds

**Coraid data storage solutions fit your business – providing what you need, the way you need it, when you need it.** Pay-as-you-grow flexibility makes Coraid the ideal solution for cloud service providers and enterprises facing rapid, unpredictable growth. And unlike other storage systems that require costly forklift upgrades or increase operational complexity by forcing you to manage multiple storage silos for multiple workloads, Coraid solutions are purpose-built for mixed workloads, and provide compute and capacity resources that scale elastically with your needs.

With easy-to-use software and industry-standard hardware, Coraid enables you to handle petabyte scale and dynamic workloads, while dramatically lowering your operating and capital expenses related to storage. When you choose Coraid, you partner with storage experts who have the proven ability to successfully design, implement and support your multi-petabyte public or private cloud deployment.

#### All-in-one platform for file and block storage and management

- Combines a high-performance, feature-rich File System with a highly-parallel, scale-out block infrastructure
- Optimizes manageability and remediation with superior workflows and visibility
- Reduces CAPEX with an architecture based on industry-standard hardware

# Storage efficiency now, data integrity forever

- Simplifies building an efficient, flexible storage platform using a rich set of storage features
- Protects against silent data corruption during storage
- Prevents miscopies during data transmission and migration

# Scale-out architecture for easy growth

- Simplifies scaling just add more ZX appliances (or pairs if configured in High Availability mode) for data services, SRX shelves for capacity, EX appliances for modular growth, or add Flash drives for performance
- Eliminates complex, error-prone setup, configuration, and multi-pathing by leveraging Layer-2 Ethernet to connect these modular components
- Speeds deployment of pooled storage, enabling administrators to share resources for any number of front-end applications and file systems

#### **Designed for mixed workloads**

- Enables you to set service-level objectives across performance, resilience, and availability on a per-workload/tenant basis
- Lets you reconfigure storage as workload profiles change
- Streamlines systems and avoids multiple, stranded silos of storage

# THE CORAID ETHERDRIVE FAMILY

The EtherDrive storage platform provides a modular architecture that fits a variety of workloads, and scales capacity and performance when you need it.

# Coraid EtherDrive EX: Unified Storage



EtherDrive EX is a block and file storage solution for companies that want to start small and scale to petabyte+ environments. The EtherDrive

EX appliance is packaged in a highly dense form factor, and provides availability and resiliency within a single node.

# Coraid EtherDrive ZX: High-Performance File Storage



EtherDrive ZX leverages the open storage architecture capability of Coraid EtherDrive

to bring together two exceptional systems. The ZX combines a high-performance file system that can grow to petabyte+ environments as well as scale-out block storage infrastructure that offers simplicity and flexibility.

# Coraid EtherDrive SRX: Scalable Block Storage



EtherDrive SRX block storage solutions offer flexible building blocks for cloud-scale storage deployments. EtherDrive SRX appliances leverage a massively

parallel, connectionless storage networking fabric and software intelligence to aggregate commodity hardware resources and manage them as a pooled resource.



#### **EtherDrive EX & ZX Software Features**

File System	128-bit addressability			
File-level Protocol	NFS, CIFS			
Block Protocol	ATA-over-Ethernet (AoE) – only on EX			
Thin Provisioning	Allows storage capacity to be easily allocated, on a just-enough and just-in-time basis, thereby eliminating the "volume reserve" fixed allocation often required by legacy storage			
Hybrid Storage Pools	Optimized storage hierarchy with pools of storage containing DRAM, flash, and disk drives			
Data Compression	Can save up to 50% of total disk space via choice of 4 compression algorithms, for tuning the right mix between application performance and storage			
RAID	Striping, mirroring, triple-mirroring, single-parity RAID, double-parity RAID, triple-parity RAID, wide stripes			
Remote Management	SNMP and IPMI			
Data Protection	Read-only snapshots, writeable clones, local and remote replication			
Data Integrity	Protects against both "silent data corruption" during disk storage, miscopies, and mistransmissions via checksums and other protections. With self- healing capabilities, bad data is detected and automatically repaired using the correct data (for RAID configurations)			
Network Services	NTP and SMTP-based alerts			
High Availability	Integrated High Availability Active / Active configuration with automatic failover			

#### **EtherDrive Hardware Specifications**

Feature	EX	zx	SRX	Cache Enclosure
Models / Memory "S" models have SFP+ connectors "R" models have RJ45 connectors	<ul> <li>EX3260-S2 (64GB RAM)</li> <li>EX3260-R2 (64GB RAM)</li> </ul>	<ul> <li>ZX4000-S4 (256GB RAM)</li> <li>ZX4000-R4 (256GB RAM)</li> </ul>	• SRX6200-S2 • SRX6200-S4 • SRX6200-R2 • SRX6200-R4 • SRX6300-S2 • SRX6300-S4 • SRX6300-R2 • SRX6300-R4	Optional enclosure
Form Factor	4U	2U	SRX6200: 2U SRX6300: 4U	2U
Drive Bays – Hot Swappable	Up to 60	n/a	SRX6200: Up to 24 SRX6300: Up to 36	Up to 12
Capacity	Up to 240TB w/ 4TB HDD	More than 2PB, using 15 SRX chassis with 4TB HDD as capacity nodes	Up to 144TB w/ 4TB HDD	n/a
Network Interface Ports (SFP+ or RJ45)	2x10Gb Ethernet	4x10Gb Ethernet	2 x 10GbE or 4 x 10GbE	n/a
Expansion Interface Ports (SFP+ or RJ45)	2x10Gb Ethernet	4x10Gb Ethernet	n/a	n/a
Chassis / Enclosure Size (W x H x D)	16.56" x 6.97" x 34.00"	17.50" x 3.50" x 29.00"	17.70" x 7.00" x 25.50"	17.20" x 3.50" x 25.50"
Weight – Without Drives	76.8 Kg (169 lbs)	16.4 Kg (36.1 lbs)	SRX6200: 27.3 Kg (60 lbs) SRX6300: 45.3 Kg (100 lbs)	1023.6 Kg (52 lbs)
Relative Humidity (non-condensing)	10% to 80%	10% to 90%	20% to 90%	10% to 90%
Power Consumption (max)	1865W	1000W	SRX6200: 350W SRX6300: 560W	1200W
<b>Power Supply</b> – Dual Redundant, Hot Swappable	230 VAC, 50/60Hz	100-240 VAC, 50/60Hz		
Operating Temperature	5° C to 35° C (41° F to 95° F)			

#### **About Coraid**

Coraid provides storage solutions for cloud service providers and enterprises that are experiencing rapid, unpredictable data growth. Coraid leverages Layer 2 Ethernet to elevate network performance and improve operational effectiveness for companies deploying dynamic, large-scale, multi-workload environments. With its modular, pay-as-you-grow architecture, easy-to-use software, and proven support, design, and implementation, Coraid partners with customers to enable just-in-time scaling and versatility with quick return on investment. For more information, visit www.coraid.com.

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