EMC CLARiiON CX3 Model 80

Networked Storage System

Architect of an Open World™

EMC CLARiiON CX3-80

Performance, Scalability, Flexibility

Bull enriches its StoreWay offer with the CX3-80 high-end model of the CLARiiON CX3 UltraScale Series which benefits from the high performance, cost-effective and compact UltraScale architecture. The CX3 Model 80 perfectly fits within SAN infrastructures; it offers a complete suite of advanced storage software, in particular the local and remote replication features. Thanks to its high levels of performance, scalability and flexibility the CX3 Model 80 enables storage consolidation, demanding OLTP workloads, and applications requiring high drive counts and high bandwidth such as scientific computation and data ware house. Bull delivers professional services for the audit, architecture, integration and installation phases of storage projects, and support services for the optimized use of the CX3-80.

UltraScale Architecture benefits :

- New CLARiiON CX3 UltraScale architecture is designed from the ground up to deliver optimized performance, new levels of scalability, flexible configuration, and even higher resilience.
- Leading flexibility with support for 1, 2, and 4 Gb/s SAN connectivity with auto-negotiation to simplify deployment in existing SANs.
- High bandwidth throughout the new CX3 UltraScale architecture- from the 4 Gb/s SAN, through the innovative native PCI Express I/O interconnect, to the 4 Gb/s UltraPoint technology, and on to high-performance 4 Gb/s 15k RPM disk drives- allows customers to realize the full power of the CLARiiON CX3 series.
- The CX3 Model 80 delivers from 365 GB up to 239 TB of storage, features eight 4 Gbit/s FC front-end ports and enables connection to up to 256 servers.

Built-in high availability :

- RAID protection levels 0, 1,1/0, 3 and 5, all of which can coexist in the same array to match the different protection requirements of data.
- Battery backed-up write mirrored cache, and cache vault disks to ensure data protection in the event of a power failure.
- Automated system diagnostics.
- Redundant data paths, power supplies, drive connections and storage processors.

Advanced Storage Software :

- Navisphere Manager simplifies and automates the management of the storage infrastructure.
- Navisphere Analyser allows the investigation of performance and trends.
- PowerPath offers multi-path access between CX arrays and attached servers, and also dynamically balances the I/O load over all channels.
- SnapView creates point-in-time snapshots and full-copy clones of production data for faster backup and restore operations.
- MirrorView performs remote data mirroring for data protection and application recoverability in the event of disaster.
- SAN Copy enables high-speed data copying between multi-vendor storage arrays.

Specifications

CLARiiON CX3-80

Drive Interface	73 GB	73 GB	146 GB	146 GB	300GB	500 GB
Formatted capacity* GB	67.7	67.7	135	135	272	465
Form factor	3.5″	3.5″	3.5″	3.5″	3,5″	3,5″
Height	1.0″	1.0″	1.0″	1.0″	1.0″	1.0″
Rotational speed (rpm)	10,000	15,000	10,000	15,000	10,000	7,200
Interface	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel
Data Buffer MB	16	16	32	32	32	16
Transfer rates Buffer to/from media MB/s	26.7-40.2	57-86	43-78	58-96	59-118	29-64
SP to/from buffer MB/s (max.)	200	400	200	400	200	200
Access time						
Average Seek ms Read Write	 5.2 6.2	 3.6 4.0	 4.7 5.3	 3.5 4	 4.7 5.4	 8.5 9.5
Rotational latency ms	2.99	2	2.99	2	3	4.17

Dimensions			
Rackmount processor chassis with standby power supplies (standard NEMA 19-inch rack)			
Height : 10.25 in. (26.07 cm) 6 EIA units	Width : 18.98 in. (48.21 cm)	Depth : 28.05 in (71.25 cm).	Weight : 235 lb (106.6 kg) max.
Rackmount 4Gb Fibre Channel Ponit-to-Point disk expansion chassis with dual power supplies			
Height: 5.25 in. (13.33 cm) 3 EIA units	Width : 17.72 in. (45.0 cm)	Depth : 14.00 in. (35.56 cm)	Weight : 68 lb (30.9 kg) max.

System memory: 8 GB per storage processor	Number of drives : 5 up to 480	RAID levels: RAID 0, 1, 1/0, 3, 5

Available software	Navisphere ® Manager, Navisphere Analyzer, SnapView™, MirrorView™, PowerPath ® , SAN Copy™	
Connected hosts	Windows, Solaris, Linux Red Hat, Linux SuSE, AIX, HP-UX , VMware	
Front-end connectivity	4 FC 4 Gbit/s optical ports per processor	
Power	Processor chassis	Disk expansion chassis
AC Voltage	100-240 VCA ±10 %, single phase	100-240 VCA ±10 %, single phase
Frequency	47-63 Hz	47-63 Hz
Power consumption	820 VA (800 W) max.	440 VA (425W) max.
Heat dissipation (max.)	2,730 Btu/hr	1,450 Btu/hr
Protection	Rackmount : 20 amps, fused	Rackmount : 10 amps, fused
AC Circuits	Redundant, external AC circuits	Redundant, external AC circuits
Inlet type	Dual inlet Rackmount : IE320-C14 Appliance coupler	Dual inlet Rackmount : IE320-C14 Appliance coupler
Operating environment		
Temperature	50-104 degrees F (10-40 degrees C)	
Temperature gradient	10 degrees C/hr	
Relative humidity	20% to 80 % (non-condensing)	
Altitude	8,000 ft. (2438.4 m) @ 104 degrees F (40 degrees C) max. 10,000 ft. (3048 m) @ 98.6 degrees F (37 degrees C) max.	
Electromagnetic emissions and immunity	FCC Class A CE Mark ICES-003 Class A (for Canada) EN55024 Immunity, ITE BSMI	EN55022 Class A VCCI Class A (for Japan) AS/NZS 3548 Class A (for Australia, New Zealand) Class A (for Taiwan)
Quality and Safety standards	UL 60950 ; CSAC 22.2-60950, FN 60950 NEBS Level 3 Certification ETSI EN 300 386 Manufactured under an ISO 9000-registered quality system	

*Note: the FLARE® storage operating environment requires 33 GB of disk space on each of the first five drives.

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