



PRELIMINARY SPECIFICATIONS

4Gb Fibre Channel SBOD Storage System

S3F4SL

Next-Gen Enterprise Solutions



Ideal for Storage Applications in:

- Online Transaction Processing
- Internet Appliance Accelerators
- Data Warehousing and Mining
- Storage Area Network
- Video Processing
- Communications Systems
- Medical, Laboratory and Scientific Research
- Real-Time Data Acquisition
- Web/Email Caching

E-Disk® Altima™ SAN 4Gb Fibre Channel Switched BOD

BitMICRO Networks, Inc. brings you the most advanced solid state disk (SSD)-based storage system with the E-Disk® Altima™ SAN Fibre Channel Switched BOD (SBOD) solution. By integrating the power, flexibility, and reliability of Fibre Channel switching with high-performance E-Disk® Altima™ SSDs, the E-Disk® Altima™ SAN S3F4SL is an ideal enterprise storage solution for hosting hot files and other data that require the highest performance and least latency, such as those required by OLTP and large multi-user applications and environments. The file cache storage subsystem may be deployed as a high performance, business critical storage layer within DAS, NAS, and SAN architectures as part of a tiered storage implementation.

The E-Disk® Altima™ SAN S3F4SL storage system utilizes up to 10 high-density, 1-inch E-Disk® Altima™ SSDs. This represents the largest storage capacity in a single SSD-based enclosure in the industry today. What's more, the E-Disk® Altima™ SAN S3F4SL storage system can scale up to 6.2 TB in a single 3U rack mount enclosure and provides trouble-free expansion up to 43 TB of pure solid state non-volatile storage.

Features and Benefits:

AVAILABILITY

- Point-to-point disk drive communications
- Drive cooling provided by four centrifugal blowers
- Hot swap components for maximum availability and dual redundant feature select module
- Extended SES for advanced management features

PERFORMANCE

- Supports FC-AL at 1, 2, or 4 Gb/s
- Multi-path trunking doubles interconnect performance
- Supports the industry's fastest and largest solid state disks

SCALABILITY

- High drive packaging density. Supports combination of up to sixteen (16) 1" E-Disk® Altima™ drives and hard drives in a 3U rack mount system.
- Grow online capacity or throughput with E-Disk® Altima™ Fibre Channel solid state disks (capacities range from 16 GB to 640 GB)
- Expand up to 6.2 TB of solid state storage in a single enclosure
- Multi-host connectivity with four (4) Fibre Channel hosts

SPECIFICATIONS FOR  SAN S3F4SL 4Gb Fibre Channel SBOD Storage Systems
Flash Disk and Solid State Disk Storage Solutions

System Specifications:

External Interface via I/O Modules	1, 2, & 4 Gb/s FC-AL external ports (4 x SFP Optical)
Supported Hosts	Single/Dual Active/Dual Independent Bridge
Maximum No. of E-Disk® Altima™ Fibre Channel Drives	10
Total SSD Capacity per Enclosure	Up to 6.2 TB (using 640GB E-Disk Altima FC drives)
Expansion Chassis	Up to 7 enclosures
Total SSD Expansion Capacity	Up to 43 TB (using 640GB E-Disk Altima FC drives)
E-Disk® Altima™ Fibre Channel Drive Supported Capacities (GB)	16, 32, 64, 128, 192, 384, 640
Hot Swap Components	E-Disk Altima Drives, power supplies, cooling fans, I/O Modules
SES Compliance	Yes

Performance Specifications:

I/O Transactions Per Second	Up to 200,000 IOPS
Sustained Read	Up to 600 MB/s
Sustained Write	Up to 400 MB/s

Environmental Specifications:

Operating Temperature	+5 to +40 °C
Operating Shock	5g 10ms, half-sine
Operating Vibration	Random 0.21 grms 5-500 Hz
Humidity	20 to 80% Non-Condensing
Altitude	0 to 7,000 feet

Physical Specifications:

Form Factor	3U	
Solid State Storage Capacity	16 GB to 6.2 TB	
Weight (excluding drives)	77.6 lbs (35 Kg)	
Dimension	Height	5.12 in (130 mm) (3EIA Units)
	Width	19.0 in (482.6 mm)
	Depth	19.7 in (500 mm)

User Interface:

Host Interface	Fibre Channel Arbitrated Loop
Drive Interface	40-Pin SCA2 Fibre Channel
SES Interface	RS-232
Error Notification	Audible Alarm, Fault Indicators
Operator Panel	Enclosure ID Selection, Status Indicators, and Configuration Switches
Certification/Compliance	UL, FCC, CE, EU RoHS, China RoHS

Power Requirements:

Voltage	110 to 240V AC or -48V DC Option for Telco Applications
Frequency	48 – 62 Hz
Power Consumption	Dual 450 Watts Power Supply Units with Power Factor Correction

Product Part Number:

Part Number Options	OS3F004S + XXXXY + TGM + AFFC
XXXX: SSD Capacity (per Enclosure)* <i>Last digit denotes single decimal number</i> (e.g. 0320 = 32.0 GB, 0062 = 6.2 TB)	16 GB to 6.2 TB
Y: Capacity Unit*	G: Gigabyte T: Terabyte
T: Temperature	C: Commercial (+5 to +40 °C)
G: PowerGuard®	1: Save Mode on Power Down
M: Media Type	L: Large Block SLC NAND Flash
A: Casing	N: Not Applicable
FF: No. of Disks	01: One E-Disk® Altima™ Drive 02: Two E-Disk® Altima™ Drives 03: Three E-Disk® Altima™ Drives : 10: Ten E-Disk® Altima™ Drives
C: Coating	N: No Conformal Coating (default)
Example	OS3F004S0062TC1LN10N

*1 GB = 1,024 Mbytes; 1 TB = 1,024 Gbytes

Note: Please contact BITMICRO Sales Representative for details on SBOD components.

BITMICRO's product specifications and engineering development objectives are subject to change at anytime without prior notice. All information provided herein is provided for design comparison and reference purposes only.

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One gigabyte, or GB, equals 1,073,741,824 bytes when referring to solid state disk capacity. Actual usable storage capacity may vary based on various factors, including operating system, file size, file format, features, application software, and disk space reserved for flash management files.

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