

EonStor® S12S-G1033 2U RAID Subsystem

High Performance SAS RAID
ASIC400 platform
Flexibility with SAS or SATA Drives

Configuration Flexibility

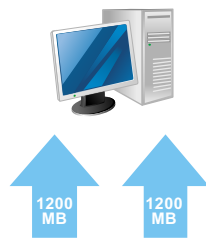
OVERVIEW

The RAID subsystem provides multi-lane Serial Attached SCSI (SAS) host interface that overcomes the limitations of parallel SCSI to achieve enhanced performance, high availability and reliability. With the SAS wide links, the subsystem can be flexibly expanded with enterprise-class SAS drives or cost-effective SATA drives.

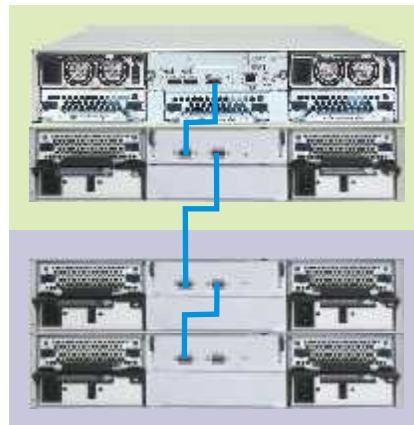
The subsystem is equipped with redundant and hot-swappable components to ensure continuous and reliable operation. Besides the familiar firmware-embedded utility, SANWAtch, further enables easy administration, comprehensive manageability and optimal performance.

APPLICATIONS

Infortrend products are widely applied in disk-to-disk backup, server-attached and network data storage and in major industries such as data-mining, medical imaging, scientific research, security/CCTV, and digital media including video-on-demand, stream editing and more.



Enterprise-level SAS Drives or Cost-effective SATA Drives



• SAS drives:

- enhanced performance and reliability
- often-accessed, business-critical data



Data Lifecycle Management

• SATA drives:

- affordable cost and high capacity
- less-accessed data archive

HIGHLIGHTS

SAS-to-SAS Series: Multi-lane SAS to SAS or SATA Drives

- Single RAID controller
- Fault-tolerant hardware modules
- 2 SAS 4x wide host ports
- SAS or SATA-II (3Gbps) disk drives
- Infortrend's 5th-generation ASIC400 RAID engine
- RAID6 to withstand simultaneous drive failures
- SAS SFF-8088 interface connectors
- Max. 60 drives (1 RAID + 4 JBODs)
- SANWatch management suite with snapshot support
- Matched JBOD: S12S-J1000-G

(For the connection between RAID and JBOD, SFF-8088 to SFF-8470 cable is required. For the connection between JBODs, SFF-8470 to SFF-8470 cable is required.)



AVAILABLE MODELS

1 channel = 4 combined PHYs

Model	Controller	Host Channels	Drive Bays	Expansion Port	Disk # Supported	SAS connector
S12S-G1033	Single	2	12	1	1 RAID+4 JBOD (60 HDD)	SFF-8088

SPECIFICATIONS

Subsystem Characteristics

- ASIC400 RAID engine
- Up to 2GB cache per controller
- SAS host ports 2
- LCD keypad panel 1
- BBU (per controller) 1
- Default DDR cache memory 512MB
- 10/100 Ethernet port 1
- COM ports 2
- PSUs 2
- Cooling modules 3
- Diagnostic LEDs on all FRUs

Drive Interface

- No. of disk trays 12
- 3Gbps SATA-II
- Enclosure service via I²C or in-band over SAS links
- SAS multi-lane expansion port (per controller) 1

Host Connection Ports

- Data single path bandwidth SAS: 12Gbps
- Tag command queuing 256

RAID Configurations

- RAID levels 0, 1(0+1), 3, 5, 6, 10, 30, 50, 60
- Up to 32 logical drives (varied by memory size)
- Up to 1024 LUNs (varied by memory size)
- Multiple array configurations
- Background rebuild/scan/initialization
- Infortrend Smart fault management technologies

High Availability

- Redundant, hot-swappable FRUs
- Subsystem self-diagnostics
- Li-Ion battery backup (standard for R2130)
- UPS status detection
- Cluster ready

Management

- Java-based SANWatch management suite
- Terminal via RS-232C
- Telnet over Ethernet
- LCD keypad panel
- Event notification methods: Email/Fax/LAN broadcast/SNMP traps/SMS/MSN

OS Support

- Microsoft Windows 2000 Server/2003 Server
- Sun Solaris ver. 9/10
- Red Hat Linux ver. 8/9, 64bit, Enterprise ver. 3
- SuSE: Linux ver. 8/9, 64bit
- Fedora 64bit
- MAC OS X Version 10.4

Requirements

- AC Input: 100-240VAC 350W with PFC
- DC Output: 12V-25A; 5V-25A; 3.3V-20A
- Relative Humidity: 5% to 95% non-condensing
- Operating Temperature: 0°C to 40°C (without BBU) 0°C to 35°C (with BBU)

Dimensions

- With chassis ears/protrusions: 482mm W x 88mm H x 516mm D
- Without chassis ears/protrusions: 446mm W x 88mm H x 498mm D

Certificates

- IEC 60068-2,
- MIL-STD-810E/883E,
- ISTA,
- ASTM-D3332,
- IPC-TM-650
- IEC 1000-4
- IEC 1000-3-2, IEC 1000-3-3
- ISO 7779/3744

- RoHS
- Microsoft WHQL- Windows Server 2003

EMC

- CE
- EN 55022: 1998/A1: 2000/A2: 2003
- EN 61000-3-2: 2000/A2: 2005
- EN 61000-3-3: 1995/A1: 2001
- EN 55024: 1998/A1: 2001/A2: 2003
- FCC (FCC Part 15, subpart B)
- BSMI (CNS 13438)

Safety

- UL (60950-1: 2003)
- BSMI
- CNS 14336: 1993
- IEC 60950-1, First Edition

S12S-G1033



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