



XJ3000-2123

SSG JBOD Compatibility Test Report

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Originate Date	Revision	Revision	Release Status
2012/2/7	A1	A1	Preliminary Formal Release



Product Specification

Title	XJ3000-2123
	XJ3000-2123 Entry-Level SAS/SATA 6G JBOD Series
Features	Enterprise JBOD
	High performance, redundancy & connectivity SAS interface supports
	High performance/availability SAS drives and high capacity/lower cost SATA drives in a single system, the flexibility to reduce total cost of ownership (true mix-and-match of drives in a single enclosure)
	Two 4-port connectors for host or expansion with automatic port speed detection and negotiation
	Scalable with expansion ports to couple with business growth
	Environment monitoring with SEP/SES support
	Redundant 6G expander modules and power supply, hot-swap drives and fans for high availability and easy maintenance
Specifications	
XJ3000-2123 Entry-Level SAS/SATA 6G JBOD Series	
GENERAL	
Number of Expander	Single/Dual
Host Interface	Single Mini SAS 4x connector
Expansion Interface	Single Mini SAS 4x connector
Expander Chip	LSISAS2x28
Transfer Speed	2,400MB/s per connector
DRIVES SUPPORTED	
Drive Interface	3.0/6.0 Gb dual ported SAS, 1.5/3.0/6.0 Gb single ported SATA
Drive RPM	Up to 15,000
Form Factor	3.5", 1" height
ADMINISTRATION / MANAGEMENT	
Admin/Firmware Upgrade	In-band & Out-of-band Serial port via Hyperterminal
LED Indicators, Audible Alarm	Yes
HOT-SWAP & REDUNDANCY	
Disk Drive	Hot-swap 12-bay
Cooling	2 x hot-swap blowers
Power Supplies	500W 1+1 hot-swap redundant 80+ (Sliver)

Power Entry	Dual AC Inlet	
ELECTRICAL & ENVIRONMENTAL		
Universal A/C Input	100~240V AC full range	
Operating Environment	Temperature 0°C to 35°C Relative humidity 20% to 80%	
Non-operating Environment	Temperature -20°C to 60°C Relative humidity 10% to 90%	
PHYSICAL SPECIFICATION		
Dimensions (W x D x H)	mm	482.6 x 450 x 88.8
	inches	19 x 20 x 3.5
Gross Weight	w/ PSU; w/o Rail & Disks	23kgs / 50.6lbs
Packaging Dimension (W x D x H)	mm	600 x 730 x 288
Cubic Feet	5.2	
Reference Container Loading	20'	210
	40'	435
	40' HQ	520

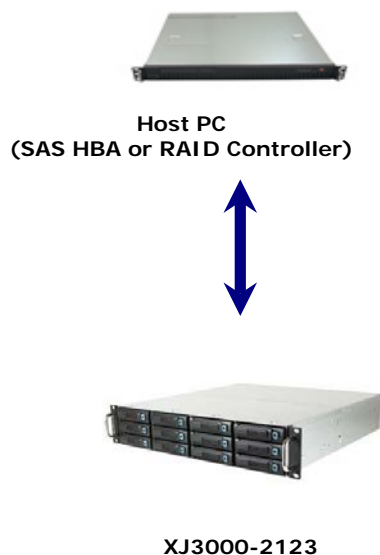
Product image



Dimensions (W x D x H)
(with chassis ears/protrusions)

mm : 482.6 x 450 x 88.8
inches : 19 x 20 x 3.5

1. Single Host



MotherBoard: TYAN I5400PW S5397
 OS: Microsoft Windows Server 2003 Service Pack 2 32bit
 CPU: Intel Xeon L5410 2.33GHz *1
 Memory: Transcend DDR2 667 FB-DIMM/ 1GB *2
 HDD: Seagate 160GB ST9160511NS *1

SAS HBA: LSI 9200-8e, FW: 11.00.00.00, BIOS: 7.17.00.00(2011.2.18),
 Driver: 2.0.49.0, GUI: N/A

SAS HBA: LSI 3801E, FW: 01.31.02.00-IT, BIOS: 06.32.00.00,
 Driver: 1.34.2.0, GUI: 2.92-02

3G SAS RAID CARD: Areca ARC1680, FW: V.1.49_2010_12_02, BIOS: V.1.22d_2010_11_18, Driver: 6.20.0.22, GUI: V.1.87_111101

3G SAS RAID CARD: Adaptec 5085, FW: 5.2.0.18252, BIOS: 5.2.0.18252, Driver: 5.2.0.18252, GUI: 7.00.00.18781

3G SAS RAID CARD: ATTO R348, FW: 3.80, BIOS: 4.05, Driver: 3.70.2.0, GUI: 4.01

3G SAS RAID CARD: LSI 8888ELP, FW: 1.40.282-1279, BIOS: 2.07.00, Driver: 5.1.112.32, GUI: 11.06.00.0300

3G SAS RAID CARD Promise EX8654, FW: v1.10.0000.00, BIOS: 3.00.0000.88[OEM0450], Driver: 5.1.0.4, GUI: V3.15.0000.00

6G SAS RAID CARD: Areca ARC1880IX, FW: 1.49_2011_08_02, BIOS: V1.22d, Driver: 6.20.0.22, GUI: V.1.87_111101

6G SAS RAID CARD: 3 Ware 9750-8e, FW: FH9X 5.12.00.013, BIOS: BE9X 5.11.00.007, Driver: 5.1.0.46, GUI: 2.11.00.019

6G SAS RAID CARD: ATTO R680, FW: 2.55, BIOS: 3.06, Driver: 2.10.2.0, GUI: 4.01

6G SAS RAID CARD: Intel RS2PI008, FW: 2.120.63-1242, BIOS: 3.22.00_4.11.05.00, Driver: 5.1.112.32, GUI: 11.06.00.0300

6G SAS RAID CARD: Adaptec 6405, FW: 5.2.0, BIOS: 5.2.0, Driver: 5.2.0.18300, GUI: 7.30.00(18837)

6G SAS RAID CARD: LSI 9260-4i, FW: 2.70.13-0889, BIOS: 3.13.00, Driver: 5.1.112.32, GUI: 11.12.01.01



Summary

Item	Descriptions	Result
HBA Card compatibility test	LSI 9200-8e SAS HBA	PASS
	LSI 3801E SAS HBA	PASS
RAID Card compatibility test	Areca ARC1680 SAS RAID CARD	PASS
	Adaptec 5085 SAS RAID CARD	PASS
	ATTO R348 SAS RAID CARD	PASS
	LSI 8888ELP SAS RAID CARD	PASS
	Promise EX8654 SAS RAID CARD	PASS
	Areca ARC1880IX SAS RAID CARD	PASS
	3 Ware 9750-8e SAS RAID CARD	PASS
	ATTO R680 SAS RAID CARD	PASS
	Intel RS2PI008 SAS RAID CARD	PASS
	Adaptec 6405 RAID CARD	PASS
	LSI 9260-4i RAID CARD	PASS

** Notes: Test items and test contents depend on spec.



RAID Card Compatibility Test

Test Engineer	Jack Huang
Model name	XJ3000-2123
MFG	1.1.0.1
Firmware	1.11.1.1
Enclosure Management	V1.09
Backplane	B40-2ATCXMXX00A100
HDD Type for 6G RAID Card	6G SAS HDDs: HITACHI HUS156060VLS600 600GB *6 Seagate ST3600057SS 600GB*6
HDD Type for 3G RAID Card	3G SAS HDDs: HITACHI HUS154545VLS300 450GB *10 Fujitsu MBA3300RC 300GB *2
Power Housing	ZIPPY MRW-5500V4V AC INPUT:100-240V 47-63Hz 8-4A, DC OUTPUT: 500W
Power Module	ZIPPY MRW-3500V-R AC INPUT:100-240V 47-63Hz 8-4A, DC OUTPUT: 500W
Other	

Test Configuration			
Item		Result	Note/Issue ID
RAID Function Test	Method		
Areca ARC1680 RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
Adaptec 5085 RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 1 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Create/Rebuild/Remove a RAID 50 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 1 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	

	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
	Remove a crashed RAID 50 volume	Pass	
ATTO R348 RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 1 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 1 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
LSI 8888ELP RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 1 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Create/Rebuild/Remove a RAID 50 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 1 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
	Remove a crashed RAID 50 volume	Pass	
Promise EX8654 RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Create/Rebuild/Remove a RAID 50 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
	Remove a crashed RAID 50 volume	Pass	
Areca ARC1880IX RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	

	Remove a crashed RAID 10 volume	Pass	
3Ware 9750-8e RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Create/Rebuild/Remove a RAID 50 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
	Remove a crashed RAID 50 volume	Pass	
ATTO R680 RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 1 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 1 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
Intel RS2PI008 RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 1 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Create/Rebuild/Remove a RAID 50 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 1 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
	Remove a crashed RAID 50 volume	Pass	
Adaptec 6405 RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 1 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Create/Rebuild/Remove a RAID 50 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 1 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	

	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
	Remove a crashed RAID 50 volume	Pass	
LSI 9260-4i RAID Function	Create/Remove a RAID 0 volume	Pass	
	Create/Rebuild/Remove a RAID 1 volume	Pass	
	Create/Rebuild/Remove a RAID 5 volume	Pass	
	Create/Rebuild/Remove a RAID 6 volume	Pass	
	Create/Rebuild/Remove a RAID 10 volume	Pass	
	Create/Rebuild/Remove a RAID 50 volume	Pass	
	Remove a crashed RAID 0 volume	Pass	
	Remove a crashed RAID 1 volume	Pass	
	Remove a crashed RAID 5 volume	Pass	
	Remove a crashed RAID 6 volume	Pass	
	Remove a crashed RAID 10 volume	Pass	
	Remove a crashed RAID 50 volume	Pass	



HBA Card Compatibility Test

Test Engineer	Jack Huang
Model name	XJ3000-2123
MFG	1.1.0.1
Firmware	1.11.1.1
Enclosure Management	V1.09
Backplane	B40-2ATCXMXX00A100
HDD Type for 6G HBA Card	6G SAS HDDs: HITACHI HUS156060VLS600 600GB *6 Seagate ST3600057SS 600GB*6
HDD Type for 3G HBA Card	3G SAS HDDs: HITACHI HUS154545VLS300 450GB *10 Fujitsu MBA3300RC 300GB *2
Power Housing	ZIPPY MRW-5500V4V AC INPUT: 100-240V 47-63Hz 8-4A, DC OUTPUT: 500W
Power Module	ZIPPY MRW-3500V-R AC INPUT: 100-240V 47-63Hz 8-4A, DC OUTPUT: 500W
Other	

Test Configuration			
Item		Result	Note/Issue ID
HBA Function			
LSI 9200-8E SAS HBA Card	While using LSI 9210-8e SAS HBA to connect with XJ3000-2123 SAS JBOD. Then check if all hard drives can be detect by LSI BIOS utility.	Pass	
	While using LSI 9210-8e SAS HBA to connect with XJ3000-2123 SAS JBOD. Then check if all hard drives can be detect by OS Disk management.	Pass	
LSI 3801E SAS HBA Card	While using LSI 3801E SAS HBA to connect with XJ3000-2123 SAS JBOD. Then check if all hard drives can be detect by LSI BIOS utility.	Pass	
	While using LSI 3801E SAS HBA to connect with XJ3000-2123 JBOD. Then check if all hard drives can be detect by LSI MSM.	Pass	
	While using LSI 3801E SAS HBA to connect with XJ3000-2123 SAS JBOD. Then check if all hard drives can be detect by OS Disk management.	Pass	