



## Interoperability Report for 3ware 6Gb/s SAS Controllers

**This represents basic compatibility and is only a guide to hardware which is known to function with the listed 3ware SATA+SAS controllers.**

**Updated 7/29/2013**

**Controllers ♦ Disk Drives ♦ Solid State Drives ♦ Motherboards ♦ Enclosures ♦ SAS Switches ♦ Cables**

The 3ware QA group performs comprehensive functionality testing in order to demonstrate compatibility of the 3ware product line. The listed components represent the interoperability guide for the direct attached storage ecosystem based on our findings. Testing consists many individual test cases specific to Enclosures, Drives, and Motherboards and includes RAID functionality across all supported RAID levels, & basic enclosure SES functions (drive locate, array locate, fan, temperature, power supply, and enclosure information), enclosure power cycles during IO and physical drive pulls.

## 3ware SAS 6Gb/s Interoperability Matrix

### Controllers

Manufacturer	Model	Memory	FW Version	S/W Revision
LSI	3ware 9750-4i	512MB DDR2	5.12.00.016	10.2.2.1
	3ware 9750-4i4e	512MB DDR2	5.12.00.016	10.2.2.1
	3ware 9750-8i	512MB DDR2	5.12.00.016	10.2.2.1
	3ware 9750-8e	512MB DDR2	5.12.00.016	10.2.2.1
	3ware 9750-16i4e	512MB DDR2	5.12.00.016	10.2.2.1
	3ware 9750-24i4e	512MB DDR2	5.12.00.016	10.2.2.1

## 3ware SAS 6Gb/s Interoperability Matrix

### Hard Disk Drives

Manufacturer	Type	Generation	Model/Family	FW Version	Capacity (GB)	Size
Fujitsu	SAS	3Gb/s	MAX3036RC	n/a	36	3.5"
			MAX3073RC	D206	73	
			MAX3147RC	104	146	
			MBA3300RC	103	300	
		6Gb/s	MBB2073RC	n/a	73	2.5"
			MBB2147RC	105	147	
			MBE2073RC	0103	73	2.5"

## 3ware SAS 6Gb/s Interoperability Matrix

### Hard Disk Drives

Manufacturer	Type	Generation	Model/Family	FW Version	Capacity (GB)	Size
Hitachi	SATA	3Gb/s	HDT725050VLA360	V560A52A	500	3.5"
			HDS721010KLA330	GKA0A51D	1000	
			HUA721010KLA330	GKAOA70M	1000	
			HUA722010CLA330	JP40A39C	1000	
			HDS722020ALA330	JKA0A3EA	2000	
			HUA722020ALA330	JKA0A28A	2000	
		6Gb/s	HDS723020BLA642	MN60A580	2000	
			HUA723020ALA640	MK70A580	2000	
			HUA723030ALA640	MKA0A580	3000	
			HUS724040ALE640	MJAOA380	4000	
	HUS724040ALA640	MFAOA8B0	4000			
	HUS724030ALA640	MFAOA8B0	3000			
	HUS724020ALA640	MFAOA8B0	2000			
	SAS	3Gb/s	HUS151436VLS300	A420	36	3.5"
			HUS153073VLS300	A140	73	
			HUS153014VLS300	A140	147	
		6Gb/s	HUC151473CSS600	A330	73	2.5"
			HUC103014CSS600	A120	147	2.5"
HUS156030VLS600			A5D0	300	2.5"	
HUC103030CSS600			A120	300	2.5"	
WD9001BKHG			A120	600	2.5"	
HUS723020ALS640	H166	2000	3.5"			

Hitachi		HUS723030ALS640	H166	3000	3.5"
		HUS724040ALS640	A152	4000	3.5"
		HUC109090CSS600	a1D0	900	2.5"
		HUC109090CSS601	b1D0	900	2.5"
		HUC109060CSS601	b1D0	600	2.5"
		HUC109045CSS601	b1D0	450	2.5"
		HUC109030CSS601	b1D0	300	2.5"
		HUSML4020ASS600	A310	200	2.5"
		HUSML4040ASS600	A310	400	2.5"
	HUC101212CSS600	A35A	1200	2.5"	

## 3ware SAS 6Gb/s Interoperability Matrix

### Hard Disk Drives

Manufacturer	Type	Generation	Model/Family	FW Version	Capacity (GB)	Size
Seagate	SATA	3Gb/s	ST3500630NS	3.AEG	500	3.5"
			ST3500641NS	3.AEC	500	
			ST3750330NS	SN06	750	
			ST3750640NS	3.AEK	750	
			ST31000340NS	SN06	1000	
			ST32000644NS	AN11	2000	
		6Gb/s	ST500NM0011	SN003	500	3.5"
			ST1000NM0011 See <a href="#">KB16598 regarding compatibility</a>	SN003	1000	3.5"
			ST2000NM0011	SN003	2000	3.5"
			ST33000650NS	0001	3000	3.5"
			ST91000640NS	SN01	1000	2.5"
			ST9500620NS	SN02	500	2.5"
	SAS	3Gb/s	ST336754SS	0003	36	3.5"
			ST373454SS	0003	73	
			ST373455SS	0002	73	
ST3146356SS			0003	146		
ST3300655SS			0002	300		
ST3300656SS			0003	300		
ST31000640SS			0004	1000		

## 3ware SAS 6Gb/s Interoperability Matrix

### Hard Disk Drives

Manufacturer	Type	Generation	Model/Family	FW Version	Capacity (GB)	Size
Seagate	SAS	6Gb/s	ST3300657SS	0005	300	3.5"
			ST1000NM0001	0001	1000	
			ST32000444SS	0004	2000	
			ST2000NM0001	0001	2000	
			ST33000650SS	0002	3000	
			ST3000NC002	SNZ1	3000	
		2.5"	ST973452SS	0001	73	
			ST9300603SS	B248	300	
			ST9450404SS	0006	450	
			ST9500430SS	0001	500	
ST9500620SS	0002	500				
Toshiba	SATA	3Gb/s	MK5061GSYB	ME0A	500	2.5"
			MK1002TSKB	MT2A	1000	3.5"
			MK2002TSKB	MT1A	2000	3.5"
		6Gb/s	MK2002TSKB	MT1A	2000	3.5"
			MG03ACA100	FL1A	1000	
			MG03ACA200	FL1A	2000	
	MG03ACA300		FL1A	3000		
	SAS	6Gb/s	MK3001GRRB	102	300	2.5"
			MBF2300RE	101	300	
			MBF2450RE	101	450	
MBF2600RE			101	600		
MK2001TRKB	105	2000	3.5"			

## 3ware SAS 6Gb/s Interoperability Matrix

### Hard Disk Drives

Manufacturer	Type	Generation	Model/Family	FW Version	Capacity (GB)	Size
WD	SATA	3Gb/s	WD5000ABYS	12.01C01	500	3.5"
			WD5001ABYS	58.01D01	500	
			WD7500AYYS	30.04G30	750	
			WD1000FYPS	03.A03	1000	
			WD1003FBYX	01.01V01	1000	
			WD2003FYYS	01.00D02	2000	
		6Gb/s	WD1500HLHX	5G04	150	3.5"
			WD3000HLHX	5G04	300	
			WD4500HLHX	5G04	450	
			WD5003ABYX	01.01S01	500	
	WD6000HLHZ	04.05G04	600			
	WD6000HLHX	5G04	600			
	WD2000FYYZ	01.01KX1	2000			
	WD3000FYYZ	01.01KX1	3000			
	WD4000FYYZ	01.01KX1	4000			
WD1000DHTZ	04.06A00	1000				
SAS	6Gb/s	WD3000BKFG	n/a	300	2.5"	
		WD9001BKHG	SR03	900		
	6Gb/s	WD6001HKHG	SR07	600	3.5"	
WD9001HKHG	SR04	900				

## 3ware SAS 6Gb/s Interoperability Matrix

### Solid State Drives (SSD)

Manufacturer	Type	Generation	Model/Family	FW Version	Capacity (GB)	Size
Adata	SATA	3Gb/s	S599	3.0.5	100	2.5"
Hitachi	SAS	6Gb/s	HUSSL4040ASS600	A131	600	
			HUSSL4010BSS600	A190	100	
			HUSSL4020BSS600	A190	200	
			HUSSL4040BSS600	A190	400	
Kingston	SATA	6Gb/s	SE100S37/100GB	510ABBF0	100	
			SE100S37/200GB	510ABBF0	200	
			SE100S37/400GB	510ABBF0	400	
Intel	SATA	3Gb/s	SSDSA2M080G2GC	02HD	80	
			SSDSA2SH032G1GN	045C8790	32	
			X25-M, SSDSA2ME20	350	200	
		6Gb/s	SSDSC2BW060A3 (520 series)	400i	60	
			SSDSC2BW120A3	3CPi	120	
			SSDSC2MH120A2C	PPXC	120	
			SSDSC2MH120A2xx (510 series)	PWG4	120	
			SSDSC2BW120A3 (520 series)	400i	120	
			SSDSC2BW180A3 (520 series)	400i	180	
			SSDSC2BW240A3 (520 series)	400i	240	
SSDSC2MH250A2xx (510 series)	PWG4	250				
SSDSC2BW480A3 (520 series)	400i	480				
Micron	SATA	6Gb/s	MTFDDAC128MAM-1J1	0001	128	
			MTFDDAC256MAG-1G1	0002	256	
			MTFDDAC256MAM-1K1	0001	256	
			MTFDDAC512MAM-1K1	0001	512	
OCZ Technology	SATA	6Gb/s	D2CSTK251M21-0120	2.22	120	2.5"

Samsung	SATA	6Gb/s	PM830, MZ7PC128HAFU-00000 PM830, MZ7PC256HAFU-000DA MZ7TD480HAGM-000DA MZ7WD480HAGM-00003 840 Pro Series	CXM0101Q CXM0101Q DXT03W1Q DXM85W3Q DXM05B0Q	128 256 480 480 512	2.5"
	SAS	6Gb/s	MZ6ER800HAGL/003 MZ6ER400HAGL/003	DM0A DM0A	800 400	
SanDisk	SAS	6Gb/s	LB806M LB406M LB206M	P325 P325 P325	800 400 200	2.5"
Seagate	SATA	6Gb/s	ST100FM0012 ST200FM0012 ST400FM0012 ST800FM0012	0004 0004 0004 0004	100 200 400 800	2.5"
	SAS	6Gb/s	ST100FM0002 ST200FM0002 ST400FM0002 ST800FM0002	0003 0003 0003 0003	100 200 400 800	

3ware SAS 6Gb/s Interoperability Matrix						
Solid State Drives (SSD)						
Manufacturer	Type	Generation	Model/Family	FW Version	Capacity (GB)	Size
OCZ	SATA	6Gb/s	D2CSTK251M11012	2.15	120	2.5"
			VTX3-25SAT3-120G	2.15	120	
			Agility3 AGT3-25SAT3-120G	2.15	256	
Patriot Memory	SATA	3Gb/s	Torqx	n/a	128	
		6Gb/s	PW240GS25SSDR	320ABBF0	240	
Samsung	SATA	3Gb/s	MCB4E50G5MXP-OVB	VBC3803Q	50	
			MCC0E1HG5MXP-OVB	VBC3803Q	100	
			MZ7PC256HAFU-000DA	CXM01W1Q	256	
STEC	SATA	1.5Gb/s	M8ISB2-32UC	2119	32	

			M8ISB2-50UC	2119	50
Toshiba	SAS	6Gb/s	MK4001GRZB	0107	400
Unigen	SATA	3Gb/s	UGB88PGB100HB1-ES	RC Rev-1	100

3ware SAS 6Gb/s Interoperability Matrix				
Systems / Motherboards				
Manufacturer	Model/Family	BIOS Version	Chipset	CPU Type
Apple	Mac Pro	n/a	Intel w/ PCIe Gen 1.0	Intel Xeon
	Mac Pro	n/a	Intel w/ PCIe Gen 2.0	Intel Xeon
Arima	NM461	NK46X 071	nVidia nForce 2200 Pro	AMD Opteron
ASRock	760GM-P33	2.67C	AMD 760G Northbridge	AMD Athlon II X2
Asus	A8N-SLI Deluxe	6.00PG	nVidia nForce4	Athlon64
	KFN4-D16	1002	nVidia nForce 2000 Pro	AMD Opteron
	KFN4-DRE	1002	nVidia nForce 2200 Pro	AMD Opteron
	M4A78LT-LE	2.61	2,61 AMD 760G/SB710	AMD Athlon II X2
	P5B-VM	0505	Intel Q965/ICH8DO	Intel Core2 Duo
	P5WD2-E	1050	Intel 975X	Intel Pentium D
	P6T6 WS Revolution	507	nVidia nForce 200	Intel Core i7
Dell	PowerEdge 1900	n/a	Intel 5000P	Intel Xeon
	PowerEdge 2900	n/a	Intel 5000X	
	PowerEdge SC440	1.1.0	Intel 3000	

Gigabyte	GA-H61M-USB3-B3	6.00PG	Intel H61 Express	Intel Core i7
HP	dc7800	01.24	Intel Q35 Express	Intel Core2 Duo
	DL145 G3	4.0 R6.1	ServerWorks HT2100	AMD Opteron
	xw8400	2.24	Intel 5000X	Intel Xeon
Intel	DH61BE	BEH6110H.86A.0020.2011.0218.1538	Intel H61 Express	Intel Core i3
	DX58S0	SOX5810J.86A.2127.2008.0914.1638	Intel X58 Express	Intel Core i7
	S3210SHLC	3200x38.86B.00.00.033	Intel 3210	Intel Core 2
Intel	S5000PAL	S5000.86B.10.00.0081	Intel S5000P	Intel Xeon
	S5000PSL	S5000.86B.04.00.0066	Intel S5000P	Intel Xeon
	S5000VSA	S5000.86B.04.00.0066	Intel S5000P	Intel Xeon
	SE7230NH1-LX	NH72310J.86B.1340.2007.0308.1650	Intel E7230	Intel Pentium 4

3ware SAS 6Gb/s Interoperability Matrix				
Systems / Motherboards				
Manufacturer	Model/Family	BIOS Version	Chipset	CPU Type
Intel	SE7520BD2	SE7520BD22.86b.P.09.00.075	Intel 7520	Intel Xeon
	SE7525RP2	RP20.86B.P.05.00. 0020.12160050818	Intel 7525	
	SSR212MC2BR	S5000.86B.04.00.0066	Intel S5000P	
	SSR212MC2R	S5000.86B.04.00.0066	Intel S5000	
Rackable	C2004	n/a	Intel S5000P	Intel Xeon
	S3118	n/a	Intel S5000P	
Silicon Mechanics	iServ R276-SAS	1.1 (motherboard) & A.09 (chassis)	Intel 5000P	Intel Xeon
Supermicro	C2SBA+II	1.1	Intel G33 + ICH9R	Intel Core2 Duo
	C7X58	1.1a	Intel X58 Express	Intel Xeon
	H8DC8	1.0c	nVidia CK804	AMD Opteron
	H8DCi	1.0a	nVidia CK804	
	H8DGi	1.0b	SR5690/SP5100	
	H8DME-2	2.1a	nVidia MCP55 Pro	
	H8DSR-8	1.0c	ServerWorks HT2000	
	H8QC8	1.0a	nVidia CK804	
H8SMA-2	2.0a	nVidia MCP55 Pro		

Supermicro	PDSMA+	1.2b	Intel 3000	Intel Pentium 4
	PDSMU	1.3	Intel 3010	
	X6DAE-G	1.2a	Intel E7525	Intel Xeon
	X6DAi-G	1.2c	Intel E7525	
	X6DH3-G2	2.0	Intel E7520	
	X6DHE-G2+	2.0	Intel E7520	
	X6DHT-G	2.0c	Intel E7520	

## 3ware SAS 6Gb/s Interoperability Matrix

### Systems / Motherboards

Manufacturer	Model/Family	BIOS Version	Chipset	CPU Type
Supermicro	X7DAE+	2.0b	Intel S5000X	Intel Xeon
	X7DB3	2.1a	Intel 5000P	
	X7DB8	1.3c	Intel 5000P	
	X7DBE	1.1c	Intel 5000P	
	X7DBE+	1.1	Intel 5000P	
	X7DBi+	1.3c	Intel 5000P	
	X7DBN	1.2	Intel 5000P	
	X7DBR3	2.1a	Intel 5000P	
	X7DBU	2.4	Intel 5000P	
	X7DCL-3	1.0	Intel S5100	
	X7DCU	1.1c	Intel 5100	
	X7DWA-N	1.1	Intel S5400	
	X7DWE	1.0	Intel S5400	
	X7DWN+	1.0b	Intel S5400	
	X7DWT-INF	1.0b	Intel S5400	
	X7QC3	1.0a	Intel 7300	
	X7SBL-LN2	1.0	Intel 3200	
	X8DAE	1.0c	Intel 5520	Intel Xeon
	X8DAH+	1.0c	Intel 5520	
	X8DT3-F	1.0c	Intel 5520	
X8DTH-iF	1.1	Intel 5520		
X8DTL-6F	1.0c	Intel 5500		
X8DTL-i	1.0	Intel 5500		

## 3ware SAS 6Gb/s Interoperability Matrix

### Systems / Motherboards

Manufacturer	Model/Family	BIOS Version	Chipset	CPU Type
Supermicro	X8DTN+-F	1.0a	Intel 5520	Intel Xeon
	X8DTU-F	2.0	Intel 5520	Intel Xeon
	X8STE	1.1	Intel X58 Express	Intel Core i7
	X9DRW-iF	1.02	Intel C602	Intel Xeon
	X9DAi	1.0c	Intel C602	Intel Xeon
	X9SRE	2.0a	Intel C602	Intel Xeon
Tyan	S2877G2NR	1.07	AMD 8131	AMD Opteron
	S2892G3NR	1.02	AMD 8131	
	S2895A2NRF	1.04.2895	nVIDIA nForce 2200	
	S2912G2NR	4.0	nVIDIA NFP3600	
	S2915A2NRF	1.00.2915	nVIDIA NFP3600	
	S2932G2NR	2.02	nVIDIA nForce Pro 3600	
	S4881G2NR	4.0 Rel 6.1	AMD 8131	
	S5360G2NR	1.4	Intel E7520	Intel Xeon
	S5372G2NR-LC	4.0 Rel 6.1	Intel 5000V	
	S5380G2NR	1.04	Intel 5000P	
	S5392ANR	1.1	Intel 5400A	
	S5396A2NRF	1.01F	Intel 5400	
	S5397AG2NRF	1.03	Intel 5400NB	
	S7020AGM2NR	8.00.16	Intel 5520	

## 3ware SAS 6Gb/s Interoperability Matrix

### Chassis / Drive Enclosures

Manufacturer	Model/Family	Size	Type	Expander Mfg	FW Version	HDD Count	Drive Interface Type	Drive Form Factor
AIC	RSC-2A-SA1-2	2U	Chassis	Vitesses	109H	24	SATA+SAS	2.5"
	RSC-3EC-80R	3U		Vitesses	109G	16		3.5"
	RSC-3EG2-0 w/ BKP-SEM-I2C-24-R	3U		n/a	n/a	16		3.5"
	Xtore XJ-SA24-316R-D	3U	Drive Enc.	Vitesses	1.14F.01	16	SATA+SAS	3.5"
Xtore XJ-SA26-224R-D	2U	Vitesses		1.14F.01	24	3.5"		
Chenbro	RM21706T	2U	Chassis	n/a	n/a	6	SATA+SAS	3.5"
	RM31212	3U				12		3.5"
	RM31616	3U				16		3.5"
	RM41416	4U				16		3.5"
	RM51224	5U				24		3.5"
	RM51924	5U				24		3.5"
Ci Design	SE316-JBOD	3U	Drive Enc.	Ci Design	19.0.2	16	SATA+SAS	3.5"
	SR212	2U	Chassis	n/a	n/a	12	SATA+SAS	3.5"
	SR316	3U				16		3.5"
	SR524	5U				24		3.5"
Intel	SSR212MC2BR	2U	Chassis	LSI	n/a	12	SATA+SAS	3.5"
JMR	SASS-JD-G2	3U	Drive Enc.	JMR	n/a	16	SATA+SAS	3.5"
LSI	620J	2U	Drive Enc.	LSI	3.13	24	SATA+SAS	2.5"
	630J	2U		LSI	3.13	12		3.5"
Xyratex	OneStor SP-2424	4U	Drive Enc.	PMC Sierra	2004	24	SAS /SATA	3.5"

## 3ware SAS 6Gb/s Interoperability Matrix

### Chassis / Drive Enclosures

Manufacturer	Model/Family	Size	Type	Expander Mfg	FW Version	HDD Count	Drive Interface Type	Drive Form Factor
Proware	SB-3163J-S3S3	3U	Drive Enc.	Proware	n/a	16	SATA+SAS	3.5"
Supermicro	CSE-748TQ	4U	Chassis	n/a	n/a	5	SATA+SAS	3.5"
	CSE-815TQ	1U		n/a	n/a	4		
	CSE-823TQ	2U		n/a	n/a	6		
	CSE-825TQ	2U		n/a	n/a	8		
	CSE-826E1	2U		LSI	A1	12		
	CSE-826E2	2U		LSI	A1	12		
	CSE-826TQ	2U		n/a	n/a	12		
	CSE-836E1	3U		LSI	A1	16		
	CSE-836E2	3U		LSI	A1	16		
	CSE-836TQ	3U		n/a	n/a	16		
	CSE-846E1	4U		LSI	A1	24		
	CSE-846E2	4U		LSI	A1	24		
	CSE-846TQ	4U		n/a	n/a	24		
	CSE-847E1	5U		LSI	A1	36		
	CSE-847E2	5U		LSI	A1	36		
	CSE-213A	2U		Chassis	n/a	n/a		
	SAS2-216EL1	2U	LSI		206	24		
SAS2-216EL2	2U	LSI	206		24			
TST	ESR-212	2U	Chassis	n/a	n/a	12	SATA	3.5"
Xyratex	SP1424s	4U	Chassis	Xyratex	0151	24	SATA+SAS	3.5"

## 3ware SAS 6Gb/s Interoperability Matrix

### SAS Switches

Manufacturer	Model	Firmware Version	Ports	Generation
LSI	SAS6160	200.5.0.0	16	6Gb/s

## 3ware SAS 6Gb/s Interoperability Matrix

### SAS + SATA Cables

Manufacturer	Model/Part Number	Description	Length (M)
LSI	CBL-SFF8087-05M	Internal SFF-8087 SATA+SAS cable	0.5
	CBL-SFF8087-06M	Internal SFF-8087 SATA+SAS cable	0.6
	CBL-SAS8087OCF-06M	Internal SFF-8087 breakout cable forward 4x, SFF-8482 w/ Power	0.6
	CBL-SFF8088SAS	External SFF-8088 SAS cable	Various
	CBL-SFF8088IB	External SFF-8088 to SFF-8470 SAS cable	Various