



**EchoStreams**  
Innovative Solutions  
**LAB AND ENGINEERING**

**eDrawer4048S-UN  
Approved Vendor List (AVL)**

**Description**

This document is to present the vendor components that are qualified and approved to be used in conjunction with Echostreams enclosure. The list is curated from Echostreams lab test results, as well as from AVL and QVL of the aforementioned components. Items unlisted do not reflect on their incompatibility rather than they have yet looked upon. Disqualified items may be listed explicitly. Items on the list are subject to change.

**Enclosures**

eDrawer4048S-D4

**Lists**

[CPU](#)

[Memory](#)

[IO Card](#)

[HDD](#)

[OS Drive](#)

Document Version	1.00
Release Date	2017.11.01

This list is compiled based on the compatibility between CPU and motherboard.

Product Name	Code Name	Package	Steppi ng	L3 Cache	# of Cores/Thre ads	Process or Base	All Cores Boost	Processor Boost	TDP	Memory Types
AMD 7601										
PS7601BDVIHAF	Naples	SP3	PR	64MB	32 / 64	2.2	2.7	3.20 / 3	180W	DDR4-2666
AMD 7551										
PS7551BDVIHAF	Naples	SP3	PR	64MB	32 / 64	2	2.55	3.00 / 3	180W	DDR4-2666
AMD 7451										
PS7451BDVHCAFA	Naples	SP3	PR	64MB	24 / 48	2.3	3.2	3.20 / 3	180W	DDR4-2666
AMD 7351										
PS7351BEVGPAF	Naples	SP3	PR	64MB	16 / 32	2.4	2.9	2.90 / 2	155/170W	DDR4-2400/2666
AMD 7351P										
PS735PBEVGPAF	Naples	SP3	PR	64MB	16 / 32	2.4	2.9	2.90 / 2	155/170W	DDR4-2400/2666
AMD 7501										
PS7501BEVIHAF	Naples	SP3	PR	64MB	32 / 64	2	2.6	3.00 / 3	155/170W	DDR4-2400/2666
AMD 7401										
PS7401BEVHCAF	Naples	SP3	PR	64MB	24 / 48	2	2.8	3.00 / 3	155/170W	DDR4-2400/2666
AMD 7401P										
PS740PBEVHCAF	Naples	SP3	PR	64MB	24 / 48	2	2.8	3.00 / 3	155/170W	DDR4-2400/2666
AMD 7301										
PS7301BEVGPAF	Naples	SP3	PR	64MB	16 / 32	2.2	2.7	2.70 / 2	155/170W	DDR4-2400/2666
AMD 7251										
PS7251BFV8SAF	Naples	SP3	PR	32MB	8 / 16	2	2.9	2.90 / 2	120W	DDR4-2400

This list is compiled based on the compatibility between memory module and motherboard.

Product Name	Memory	Module Suppl	Size	Chip Brand	Rank	Voltage	Data Transfer	Error Co	CAS Laten	Pins	Note
HMA82GR7AFR8N-UHTD	DDR4	SK Hynix	16GB	SK Hynix	2R X8	1.2v	2400MHz	ECC	Registered	17	288-pin
HMA82GR7AFR8N-UHT2	DDR4	SK Hynix	16GB	SK Hynix	2R X8	1.2v	2400MHz	ECC	Registered	17	288-pin
HMA84GR7AFR4N-UHTD	DDR4	SK Hynix	32GB	SK Hynix	2R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
HMA84GR7AFR4N-UHT2	DDR4	SK Hynix	32GB	SK Hynix	2R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
CT16G4RFD424A.36FB1	DDR4	Crucial	16GB	Micron	2R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
MTA36ASF2G72PZ-2G3B1QK	DDR4	Micron	16GB	Micron	2R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
CT16G4RFS424A.18FB1	DDR4	Crucial	16GB	Micron	1R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
MTA18ASF2G72PZ-2G3B1IG	DDR4	Micron	16GB	Micron	1R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
M4R0-8GSSBCSJ	DDR4	INNODISK	8GB	Samsung	2R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
M393A4K40BB1-CRC0Q	DDR4	Samsung	32GB	Samsung	2R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
VP9MR4G7224JBJSB	DDR4	Viking	32GB	Samsung	2R X4	1.2v	2400MHz	ECC	Registered	17	288-pin
M393A4K40BB2-CTD	DDR4	Samsung	32GB	Samsung	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
CT32G4RFD4266.36FD1	DDR4	CRUCIAL	32GB	Micron	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
CT32G4RFD4266-2G6D1	DDR4	CRUCIAL	32GB	Micron	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
MTA36ASF4G72PZ.2G6D1RG	DDR4	Micron	32GB	Micron-Inphi	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
MTA36ASF4G72PZ.2G6D1QK	DDR4	Micron	32GB	Micron-Montage	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
CT32G4RFD4266.-2G6D1	DDR4	CRUCIAL	32GB	Micron	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
HMA82GR7AFR8N-VKT3	DDR4	SKhynix	16GB	Skhynix-Montag	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
HMA84GR7AFR4N-VKTF	DDR4	SKhynix	32GB	Skhynix-IDT	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
CT16G4RFD8266-2G6H1.001	DDR4	CRUCIAL	16GB	Micron	2R X8	1.2v	2666MHz	ECC	Registered	19	288-pin
MTA18ASF2G72PDZ-2G6H1QG	DDR4	Micron	16GB	Micron	2R X8	1.2v	2666MHz	ECC	Registered	19	288-pin
CT32G4RFD4266-2G6H1.001	DDR4	CRUCIAL	32GB	Micron	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
MTA36ASF4G72PZ-2G6H1QG	DDR4	Micron	32GB	Micron	2R X4	1.2v	2666MHz	ECC	Registered	19	288-pin
HMAA8GL7AMR4N-UHTE	DDR4	SKhynix	64GB	SKhynix	4DRx4	1.2v	2400MHz	ECC	Registered	17	288-pin
M386A8K40BM1-CRC4Q M	DDR4	Samsung	64GB	Samsung	4DRx4	1.2v	2400MHz	ECC	Registered	17	288-pin

This list is compiled based on the compatibility between the host IO cards and the enclosure.

IO Card	Vendor	Name	Model	Chipset	Host Bus	Cle Lan	Xfer Rate	Int. Port	Ext. Port	Connector	Form Factor	
SAS Card	Avago	MegaRAID	SAS 9286-8e	SAS2208	PCIe Gen3	x8	6Gb/s	0	8	SFF-8088	LP	
		HBA	SAS 9207-8e	SAS2308	PCIe Gen3	x8	6Gb/s	0	8	SFF-8087	LP	
		HBA	SAS 9207-4i4e	SAS2308	PCIe Gen3	x8	6Gb/s	4	4	SFF-8087/88	LP	
		HBA	SAS 9305-24i	SAS3224 IOC	PCIe Gen3	x8	12Gb/s	24	0	SFF-8644	LP	
		HBA	SAS 9305-16e	SAS3224 IOC	PCIe Gen3	x8	12Gb/s	0	16	SFF-8644	LP	
		HBA	SAS 9300-8e	SAS3008 IOC	PCIe Gen3	x8	12Gb/s	0	8	SFF-8644	LP	
		HBA	SAS 9300-16e	SAS3008 IOC	PCIe Gen3	x8	12Gb/s	0	16	SFF-8644	LP	
		HBA	SAS 9300-4i4e	SAS3008 IOC	PCIe Gen3	x8	12Gb/s	4	4	SFF-8643/44	LP	
		MegaRAID	SAS 9380-8i8e	SAS3108 ROC	PCIe Gen3	x8	12Gb/s	8	8	SFF-8643/44	LP	
		MegaRAID	SAS 9380-8e	SAS3108 ROC	PCIe Gen4	x8	12Gb/s	0	8	SFF-8644	LP	
	Adaptec		ASR-71605								LP	
	ATTO		H12F0				12Gb/s		16		LP	
Network Car	Mellanox	ConnectX-3	CX354A		PCIe Gen3	x8	ib/s IB or 40GbE		2	QSFP	LP	
			CX353A		PCIe Gen3	x8	ib/s IB or 40GbE		1	QSFP	LP	
		ConnectX-4	CX456A		PCIe Gen3	x8	0Gb/s IB or GbE					LP
			CX415A		PCIe Gen3	x8	0Gb/s IB or GbE					LP
			CX416A		PCIe Gen3	x8	0Gb/s IB or GbE					LP
	Intel		X520		82599	PCIe Gen3	x8	10GbE	0	2	SFP+	LP
			XL710-QDA1		XL710	PCIe Gen3	x8	40GbE	0	1	QSFP+	LP
			XL710-QDA2		XL710	PCIe Gen3	x8	40GbE	0	2	SFP28	LP
			X710-DA2		XL710	PCIe Gen3	x8	10GbE	0	2	SFP+	LP
			X710-DA4		XL710	PCIe Gen3	x8	10GbE	0	4	SFP+	LP
			X550-T1		550	PCIe Gen3	x8	10GbE	0	1	RJ-45	LP
			X550-T2		550	PCIe Gen3	x8	10GbE	0	2	RJ-45	LP
			X540-T1		540	PCIe Gen3	x8	10GbE	0	1	RJ-45	LP

	X540-T2	540	PCIe Gen3	x8	10GbE	0	2	RJ-45	LP
	X520-SR2	520	PCIe Gen3	x8	10GbE	0	2	MMF	LP
	X520-SR1	520	PCIe Gen3	x8	10GbE	0	1	MMF	LP
	X520-QDA1	520	PCIe Gen3	x8	10GbE	0	1	QSFP+	LP
	X520-LR1	520	PCIe Gen3	x8	10GbE	0	1	SMF	LP
	X520-DA2	520	PCIe Gen3	x8	10GbE	0	2	SFP+	LP
	I340-F4				1GbE			MMF	
	I350-F2				1GbE			MMF	
	I350-F4				1GbE			MMF	
	I350-T4V2				1GbE				
Qlogic	QLE2563		PCIe Gen3	x8					LP
	QLE2672		PCIe Gen3	x8					LP
	QLE3242		PCIe Gen3	x8			2	RJ-45	LP
	QLE2562		PCI-E 2.0	x8	8 Gb/s FC		2 SFP+		LP
HotLava	HL-100G2Q-XL	XL710	PCIe Gen3	x8	40GbE		1	QSFP	LP
Atto	FC-322E				32Gb FC				LP
Storage Card	Samsung	SM1715	PCIe Gen3	x8	PCIe NVMe				LP
	Kingston	EP1000	PCIe Gen3	x8	PCIe NVMe				LP

This list is compiled based on the compatibility between hard drives and expander. Echostreams backplane is used as a passive medium between those components. Only drives with 3.5" form factor are supported by the enclosures.

Vendor	Model	Type	Gen	FW	Capacity	Size	Cache	RPM
WD	WD4001FYYG	SAS	6Gb/s	VR07	4TB	3.5"	32MB	7200 RPM
	WD3001FYYG	SAS	6Gb/s	VR07	3TB	3.5"	32MB	7200 RPM
	WD2001FYYG	SAS	6Gb/s	VR07	2TB	3.5"	32MB	7200 RPM
	WD1001FYYG	SAS	6Gb/s	VR07	1TB	3.5"	32MB	7200 RPM
	WD9001HKHG	SAS	6Gb/s	SR07	900GB	3.5"	32MB	10K RPM
	WD6001HKHG	SAS	6Gb/s	SR07	600GB	3.5"	32MB	10K RPM
	WD4501HKHG	SAS	6Gb/s	SR07	450GB	3.5"	32MB	10K RPM
	WD3001HKHG	SAS	6Gb/s	SR07	300GB	3.5"	32MB	10K RPM
	HGST	HUS726060ALS640	SAS	6Gb/s	A1E2	6TB	3.5"	64MB
HUS724040ALS640		SAS	6Gb/s	A152	4TB	3.5"	64MB	7200 RPM
HUS724030ALS640		SAS	6Gb/s	A152	3TB	3.5"	64MB	7200 RPM
HUS724020ALS640		SAS	6Gb/s	A152	2TB	3.5"	64MB	7200 RPM
HUS723030ALS640		SAS	6Gb/s	A220	3TB	3.5"	64MB	7200 RPM
HUS723020ALS640		SAS	6Gb/s	A220	2TB	3.5"	64MB	7200 RPM
HUS156060VLS600		SAS	6Gb/s	A5D0	600GB	3.5"	64MB	15K RPM
HUS156045VLS600		SAS	6Gb/s	A5D0	450GB	3.5"	64MB	15K RPM
HUS156030VLS600		SAS	6Gb/s	A5D0	300GB	3.5"	64MB	15K RPM
Seagate	ST32000444SS	SAS	6Gb/s	5	2 TB	3.5"		7200 RPM
	ST33000650SS	SAS	6Gb/s	2	3TB	3.5"		7200 RPM
	ST32000645SS	SAS	6Gb/s	2	2TB	3.5"		7200 RPM
	ST2000NM0001	SAS	6Gb/s	2	2TB	3.5"		7200 RPM
	ST1000NM0001	SAS	6Gb/s	2	1TB	3.5"		7200 RPM
	ST500NM0001	SAS	6Gb/s	2	500GB	3.5"		7200 RPM
	ST33000650SS	SAS	6Gb/s	1	3TB	3.5"		7200 RPM
	ST32000445SS	SAS	6Gb/s	6	2TB	3.5"		7200 RPM
	ST31000424SS	SAS	6Gb/s	6	1TB	3.5"		7200 RPM
	ST3500414SS	SAS	6Gb/s	6	500GB	3.5"		7200 RPM
	ST32000444SS	SAS	6Gb/s	5	2TB	3.5"		7200 RPM
	ST31000424SS	SAS	6Gb/s	5	1TB	3.5"		7200 RPM
	ST3500414SS	SAS	6Gb/s	5	500GB	3.5"		7200 RPM
	ST3450802SS	SAS	6Gb/s	9	450GB	3.5"		10K RPM
	ST3600002SS	SAS	6Gb/s	9	600GB	3.5"		10K RPM
	ST3600057SS	SAS	6Gb/s	8	600GB	3.5"		15K7 RPM
	ST3450857SS	SAS	6Gb/s	8	450GB	3.5"		15K7 RPM
	ST3300657SS	SAS	6Gb/s	8	300GB	3.5"		15K7 RPM
	ST6000NM0034	SAS	12Gb/s		6TB	3.5"	128MB	7200 RPM
Toshiba	MG03SCA100	SAS	6Gb/s	108	1TB	3.5"		7200 RPM

MG03SCA200	SAS	6Gb/s	108	2TB	3.5"	7200 RPM
MG03SCA300	SAS	6Gb/s	108	3TB	3.5"	7200 RPM
MG03SCA400	SAS	6Gb/s	108	4TB	3.5"	7200 RPM
MK2001TRKB	SAS	6Gb/s	105	2TB	3.5"	7200 RPM
MK1001TRKB	SAS	6Gb/s	105	1TB	3.5"	7200 RPM

Product Name	Type	Vendor	Form Fact	Format	Capacity	Interface	S <sub>I</sub> Series	Cache	RPM
ST2000NX0243	SATA	Seagate	2.5"	4Kn	2TB	6Gb/s	Enterprise Capacity V3	128MB	7200
ST1000NX0333	SAS	Seagate	2.5"	512e	1TB	12Gb/s	Enterprise Capacity V3	128MB	7200
ST8000NM0055	SATA	Seagate	3.5"	512e	8TB	6Gb/s	Enterprise Capacity V5	256MB	7200
ST1000NM0016	SATA	Seagate	3.5"	512e	10TB	6Gb/s	Enterprise Capacity V6	256MB	7200
ST8000NM0016	SATA	Seagate	3.5"	512e	8TB	6Gb/s	Enterprise Capacity V6	256MB	7200
WD4000FYYZ-01UL1B1	SATA	WD	3.5"	512n	4TB	6Gb/s	WD Re	64MB	7200
WD4000FYYZ-01UL1B2	SATA	WD	3.5"	512n	4TB	6Gb/s	WD Re	64MB	7200
WD6001FSYZ-01SS7B0	SATA	WD	3.5"	512e	6TB	6Gb/s	WD Re	128MB	7200
HUH728080ALE604	SATA	HGST	3.5"	512e	8TB	6Gb/s	Ultrastar He8	128MB	7200
HUS726060ALE610	SATA	HGST	3.5"	512e	6TB	6Gb/s	Ultrastar 7K6000	128MB	7200
MG05ACA800A	SATA	Toshiba	3.5"	4Kn	8TB	6Gb/s	Capacity	128MB	7200
MG05ACA800E	SATA	Toshiba	3.5"	512e	8TB	6Gb/s	Capacity	128MB	7200
AL14SEB120N	SAS	Toshiba	2.5"	512n	1.2TB	12Gb/s	Performance	128MB	10k
XF1212-1A0512	SSD	Seagate	2.5"	SATA	480GB	6Gb/s	RL04		
SDLF1CRR-019T-1HA1	SSD	SanDisk	2.5"	SATA	1.92TB	6Gb/s	ZR04		
PX-G128M6e-2280	M.2	PLEXTOR	2280	PCIe	128GB				
MZHPV256HDGL	M.2	Samsung	2280	PCIe	256GB				
MZVPV128HDGM	M.2	Samsung	2280	PCIe(NVM)	128GB				
MZVPV512HDGL	M.2	Samsung	2280	PCIe(NVM)	512GB				
ND280C-256GM-MT	M.2	TECHCOMP	2280	PCIe	256GB				
ND280C-512GM-MT	M.2	TECHCOMP	2280	PCIe	512GB				
Me.262 256GB M.2	M.2	Ezlink	2280	PCIe	256GB				