



## LAB AND ENGINEERING

### DuraStreams Skylake 3.5" Drive Storage Server Approved Vendor List (AVL)

#### Description

This document is to present the vendor components that are qualified and approved to be used in conjunction with the Premio enclosure. The list is curated from the Premio 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

DSS316S-D4                      DSS212S-D4  
DSS424S-D4

#### Lists

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Document Version	1.10
Release Date	7/6/2017



## CPU AVL

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

Socket	Family	Number	Core	Frequency	Cache	Power
LGA3647	Platinum	8180	28	2.50GHz	38.5M	205W
	Platinum	8176	28	2.10GHz	38.5M	165W
	Platinum	8170	26	2.10GHz	35.75M	165W
	Platinum	8168	24	2.70GHz	33M	205W
	Platinum	8164	26	2.00GHz	35.75M	150W
	Platinum	8160	24	2.10GHz	33M	150W
	Platinum	8160T	24	2.10GHz	33M	150W
	Gold	6142	16	2.60GHz	22M	150W
	Gold	6150	18	2.70GHz	24.75M	165W
	Gold	6154	18	3.00GHz	24.75M	200W
	Gold	6152	22	2.10GHz	30.25M	140W
	Gold	6140	18	2.30GHz	24.75M	140W
	Gold	6148	20	2.40GHz	27.5M	150W
	Gold	6126	12	2.60GHz	19.25M	125W
	Gold	6130	16	2.10GHz	22M	125W
	Gold	6126T	12	2.60GHz	19.25M	125W
	Gold	6130T	16	2.10GHz	22M	125W
	Gold	6138T	20	2.00GHz	27.5M	125W
	Gold	6138	20	2.00GHz	27.5M	125W
	Gold	6134	8	3.20GHz	24.75M	130W
	Gold	6132	14	2.60GHz	19.25M	140W
	Gold	6128	6	3.40GHz	19.25M	115W
	Gold	5122	4	3.60GHz	16.5M	105W
	Gold	5118	12	2.30GHz	16.5M	105W
	Gold	5115	10	2.40GHz	13.75M	85W
	Gold	5120	14	2.20GHz	19.25M	105W
	Gold	5120T	14	2.20GHz	19.25M	105W
	Silver	4109T	8	2.00GHz	11M	70W
	Silver	4112	4	2.60GHz	8.25M	85W
	Silver	4114	10	2.20GHz	13.75M	85W
	Silver	4108	8	1.80GHz	11M	85W
	Silver	4110	8	2.10GHz	11M	85W
	Silver	4116	12	2.10GHz	16.5M	85W
	Bronze	3106	8	1.70GHz	11M	85W
	Bronze	3104	6	1.70GHz	8.25M	85W



## Memory AVL

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

Vendor	Module	Type	Type3	Type2	Size	Chipmaker	Chip
Samsung	M393A2G40EB1-CPB0Q	DDR4	RDIMM	ECC	16GB	SEC	K4A4G045WEBCPB
Samsung	M393A4K40BB0-CPB	DDR4	RDIMM	ECC	32GB	SEC	K4A8G045WBBCPB
Hynix	HMA84GR7AFR4N	DDR4	RDIMM	ECC	32GB	Hynix	H5AN8G4NAFR
Kingston	KVR24R17S4/16MA	DDR4	RDIMM	ECC	16GB	Micron	6BA77D9SRK
Micron	MTA18ASF2G72PZ-2G3B1RG	DDR4	RDIMM	ECC	16GB	Micron	6CB47D9TBJ
Micron	MTA36ASF4G72PZ-2G3B1MG	DDR4	RDIMM	ECC	32GB	Micron	5YB47D9TBJ
Samsung	M386A4K40BB0-CRC4Q	DDR4	LRDIMM	ECC	32GB	SEC	K4A8G045WBBCRC
Hynix	HMA82GR7AFR8N	DDR4	RDIMM	ECC	16GB	Hynix	H5AN8G8NAFR
Hynix	HMAA8GR7A2R4N-VK	DDR4	3DS RDIMM	ECC	64GB	Hynix	H5ANAG4TA2R
Kingston	KSM26RS4/16HAI	DDR4	RDIMM	ECC	16GB	Hynix	H5ANBG4NAFR
Kingston	KSM26RS4/32HAI	DDR4	RDIMM	ECC	32GB	Hynix	H5ANBG4NAFR
Samsung	M393A2K40BB2-CTD7Q	DDR4	RDIMM	ECC	16GB	SEC	K4A8G045WBBCTD
Smart	SH2047RD420493-SB	DDR4	RDIMM	ECC	16GB	SEC	K4A8G045WBBCTD



## IO Card AVL

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
	Avago	MegaRAID	SAS 9260-8i	SAS3108 ROC	PCIe Gen2	x8	6Gb/s	8	0	SFF-8087	LP
	Avago	HBA	SAS 9207-4i4e	SAS2308	PCIe Gen3	x8	6Gb/s	4	4	SFF-8087/88	LP
	Avago	HBA	SAS 9305-24i	SAS3224 IOC	PCIe Gen3	x8	12Gb/s	24	0	SFF-8644	LP
	Avago	HBA	SAS 9305-16e	SAS3224 IOC	PCIe Gen3	x8	12Gb/s	0	16	SFF-8644	LP
	Avago	HBA	SAS 9300-8e	SAS3008 IOC	PCIe Gen3	x8	12Gb/s	0	8	SFF-8644	LP
	Avago	HBA	SAS 9300-16e	SAS3008 IOC	PCIe Gen3	x8	12Gb/s	0	16	SFF-8644	LP
	Avago	HBA	SAS 9300-16i	SAS3008 IOC	PCIe Gen3	x8	12Gb/s	16	0	SFF-8643	LP
	Avago	HBA	SAS 9300-4i4e	SAS3008 IOC	PCIe Gen3	x8	12Gb/s	4	4	SFF-8643/44	LP
	Avago	MegaRAID	SAS 9380-8i8e	SAS3108 ROC	PCIe Gen3	x8	12Gb/s	8	8	SFF-8643/44	LP
	Avago	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							56Gb/s IB				
Card	Mellanox	ConnectX-3	CX354A		PCIe Gen3	x8	or 40GbE		2	QSFP	LP
	Mellanox	ConnectX-3	CX353A		PCIe Gen3	x8	ib/s IB or 40GbE		1	QSFP	LP
	Mellanox	ConnectX-4	CX456A		PCIe Gen3	x8	0Gb/s IB or GbE				LP
	Mellanox	ConnectX-4	CX415A		PCIe Gen3	x8	0Gb/s IB or GbE				LP
	Mellanox	ConnectX-4	CX416A		PCIe Gen3	x8	0Gb/s IB or GbE				LP
	Intel		X520	82599	PCIe Gen3	x8	10GbE		2	SFP+	LP
	Intel		XL710		PCIe Gen3	x8	40GbE		2	SFP+	LP
	Intel		X710-DA4		PCIe Gen3	x8			4	SFP+	LP
	Intel		X540-T1	540	PCIe Gen3	x8	10GbE	0	1	RJ-45	LP
	Intel		X540-T2	540	PCIe Gen3	x8	10GbE	0	2	RJ-45	LP

IO Card	Vendor	Name	Model	Chipset	Host Bus	Cle Lan	Xfer Rate	Int. Port	Ext. Port	Connector	Form Factor
	Qlogic		QLE2563		PCIe Gen3	x8					LP
	Qlogic		QLE2672		PCIe Gen3	x8					LP
	Qlogic		QLE3242		PCIe Gen3	x8			2	RJ-45	LP
	HotLava		HL-100G2Q-XL	XL710	PCIe Gen3	x8	40GbE		1	QSFP	LP
	Atto		FC-322E				32Gb FC				LP
	Tyan		P1103B		PCIe Gen1	x4	GbE		2	RJ-45	LP
Storage											
Card	Samsung		SM1715		PCIe Gen3	x8	PCIe NVMe				LP
	Kingston		EP1000		PCIe Gen3	x8	PCIe NVMe				LP
	Intel		SSDPEDMD400G4		PCIe Gen3	x4	PCIe NVMe				LP



## SAS HDD AVL

This list is compiled based on the compatibility between hard drives and expander. The Premio 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

Vendor	Model	Type	Gen	FW	Capacity	Size	Cache	RPM
Toshiba	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



## OS Drive AVL

Type	Form	Vendor	Capacity	Model	Part Number
SATA 6Gb/s	3.5"	HGST	4TB		HUS724040ALA640
SATA 3Gb/s	2.5"	Seagate	500GB		ST9500423AS
SATA 6Gb/s	2.5"	Seagate	500GB		ST9500620NS
SATA 3Gb/s	2.5"	Seagate	750GB		ST9750420AS
SATA 3Gb/s	2.5"	Seagate	320GB		ST9320423AS
SATA 6Gb/s	3.5"	Seagate	4TB		ST4000NM0033
SATA 3Gb/s	2.5"	Western Digital	120GB		WD1200BEVS-00RST0
SATA 3Gb/s	3.5"	Western Digital	1TB		WD1002FBYS-70A6B0
SATA 3Gb/s	2.5"	Western Digital	250GB		WD2500BPVT
SATA 3Gb/s	2.5"	Western Digital	250GB		WD2500YS
SATA 3Gb/s	2.5"	Intel	160GB		SSDSA2CW160G3
SATA 3Gb/s	2.5"	Intel	240GB		SSDSC2BW240A4
SATA 3Gb/s	2.5"	Micron	512GB	M600	MTFDDAK512MBF
SATA 6Gb/s	2.5"	Micron	1TB	M600	MTFDDAK1T0MBF
SATA 6Gb/s	2.5"	Samsung	480GB		MZ-7WD480N/003
SATA 6Gb/s	2.5"	Samsung	240GB		MZ-7WD240N/003
SATA 6Gb/s	2.5"	Samsung	960GB		MZ-7WD960T/003
SATA 6Gb/s	2.5"	Sandisk	960GB		SD7SB7S-960G
SATA 6Gb/s	2.5"	Toshiba	1TB		THNSNJ1T02CSX
SATA 6Gb/s	2.5"	Toshiba	512GB		THNSNJ512GCSU
PCIe 8Gb/s	M.2 2280	Apacer	128G		APP128G1AN-01TT
PCIe 8Gb/s	M.2 2280	Intel	128G		SSDPEKKW128G7
PCIe 8Gb/s	M.2 2280	Techman	480GB		PV100D5N