LAB AND ENGINEERING

DuraStreams DSS224S-D5 Skylake Enclosure
Approved Vendor List (AVL)

Description

This document is to present the vendor components that are qualified and approved to be used in conjuction with Echostreams enclosure. The list is curated from Echostreams lab test results, as well as from AVL and QVL of the aformentioned 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

DSS212S-D5

Lists

CPU | Memory | IO Card
HDD | SSD | OS Drive

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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

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Memory AVL

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

Vendor	Module	Type	Type3	Type2	Size	Chipamaker	Chip
Kingston	KVR21R15D4/16HA	DDR4	RDIMM	ECC	16GB	Hynix	H5AN8G4NAFR
Samsung	M393A4K40BB0-CPB	DDR4	RDIMM	ECC	32GB	SEC	K4A8G045WBBCPB
Crucial	CT32G4LFD424A	DDR4	LRDIMM	ECC	32GB	Micron	7DB75D97BJ
Hynix	HMA82GR7AFR8N-UH	DDR4	RDIMM	ECC	16GB	Hynix	H5AN8G4NAFR
Micron	MTA18ASF2G72PZ-2G3A1IK	DDR4	RDIMM	ECC	16GB	Micron	5QA47D9SRK
Micron	MTA18ASF2G72PZ-2G3B1RG	DDR4	RDIMM	ECC	16GB	Micron	6CB47D9TBJ
Micron	MTA36ASF4G72PZ-2G3B1	DDR4	LRDIMM	ECC	32GB	Micron	7DB75D9TBJ
Samsung	M386A4K40BB0-CRC	DDR4	LRDIMM	ECC	32GB	SEC	K4A8G045WBBCRC
ATP	A4B08QD8BNTDME	DDR4	RDIMM	ECC	8GB	Micron	6YB47D9TNW
ATP	A416QC4BNTDME	DDR4	RDIMM	ECC	16GB	Micron	7DB77D9TNT
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
Samsung	M393A2K40BB2-CTD6Q	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 9217-8i	SAS2308	PCIe Gen3	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		PCIe Gen3	x8	6Gb/s	16	0	SFF-8643	LP
	Adaptec		ASR-81605Z		PCIe Gen3	x8	12Gb/s	16	0	SFF-8643	LP
	ATTO		H12F0		PCIe Gen3	x8	12Gb/s	0	16	SFF-8644	LP
Network Card	Mellanox	ConnectX-3	CX354A		PCIe Gen3	x8	56Gb/s IB 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	)Gb/s IB or GbE				LP
	Mellanox	ConnectX-4	CX415A		PCIe Gen3	x8	)Gb/s IB or GbE				LP
	Mellanox	ConnectX-4	CX416A		PCIe Gen3	x8	)Gb/s IB or GbE				LP
	Intel		i350-T2		PCIe Gen3	x4	1GbE		2	RJ-45	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
	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. Echostreams backplane is used as a passive medium between those components. Only drives with 2.5" form factor are supported by the enclosures.

Vendor	Model	Type	Gen	FW	Capacity	Size	Cache	RPM
WD	WD9001BKHG	SAS	6Gb/s	SR03	900GB	2.5"	32MB	10K RPM
	WD6001BKHG	SAS	6Gb/s	SR03	600GB	2.5"	32MB	10K RPM
	WD4501BKHG	SAS	6Gb/s	SR03	450GB	2.5"	32MB	10K RPM
	WD3001BKHG	SAS	6Gb/s	SR03	300GB	2.5"	32MB	10K RPM
	WD9001BKHG	SAS	6Gb/s	RG00	146GB	2.5"	32MB	10K RPM
	WD3000BKFG	SAS	6Gb/s	RG00	300GB	2.5"	16MB	10K RPM
	WD6000BKHG	SAS	6Gb/s	VG03	600GB	2.5"	32MB	10K RPM
	WD4500BKHG	SAS	6Gb/s	VG03	450GB	2.5"	32MB	10K RPM
HGST	HUC101212CSS600	SAS	6Gb/s	A35A	1.2TB	2.5"	64MB	10K RPM
	HUC109090CSS600	SAS	6Gb/s	A1D0	900GB	2.5"	64MB	10K RPM
	HUC109060CSS600	SAS	6Gb/s	A1D0	600GB	2.5"	64MB	10K RPM
	HUC109045CSS600	SAS	6Gb/s	A1D0	450GB	2.5"	64MB	10K RPM
	HUC109030CSS600	SAS	6Gb/s	A1D0	300GB	2.5"	64MB	10K RPM
	HUC106060CSS600	SAS	6Gb/s	A202	600GB	2.5"	64MB	10K RPM
	HUC106045CSS600	SAS	6Gb/s	A202/A360	450GB	2.5"	64MB	10K RPM
	HUC106030CSS600	SAS	6Gb/s	A202	300GB	2.5"	64MB	10K RPM
	HUC106060CSS600	SAS	6Gb/s	A150	600GB	2.5"	64MB	10K RPM
	HUC151473CSS600	SAS	6Gb/s	A5D0	73GB	2.5"	64MB	15K RPM
	HUC151414CSS600	SAS	6Gb/s	A5D0	147GB	2.5"	64MB	15K RPM
	HUC151414CSS600	SAS	6Gb/s	A370	147GB	2.5"	64MB	15K RPM
	HUC103014CSS600	SAS	6Gb/s	A5D0	147G	2.5"	64MB	10K RPM
	HUC103030CSS600	SAS	6Gb/s	A5D0	300GB	2.5"	64MB	10K RPM
	HUC151414CSS600	SAS	6Gb/s	A5D0	147GB	2.5"	64MB	15K RPM
	HUC151473CSS600	SAS	6Gb/s	A330	73GB	2.5"	64MB	15K RPM
	HUC103030CSS600	SAS	6Gb/s	A120	300GB	2.5"	64MB	10K RPM
	HUC103014CSS600	SAS	6Gb/s	A120	147GB	2.5"	64MB	10K RPM
	HUSMR1625ASS204	SAS	6Gb/s		250GB	2.5" 15mm		
Seagate	ST600MP0034 (512e)	SAS	6Gb/s	E001	600GB	2.5"		15K RPM
	ST450MP0034 (512e)	SAS	6Gb/s	E001	450GB	2.5"		15K RPM
	ST300MP0034 (512e)	SAS	6Gb/s	E001	300GB	2.5"		15K RPM
	ST300MX0004 (SSHDD, 512e)	SAS	6Gb/s	E001	300GB	2.5"		15K RPM
	ST450MX0004 (SSHDD, 512e)	SAS	6Gb/s	E001	450GB	2.5"		15K RPM
	ST600MX0004 (SSHDD, 512e)	SAS	6Gb/s	E001	600GB	2.5"		15K RPM
	ST300MP0004	SAS	6Gb/s	N001	300GB	2.5"		15K RPM
	ST450MP0004	SAS	6Gb/s	N001	450GB	2.5"		15K RPM
	ST300MP0014	SAS	6Gb/s	TN01	300GB	2.5"		15K RPM
	ST450MP0014	SAS	6Gb/s	TN01	450GB	2.5"		15K RPM

	ST300MP0044 (512e)	SAS	6Gb/s	TE01	300GB	2.5"	15K RPM
	ST450MP0044 (512e)	SAS	6Gb/s	TE01	450GB	2.5"	15K RPM
	ST600MP0044 (512e)	SAS	6Gb/s	TE01	600GB	2.5"	15K RPM
	ST1200MM0017	SAS	6Gb/s	1	1.2TB	2.5"	10K RPM
	ST1200MM0017	SAS	6Gb/s	1	1.2TB	2.5"	10K RPM
	ST900MM0026	SAS	6Gb/s	1	900GB	2.5"	10K RPM
	ST600MM0026	SAS	6Gb/s	1	600GB	2.5"	10K RPM
	ST450MM0026	SAS	6Gb/s	1	450GB	2.5"	10K RPM
	ST300MM0026	SAS	6Gb/s	1	300GB	2.5"	10K RPM
	ST900MM0006	SAS	6Gb/s	A001	900GB	2.5"	10K RPM
	ST600MM0006	SAS	6Gb/s	A001	600GB	2.5"	10K RPM
	ST450MM0006	SAS	6Gb/s	A001	450GB	2.5"	10K RPM
	ST300MM0006	SAS	6Gb/s	A001	300GB	2.5"	10K RPM
	ST91000640SS	SAS	6Gb/s	1	1TB	2.5"	7200 RPM
	ST9500620SS	SAS	6Gb/s	2	500GB	2.5"	7200 RPM
	ST91000640NS	SAS	6Gb/s	SN01	1TB	2.5"	7200 RPM
	ST9500620NS	SAS	6Gb/s	SN01	500GB	2.5"	7200 RPM
	ST9250610NS	SAS	6Gb/s	SN01	250GB	2.5"	7200 RPM
	ST9600204SS	SAS	6Gb/s	4	600GB	2.5"	10K RPM
	ST9450404SS	SAS	6Gb/s	4	450GB	2.5"	10K RPM
	ST9500431SS	SAS	6Gb/s	DSF0	500GB	2.5"	7200 RPM
	ST9900805SS	SAS	6Gb/s	4	900GB	2.5"	10K RPM
	ST9600205SS	SAS	6Gb/s	4	600GB	2.5"	10K RPM
	ST9450405SS	SAS	6Gb/s	4	400GB	2.5"	10K RPM
	ST9300605SS	SAS	6Gb/s	4	300GB	2.5"	10K RPM
	ST973452SS	SAS	6Gb/s	5	73GB	2.5"	15K RPM
	ST9146852SS	SAS	6Gb/s	5	146GB	2.5"	15K RPM
	ST9300603SS	SAS	6Gb/s	6	300GB	2.5"	10K RPM
	ST9146803SS	SAS	6Gb/s	6	146GB	2.5"	10K RPM
	ST9500430SS	SAS	6Gb/s	3	500GB	2.5"	7200 RPM
Toshiba	AL13SEB300	SAS	6Gb/s	101	300GB	2.5"	10K RPM
	AL13SEB450	SAS	6Gb/s	101	450GB	2.5"	10K RPM
	AL13SEB600	SAS	6Gb/s	101	600GB	2.5"	10K RPM
	AL13SEB900	SAS	6Gb/s	101	900GB	2.5"	10K RPM
	MBF2600RE	SAS	6Gb/s	101	600GB	2.5"	10K RPM
	MBF2450RE	SAS	6Gb/s	101	450GB	2.5"	10K RPM
	MBF2300RE	SAS	6Gb/s	101	300GB	2.5"	10K RPM
	MBF2600RC	SAS	6Gb/s	109	600GB	2.5"	10K RPM
	MBF2450RC	SAS	6Gb/s	109	450GB	2.5"	10K RPM
	MBF2300RC	SAS	6Gb/s	109	300GB	2.5"	10K RPM
	MK3001GRRB	SAS	6Gb/s	102	300GB	2.5"	15K RPM
	MK1401GRRB	SAS	6Gb/s	102	145GB	2.5"	15K RPM
Fujitsu	MBE2073RC	SAS	6Gb/s	103	73GB	2.5"	15K RPM
	MBD2300RC	SAS	6Gb/s	102	300GB	2.5"	10K RPM
	MBE2147RC	SAS	6Gb/s	103	147GB	2.5"	15K RPM
	MBD2147RC	SAS	6Gb/s	102	147GB	2.5"	10K RPM
Micron	MTFDJAL3T8MBU	SAS	12Gb/s		3840GB	2.5" 15mm	

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SSD AVL

Below is the list of SATA SSD supported by the JBOD

Vendor	Series	Model	Interface	Capacity	Flash Tech	Form Factor
ADATA	Premiere Pro	ASP600S3-64GM	SATA	64GB	MLC	2.5" x 7mm
ADATA	SX1000	SX1000L	SATA III		MLC	2.5" 7mm
ADATA	SX900	ASX900S7	SATA III	128GB	MLC	2.5" x 7mm
ADATA		ISSS312-032GM	SATA III	32GB	MLC	2.5" x 7mm
ADATA		IS32-064GM	SATA III	64GB	MLC	2.5" x 7mm
Intel	520 Series	SSDSC2CW180A3	SATA	180GB	MLC	2.5" x 7mm
Intel	520 Series	SSDSC2BW240A3	SATA	240GB	MLC	2.5" x 7mm
Intel	320 Series		SATA	40GB	MLC	2.5" x 7mm
Samsung	830 Series	MZ-7PC064	SATA-2	64GB	MLC	2.5" x 7mm
Samsung	850 PRO	MZ-7KE2T0	SATA III	2TB	MLC	2.5" x 7mm
Seagate	1200	ST200FM0053	SATA III	200GB	MLC	2.5" x 7mm
Micron	5100 PRO	MTFDDAK240TCB	SATA 6Gb/s	240GB	TLC	2.5" x 7mm
Micron	5100 MAX	MTFDDAK240TCC	SATA 6Gb/s	240GB	TLC	2.5" x 7mm
Micron	5100 ECO	MTFDDAK480TBY	SATA 6Gb/s	480GB	TLC	2.5" x 7mm
Micron	5100 PRO	MTFDDAK480TCB	SATA 6Gb/s	480GB	TLC	2.5" x 7mm
Micron	5100 MAX	MTFDDAK480TCC	SATA 6Gb/s	480GB	TLC	2.5" x 7mm
Micron	5100 ECO	MTFDDAK960TBY	SATA 6Gb/s	1TB	TLC	2.5" x 7mm
Micron	5100 PRO	MTFDDAK960TCB	SATA 6Gb/s	1TB	TLC	2.5" x 7mm
Micron	5100 MAX	MTFDDAK960TCC	SATA 6Gb/s	1TB	TLC	2.5" x 7mm
Micron	5100 ECO	MTFDDAK1T9TBY	SATA 6Gb/s	2TB	TLC	2.5" x 7mm
Micron	5100 PRO	MTFDDAK1T9TCB	SATA 6Gb/s	2TB	TLC	2.5" x 7mm
Micron	5100 MAX	MTFDDAK1T9TCC	SATA 6Gb/s	2TB	TLC	2.5" x 7mm
Micron	5100 ECO	MTFDDAK3T8TBY	SATA 6Gb/s	4TB	TLC	2.5" x 7mm
Micron	5100 PRO	MTFDDAK3T8TCB	SATA 6Gb/s	4TB	TLC	2.5" x 7mm
Micron	5100 ECO	MTFDDAK7T6TBY	SATA 6Gb/s	8TB	TLC	2.5" x 7mm
Samsung	SM863a	MZ7KM240HMHQ	SATA 6Gb/s	240GB		2.5" x 7mm
Samsung	SM863a	MZ7KM480HMHQ	SATA 6Gb/s	480GB		2.5" x 7mm
Samsung	SM863a	MZ7KM960HMJP	SATA 6Gb/s	960GB		2.5" x 7mm
Samsung	SM863a	MZ7KM1T9HMJP	SATA 6Gb/s	1920GB		2.5" x 7mm
Samsung	PM863a	MZ7KLM240HMHQ	SATA 6Gb/s	240GB		2.5" x 7mm
Samsung	PM863a	MZ7KLM480HMHQ	SATA 6Gb/s	480GB		2.5" x 7mm
Samsung	PM863a	MZ7KLM960HMJP	SATA 6Gb/s	960GB		2.5" x 7mm
Samsung	PM863a	MZ7KLM1T9HMJP	SATA 6Gb/s	1920GB		2.5" x 7mm
Samsung	PM863a	MZ7KLM3T8HMLP	SATA 6Gb/s	3840GB		2.5" x 7mm
Intel	DC S3500		SATA 6Gb/s	80GB - 1.6TE	MLC	2.5" x 7mm
Intel	DC S3700		SATA 6Gb/s	.00GB -800G	MLC	2.5" x 7mm
Crucial	MX100	CT128MX100SSD1	SATA 6Gb/s	128GB	MLC	2.5" x 7mm

Toshiba	HG5d	THNSNHxxxGCST	SATA 6Gb/s	50GB - 512GI	MLC	2.5" x 7mm
Toshiba	HG5d	THNSNHxxxGBST	SATA 6Gb/s	50GB - 512GI	MLC	2.5" x 9.5mm

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OS Drive AVL

Model	Type	Form	Vendor	Capacity	Part Number
HDD	SATA 6Gb/s 3.5"		HGST	2TB	HUS724020AL
	SATA 6Gb/s 2.5"		Seagate	500GB	ST9500620NS
	SATA 6Gb/s 3.5"		Seagate	3TB	ST33000651AS
	SATA 6Gb/s 2.5"		Seagate	1TB	ST91000640NS
	SATA 6Gb/s 3.5"		Seagate	8TB	ST8000NC0002
	SATA 6Gb/s 3.5"		Seagate	4TB	ST4000NM0024
	SATA 6Gb/s 2.5"		Seagate	250GB	ST9250610NS
	SATA 6Gb/s 3.5"		Seagate	4TB	ST4000NM0033
	SATA 6Gb/s 3.5"		Seagate	3TB	ST3000NC002
	SATA 6Gb/s 3.5"		Seagate	1TB	MG03ACA1
	SATA 6Gb/s 3.5"		Western Digit	4TB	WD4000FYYZ-01UL1B2
	SATA 6Gb/s 3.5"		Western Digit	1TB	WD1005FBYZ-01YCBB2
SSD	SATA 6Gb/s 2.5"		Intel	240GB	SSDSC2KW240H6
	SATA 6Gb/s 2.5"		Intel	1TB	SSDSC2KW010X6
	SATA 3Gb/s 2.5"		Micron	120GB	MTFDDAK120MAV
	SATA 6Gb/s 2.5"		Micron	1TB	MTFDDAK1T0MBF
	SATA 6Gb/s 2.5"		Sandisk	256GB	SD8SB8U-256G-1122
	SATA 6Gb/s 2.5"		Sandisk	512GB	SD7SB2Q-512G
	SATA 6Gb/s 2.5"		Sandisk	256GB	SD7SB3Q-256G
	SATA 6Gb/s 2.5"		Sandisk	960GB	SD7SB7S-960G
	SATA 6Gb/s 2.5"		Toshiba	256GB	THNSNJ256GCSY
	SATA 6Gb/s 2.5"		Toshiba	512GB	THNSNJ512GCSU