Datasheet NEUBE PROPRIETARY

PRODUCT SPECIFICATIONS

NEUBE 2.5 " TLC SATA SSD				
Interface	SATA Gen3, SATA Revision 3.2			
Flash Interface	Transfer rate up to 533MBps			
Series		ESM1710 Series	ESM1720 Series	ESM1D10 Series
Hardware Information	Capacity	3840GB	480GB, 960GB, 1920GB	7680GB
	Form Factor	2.5" SSD	2.5" SSD	2.5" SSD
	Dimensions	100.00mm (L) x 69.85mm	100.00mm (L) x 69.85mm	100.00mm (L) x 69.85mm
	Coguential Bood	(W) x 7.00mm (H)	(W) x 7.00mm (H)	(W) x 7.00mm (H)
Sustained Performance Reliability	Sequential Read	up to 530MB/s	up to 530MB/s	up to 530MB/s
	Sequential Write	up to 500MB/s	up to 500MB/s	up to 500MB/s
	Random Read	up to 98K IOPS	up to 98K IOPS	up to 97K IOPS
	Random Write	up to 37K IOPS	up to 50K IOPS	up to 42K IOPS
	Temperature Range	Operation: 0 °C ~70 °C	■ Operation: 0 °C ~ 70 °C	Operation: 0 °C ~70 °C
		■ Storage: -40 °C ~ 85 °C	■ Storage: -40 °C ~ 85 °C	■ Storage: -40 °C ~ 85 °C
	MTBF	1.5million hrs	1.5million hrs	1.5million hrs
	UBER	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read
	Power On/Off	24 times per day within	24 times per day within	24 times per day within
	Cycles	warranty period	warranty period	warranty period
	DWPD	1	1	1
	TBW	9682TB	1210TB -480GB 1725TB -960GB 3564TB -1920GB	14650TB
Power	(Power supply of 2.5" SSD: 5V±10%)	■ Active Write (Typ.) < 3.4W ■ Active Read (Typ.) < 2.6W ■ Idle < 1.5W	■ Active Write (Typ.) < 3.3W ■ Active Read (Typ.) < 2.5W ■ Idle < 1.4W	■ Active Write (Typ.) < 3.8W ■ Active Read (Typ.) < 2.8W ■ Idle < 1.6W
Environment Specifications	Commercial grade temperature & humidity test	Yes	Yes	Yes
	Shock	1500G/0.5ms	1500G/0.5ms	1500G/0.5ms
	Vibration	20Hz~80Hz/1.52mm 80Hz~2000Hz/20G	20Hz~80Hz/1.52mm 80Hz~2000Hz/20G	20Hz~80Hz/1.52mm 80Hz~2000Hz/20G
	Drop	80cm height/each face	80cm height/each face	80cm height/each face
	Bending	≥ 20Nforce	≥ 20Nforce	≥ 20Nforce
	Thermal Cycling	-40°C-85°C/1000 cycles with 50% cumulative failure. (IPC-9701)	-40°C-85°C/1000 cycles with 50% cumulative failure. (IPC-9701)	-40°C-85°C/1000 cycles with 50% cumulative failure. (IPC-9701)
RoHS compliant		Yes	Yes	Yes
HW Pfail		Support Tantalum	Support Aluminium Capacitor	Support Tantalum
Warranty	Period	5 year limited	5 year limited	5 year limited

