

MUSE-B Series

Industrial Metal 2.5" SATA III SLC SSD supports DDRIII SDRAM Cache



Built-in one DDRIII 128MB SDRAM

Product features

- SLC - NAND type flash technology
- Maximum sequential read speed 475 MB/sec (AHCI mode)
- 2.5" SATA SSD form-factor
- Maximum sequential write speed 356 MB/sec (AHCI mode)
- Supports TRIM function
- Capacity from 32GB up to 128GB
- Support DDRIII SDRAM 128MB cache for extreme performance

Product specifications

Compatibility	SATA 3.0 specification compliance	Power consumption	Power requirement	+5V ± 10%
Flash technology	SLC-NAND type flash based	Reading mode	290 mA (Max.)	
Form-factor	Metal 2.5" SATA SSD	Writing mode	380 mA (Max.)	
Host Interface	Standard SATA 7 pins (data) + 15 pins (power)	Idle mode	70 mA (Max.)	
Performance		Reliability		
Data transfer rate	Serial ATA Gen-I (1.5Gbits), Gen-II (3.0Gbits), Gen-III (6.0Gbits)	Wear-leveling	Global wear-leveling algorithms	
Sequential read	475.0 MB/sec (AHCI mode)	MTBF	3,000,000 hours	
Sequential write	356.0 MB/sec (AHCI mode)	ECC	48 bits per 2KB block	
4K Random IOPS	Read : 20K / Write : 18K	Physical specification		
Random access time	0.2 ms	Weight (max.)	73 g ± 5 g / 2.57 oz.	
Environmental specification		Dimension(W x L x H)	69.90 x 99.90 x 9.50 (mm)	
Operating temp.	STD. 0°C ~ 70°C / IND. -40°C ~ +85°C	Conformal coating	Option for special request	
Non-operating temp.	STD. -20°C ~ +80°C / IND. -50°C ~ +95°C	Warranty		
Humidity	10% ~ 95% non-condensing	Standard grade	3 years	
Vibration	800 Hz, 3.08 G	Industrial grade	5 years	
Shock	1,500 G			
Altitude	70,000 feet			

Operating temperature supports Standard grade 0°C ~ 70°C and Industrial grade -40°C ~ +85°C

Part number list - Industrial 2.5" metal SATA III SLC SSD MUSE-B Series

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	32GB	SM2SR032G-VBCTC	WM2SR032G-VBITI
	64GB	SM2SR064G-VBCTC	WM2SR064G-VBITI
	128GB	SM2SR128G-VBCTC	WM2SR128G-VBITI

Part number decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 — C

Example

S M 2 S R 1 2 8 G — V B C T C

X1 Grade

S : Standard grade operating temp. 0°C ~ 70°C

W : Industrial grade operating temp. -40°C ~ +85°C

X2 The material of casing

M : Metal casing

X3 X4 X5 Product category

2SR : 2.5" SATA III SSD supports DDRIII SDRAM 128MB as cache

X6 X7 X8 X9 Capacity

032G : 32GB

064G : 64GB

128G : 128GB

X11 Controller

V : Marvell (MUSE Series)

X12 Controller version

A,B,C,....

X13 Controller grade

C : Commercial grade

I : Industrial grade

X14 Flash IC

T : Toshiba SLC-NAND flash IC

X15 Flash IC grade

C : Commercial grade

I : Industrial grade

C Reserved for specific requirement

C : Conformal-coating

CF Industrial CompactFlash Card

CFast Industrial CFast Card

ATA Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSE Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCIe Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

UED Industrial Rugged Metal USB Flash Disk

SD Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive

CF Industrial CompactFlash Card

CFast Industrial CFast Card

ATA Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSE Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCIe Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

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