

MUSE-C Series

High Performance 2.5" SATA III(6.0Gbits) MLC SSD supports DDRIII SDRAM Cache



Product features

- MLC - NAND type flash technology
- High performance of random write IOPS, up to 61K.
- 2.5" SATA SSD form-factor
- Maximum sequential read speed 540.4 MB/sec (AHCI mode)
- Supports Windows-7 TRIM Command
- Maximum sequential write speed 444.2 MB/sec (AHCI mode)
- Supports Native Command Queuing (NCQ) command
- Capacity from 64GB up to 512GB

Product specifications

Compatibility	<ul style="list-style-type: none"> SATA 1.0a and SATA 2.6 Specification compliance 	Power consumption	<ul style="list-style-type: none"> Power requirement $\pm 5V \pm 10\%$
Flash technology	<ul style="list-style-type: none"> MLC-NAND type flash based 	Reading mode	<ul style="list-style-type: none"> 230 mA (Max.)
Form-factor	<ul style="list-style-type: none"> Metal 2.5" SATA SSD 	Writing mode	<ul style="list-style-type: none"> 710 mA (Max.)
Host Interface	<ul style="list-style-type: none"> SATA 7-pin (data) + 15-pin (power) 	Idle mode	<ul style="list-style-type: none"> 70 mA (Max.)
Performance		Reliability	
Cache buffer	<ul style="list-style-type: none"> 64GB with DDRIII SDRAM 128MB 126GB with DDRIII SDRAM 256MB 256GB/512GB with DDRIII SDRAM 512MB 	Wear-leveling	<ul style="list-style-type: none"> Global wear-leveling algorithms
Data transfer rate	<ul style="list-style-type: none"> Serial ATA Gen-I, Gen-II and Gen-III 	ECC	<ul style="list-style-type: none"> 48 bits per 2 KB block
Sequential read	<ul style="list-style-type: none"> 540.4 MB/sec (AHCI mode, max.) 	Physical specification	
Sequential write	<ul style="list-style-type: none"> 444.2 MB/sec (AHCI mode, max.) 	Weight	<ul style="list-style-type: none"> 73 g \pm 5 g /2.57 oz.
Random access time	<ul style="list-style-type: none"> 0.2ms (estimated) 	Dimension(W x L x H)	<ul style="list-style-type: none"> 69.80 x 100.00 x 9.50 (mm)
Environmental specification		Warranty	<ul style="list-style-type: none"> 2 years
Operating temp.	<ul style="list-style-type: none"> STD. 0°C~70°C/W.T. -40°C~+85°C 		
Non-operating temp.	<ul style="list-style-type: none"> STD. -20°C~+80°C/W.T. -50°C~+95°C 		
Conformal coating	<ul style="list-style-type: none"> Option for wide temperature 		
Humidity	<ul style="list-style-type: none"> 10% ~ 95% non-condensing 		
Vibration	<ul style="list-style-type: none"> 15G compliance to MIL-STD-810F 		
Shock	<ul style="list-style-type: none"> 1,500G compliance to MIL-STD-810F 		
Altitude	<ul style="list-style-type: none"> 70,000 feet 		

Operating temperature supports Standard grade 0°C ~ 70°C and Wide temp. Grade -40°C ~ +85°C

Part number list - 2.5" metal SATA III MLC SSD MUSE-C Series

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	64GB	SM2SR064G-VCCTM	WM2SR064G-VCCTM/C
	128GB	SM2SR128G-VCCTM	WM2SR128G-VCCTM/C
	256GB	SM2SR256G-VCCTM	WM2SR256G-VCCTM/C
	512GB	SM2SR512G-VCCTM	WM2SR512G-VCCTM/C

Remarks:

Wide temperature grade -40°C ~ +85°C with special conformal coating treatment on PCBA.

Part number decoder

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

Example

W M 2 S R 1 2 8 G — V C C T M / C

X1 ↗ Grade

X12 ↗ Controller version

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

A,B,C,.....

W : Wide temp. Grade operating temp. -40°C ~ +85°C

X13 ↗ Controller grade

C : Commercial grade

X2 ↗ The material of casing

M : Metal casing

X14 ↗ Flash IC

T : Toshiba flash IC

X3 X4 X5 ↗ Product category

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

X15 ↗ Flash IC grade

M : MLC NAND flash IC

X6 X7 X8 X9 ↗ Capacity

064G : 64GB 512G : 512GB

128G : 128GB

256G : 256GB

C ↗ Reserved for specific requirement

C : Conformal-coating

X11 ↗ Controller

V : MUSE Series

CFC CompactFlash Card

CFA CFast Card

AFC PCMCIA ATA Card

MIF micro IDE Flash Module

MSF micro SATA Flash Module

MUM micro USB Flash Module

MPM mini PCle Flash Module

MSM mini SATA Flash Module

SSD Solid State Disk

UFD Rugged Metal USB Flash Disk

SDC/H SD & SDHC Memory Card

AD Adaptor Card-Drive

CFC CompactFlash Card

CFA CFast Card

AFC PCMCIA ATA Card

MIF micro IDE Flash Module

MSF micro SATA Flash Module

MUM micro USB Flash Module

MPM mini PCle Flash Module

MSM mini SATA Flash Module

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