

MUSE-C Series

Metal 2.5" SATA III MLC SSD
supports DDRIII SDRAM Cache



Product features

- MLC - NAND type flash technology
- 2.5" SATA SSD form-factor
- Supports TRIM function
- Maximum sequential read speed 540.4 MB/sec (AHCI mode)
- Maximum sequential write speed 444.2 MB/sec (AHCI mode)
- Capacity from 64GB up to 512GB

Product specifications

- Compatibility**
- SATA 3.0 specification compliance
- Flash technology**
- MLC-NAND type flash based
- Form-factor**
- Metal 2.5" SATA SSD
- Host Interface**
- Standard SATA 7 pins (data) + 15 pins (power)
- Cache buffer**
- 64GB SSD with DDRIII SDRAM 128MB
 - 128GB SSD with DDRIII SDRAM 256MB
 - 256GB / 512GB SSD with DDRIII SDRAM 512MB

- Power consumption**
- Power requirement
- +5V ± 10%
- Reading mode
- 230 mA (Max.)
- Writing mode
- 710 mA (Max.)
- Idle mode
- 70 mA (Max.)
- Reliability**
- Wear-leveling
- Global wear-leveling algorithms
- MTBF
- 1,500,000 hours
- ECC
- 48 bits per 2 KB block

- Performance**
- Data transfer rate
- Serial ATA Gen-I (1.5 Gbits), Gen-II (3.0 Gbits), Gen-III (6.0 Gbits)
- Sequential read
- 540.4 MB/sec (AHCI mode)
- Sequential write
- 444.2 MB/sec (AHCI mode)
- 4K Random IOPS
- Read : 72K / Write : 61K
- Random access time
- 0.2 ms

- Physical specification**
- Weight (max.)
- 73 g ± 5 g / 2.57 oz.
- Dimension(W x L x H)
- 69.80 x 100.00 x 9.50 (mm)
- Conformal coating**
- Option for wide temperature
- Warranty**
- 2 years

- Environmental specification**
- Operating temp.
- STD. 0°C ~ 70°C / WID. -40°C ~ +85°C
- Non-operating temp.
- STD. -20°C ~ +80°C / WID. -50°C ~ +95°C
- Humidity
- 10% ~ 95% non-condensing
- Vibration
- 800 Hz, 3.08 G
- Shock
- 1,500 G
- Altitude
- 70,000 feet

Operating temperature supports Standard grade 0°C ~ 70°C and Wide temperature -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 -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 5 1 2 G — V C C T M — C

X1 Grade

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

W : Wide temperature 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 cache

X6 X7 X8 X9 Capacity

064G : 64GB

128G : 128GB

256G : 256GB

512G : 512GB

X11 Controller

V : MUSE Series

X12 Controller version

A,B,C,....

X13 Controller grade

C : Commercial grade

X14 Flash IC

T : Toshiba flash IC

X15 Flash IC grade

M : MLC-NAND flash IC

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

UED Industrial Rugged Metal USB Flash Disk

SD Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive