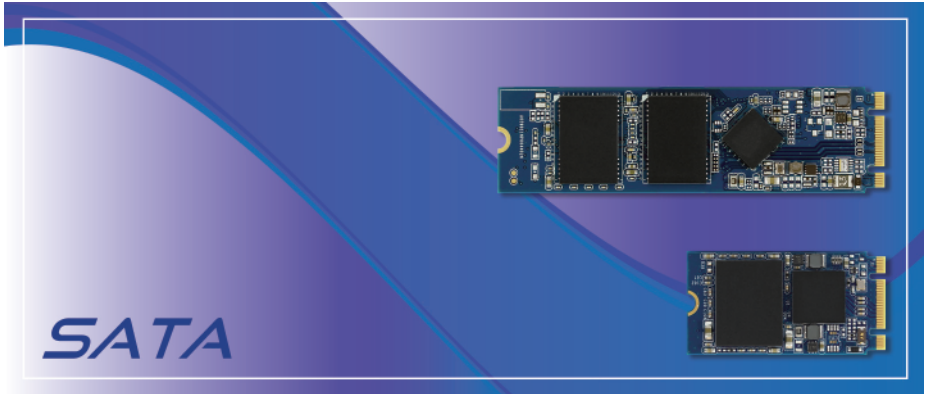


PHANES-K Series

MLC M.2 2242 / 2280 SATA III SSD



Product Feature

- MLC - NAND type flash technology
- M.2 2242 / 2280 form-factor
- S.M.A.R.T. supported
- RoHS & REACH compliant
- M.2 2242 form-factor 8GB up to 256GB
- M.2 2280 form-factor 8GB up to 512GB

Product Specification

Compatibility ▶ SATA Revision 3.1

Flash technology ▶ MLC-NAND type flash memory

Form-factor ▶ M.2 2242 / 2280

Performance

Data transfer rate ▶ SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s

Sequential read ▶ 550 MB/sec (Max.)

Sequential write ▶ 490 MB/sec (Max.)

Environmental specification

Operating temp. ▶ STD. 0°C~70°C/W.T. -40°C~+85°C

Non-operating temp. ▶ STD. -20°C~+80°C/W.T. -50°C~+95°C

Humidity ▶ 10% - 95% non-condensing

Vibration ▶ 80 Hz to 2K Hz, 20G, 3 axes

Shock ▶ 0.5ms, 1500G, 3 axes

Altitude ▶ 70,000 feet

Power consumption

Power requirement ▶ +3.3V ± 5%

Reading mode ▶ 1,500 mW (Max.)

Writing mode ▶ 2,650 mW (Max.)

Idle mode ▶ 280 mA (Max.)

Reliability

Wear-leveling ▶ Static and Dynamic wearLeveling

Erase counts ▶ Up to 3,000 times

ECC ▶ Hardware design LDPC
(Low Density Parity Check)

Physical specification

Weight ▶ 2242 : 4 g ± 0.5 g / 0.14 oz.

▶ 2280 : 6 g ± 0.5 g / 0.21 oz.

Dimension(W x L x H) ▶ 2242 : 42.00 x 22.00 x 3.60 (mm)

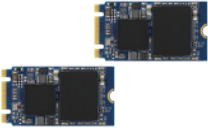
▶ 2280 : 80.00 x 22.00 x 3.60 (mm)

Warranty


MLC(standard/wide temp.) ▶ 2 years or within 3K Erasing counts

Part Number List

MLC M.2 2242 SATA III SSD ▶

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	8GB	SBMDS008G-PKCTM4BM-(T)	WBMDS008G-PKCTM4BM-(T)C
	16GB	SBMDS016G-PKCTM4BM-(T)	WBMDS016G-PKCTM4BM-(T)C
	32GB	SBMDS032G-PKCTM4BM-(T)	WBMDS032G-PKCTM4BM-(T)C
	64GB	SBMDS064G-PKCTM4BM-(T)	WBMDS064G-PKCTM4BM-(T)C
	128GB	SBMDS128G-PKCTM4BM-(T)	WBMDS128G-PKCTM4BM-(T)C
	256GB	SBMDS256G-PKCTM4BM-(T)	WBMDS256G-PKCTM4BM-(T)C

MLC M.2 2280 SATA III SSD ▶

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	8GB	SBMDS008G-PKCTM8BM-(T)	WBMDS008G-PKCTM8BM-(T)C
	16GB	SBMDS016G-PKCTM8BM-(T)	WBMDS016G-PKCTM8BM-(T)C
	32GB	SBMDS032G-PKCTM8BM-(T)	WBMDS032G-PKCTM8BM-(T)C
	64GB	SBMDS064G-PKCTM8BM-(T)	WBMDS064G-PKCTM8BM-(T)C
	128GB	SBMDS128G-PKCTM8BM-(T)	WBMDS128G-PKCTM8BM-(T)C
	256GB	SBMDS256G-PKCTM8BM-(T)	WBMDS256G-PKCTM8BM-(T)C
	512GB	SBMDS512G-PKCTM8BM-(T)	WBMDS512G-PKCTM8BM-(T)C

Part Number Decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 X16 X17 X18 X19 X20

Example1 ▶

W B M D S 2 5 6 G — P K C T M 4 B M C

Example2 ▶

W B M D S 5 1 2 G — P K C T M 8 B M C

X1 Grade

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

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

X2 The material of casing

B : Bare (without casing)

X3 X4 X5 Product category

MDS : M.2 SATA III SSD

X6 X7 X8 X9 Capacity

008G : 8GB **064G** : 64GB **512G** : 512GB

016G : 16GB **128G** : 128GB

032G : 32GB **256G** : 256GB

X11 Controller

P : PHANES Series

X12 Controller version

A, B, C, D,....

X13 Controller grade

C : Commercial grade

X14 Flash IC brand

T : Toshiba NAND flash IC

X15 Flash IC type

M : MLC-NAND Flash IC

X16 X17 X18 Form Factor Type

4 : 2242 form factor

8 : 2280 form factor

BM : With two notches in B and M positions use up to two PCI Express lanes and provide broader compatibility at the same time

X19 X20 Reserved for specific requirement

Blank : Standard product w/o thermal sensor and conformal-coating

T : Thermal Sensor.

C : Conformal coating for wide temp. grade