

PHANES-A Series

MLC 2.5" Rugged Metal SATA III SSD
Supports DDRIII SDRAM CACHE



PRODUCT FEATURES


- ▶ MLC - NAND type flash technology
- ▶ 2.5" SATA SSD form-factor
- ▶ Supports Windows-7 TRIM Command
- ▶ Supports S.M.A.R.T. Function
- ▶ Extremely rugged metal casing to endure harsh environments
- ▶ Maximum sequential read speed 526.7 MB/sec (Max.)
- ▶ Maximum sequential write speed 416.9 MB/sec (Max.)
- ▶ Capacity from 256GB up to 1TB

PRODUCT SPECIFICATION

| | | | |
|------------------------------------|--|-------------------------------|---|
| Compatibility | ▶ SATA 1.0a, SATA 2.6 and SATA 3.0 Specification compliance | Power consumption | |
| Flash technology | ▶ MLC-NAND type flash based | Power requirement | ▶ +5V ± 5% |
| Form-factor | ▶ Rugged Metal 2.5" SATA SSD | Reading mode | ▶ 842 mA (Max.) |
| Host Interface | ▶ SATA 7-pin (data) + 15-pin (power) | Writing mode | ▶ 1075 mA (Max.) |
| Performance | | Idle mode | ▶ 65 mA (Max.) |
| Data transfer rate | ▶ Serial ATA Gen-I, Gen-II and Gen-III (1.5Gb/s, 3.0Gb/s and 6.0Gb/s) | Reliability | |
| Sequential read | ▶ 526.7 MB/sec (Max.) | Wear-leveling | ▶ Static and Dynamic wear-leveling algorithms |
| Sequential write | ▶ 416.9 MB/sec (Max.) | ECC | ▶ 72 bits per 1024 bytes block |
| Random access time | ▶ 0.1ms (estimated) | Physical specification | |
| Environmental specification | | Weight | ▶ 115g ± 5g /4.06 oz. |
| Operating temp. | ▶ STD. 0° C~70° C/W.T. -40° C~+85° C | Dimension(W x L x H) | ▶ 69.90 x 100.00 x 9.50 (mm) |
| Non-operating temp. | ▶ STD. -20° C~+80° C/W.T. -50° C~+95° C | Warranty | ▶ 2 years |
| Conformal coating | ▶ Option for wide temperature | | |
| Humidity | ▶ 10% ~ 95% non-condensing | | |
| Vibration | ▶ 80 Hz to 2K Hz, 20G, 3 axes | | |
| Shock | ▶ 0.5ms, 1500 G, 3 axes | | |
| Altitude | ▶ 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" rugged metal SATA III MLC SSD supports DDRIII SDRAM Cache

| Product Picture | Capacity | 0°C ~ 70°C | -40°C ~ +85°C |
|---|--------------|-----------------|-------------------|
|  | 256GB | SR2SR256G-PACTM | WR2SR256G-PACTM/C |
| | 512GB | SR2SR512G-PACTM | WR2SR512G-PACTM/C |
| | 1TB | SR2SR01TB-PACTM | WR2SR01TB-PACTM/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 R 2 S R 5 1 2 G — P A C T 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

R : Rugged metal casing

X3 X4 X5 ▶ Product category

2SR : 2.5" SATA SSD with SDRAM Cache

X6 X7 X8 X9 ▶ Capacity

256G : 256GB

512G : 512GB

01TB : 1TB

X11 ▶ Controller

P : Phison (PHANES-A Series)

X12 ▶ Controller version

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

X13 ▶ Controller grade

C : Commercial grade

X14 ▶ Flash IC

T : Toshiba NAND flash IC

X15 ▶ Flash IC grade

M : MLC NAND flash IC

C ▶ Reserved for specific requirement

C : Conformal-coating