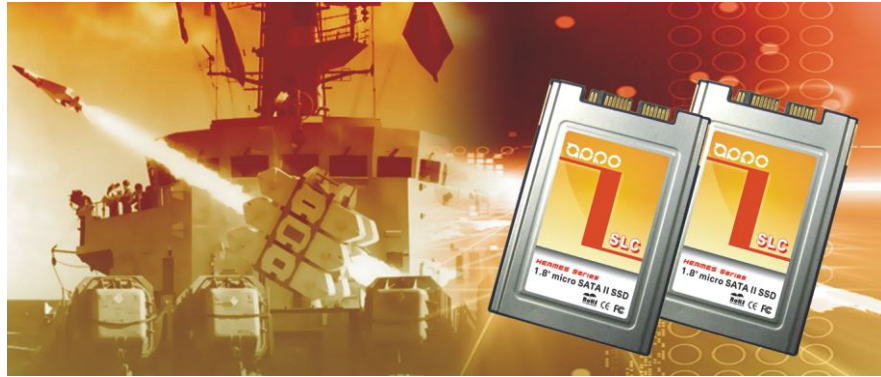


# HERMES Series

## Industrial 1.8" micro SATA II SLC SSD



### Product features


- SLC - NAND type flash technology
- Capacity from 8GB up to 32GB
- 1.8" SATA SSD form-factor in 5 mm height
- Performance up to 176.8 MB/sec (Max.)
- Micro SATA 7 pins (data) + 9 pins (power) host interface
- Automatic 8 bits ECC and retry capabilities
- Compliant with SATA 1.0a and SATA 2.6 specification
- Supports static wear-leveling algorithms

### Product specifications

- |                                    |  |                               |                                 |                        |
|------------------------------------|--|-------------------------------|---------------------------------|------------------------|
| <b>Compatibility</b>               | SATA 1.0a and SATA 2.6 specification compliance        | <b>Power consumption</b>      | Power requirement               | +5V ± 10% / +3.3V ± 5% |
| <b>Flash technology</b>            | SLC-NAND type flash based                              | <b>Reading mode</b>           | 350 mA (Max.)                   |                        |
| <b>Form-factor</b>                 | 1.8" SATA SSD  | <b>Writing mode</b>           | 500 mA (Max.)                   |                        |
| <b>Host interface</b>              | Micro SATA II 7 pins (data) + 9 pins (power connector) | <b>Sleeping mode</b>          | 150 mA (Max.)                   |                        |
| <b>Performance</b>                 |  | <b>Reliability</b>            |                                 |                        |
| <b>Data transfer rate</b>          | Serial ATA Gen-I and II (1.5Gb/s and 3.0Gb/s)          | <b>Wear-leveling</b>          | Static wear-leveling algorithms |                        |
| <b>Sequential read</b>             | 176.8 MB/sec (Max.)                                    | <b>MTBF</b>                   | > 3,000,000 hours               |                        |
| <b>Sequential write</b>            | 139.3 MB/sec (Max.)                                    | <b>ECC</b>                    | 8 bits per 512 bytes block      |                        |
| <b>Average access time</b>         | 0.2 ms (estimated)                                     | <b>Endurance</b>              | > 2,000,000 cycles              |                        |
| <b>Environmental specification</b> |  | <b>Data retention</b>         | 10 years                        |                        |
| <b>Operating temp.</b>             | STD. 0°C ~ 70°C / IND. -40°C ~ +85°C                   | <b>Physical specification</b> |                                 |                        |
| <b>Non-operating temp.</b>         | STD. -20°C ~ +80°C / IND. -50°C ~ +95°C                | <b>Weight (max.)</b>          | 25 g ± 2 g / 0.88 oz.           |                        |
| <b>Humidity</b>                    | 10% ~ 95% non-condensing                               | <b>Dimension(W x L x H)</b>   | 54.00 x 78.50 x 5.00 (mm)       |                        |
| <b>Acoustic noise</b>              | 0dB  | <b>Warranty</b>               |                                 |                        |
| <b>Vibration</b>                   | 15G compliance to MIL-STD-810F                         | <b>Standard grade</b>         | 3 years                         |                        |
| <b>Shock</b>                       | 1,500G compliance to MIL-STD-810F                      | <b>Industrial grade</b>       | 5 years                         |                        |
| <b>Altitude</b>                    | 70,000 feet  |                               |                                 |                        |

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

### Part number list - Industrial 1.8" micro SATA II SLC SSD

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	8GB	SP8SF008G-JACSC	WP8SF008G-JAISI
	16GB	SP8SF016G-JACSC	WP8SF016G-JAISI
	32GB	SP8SF032G-JACSC	WP8SF032G-JAISI

### Part number decoder

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

### Example

S P 8 S F 0 3 2 G — J A C S C

**X1** Grade

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

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

**X12** Controller version

**A,B,C,....**

**X2** The material of frame kit

**P** : Plastic frame kit

**X13** Controller grade

**C** : Commercial grade

**I** : Industrial grade

**X3 X4 X5** Product category

**8SF** : 1.8" micro SATA II SSD

**X14** Flash IC

**S** : Samsung SLC-NAND flash IC

**X6 X7 X8 X9** Capacity

**008G** : 8GB

**016G** : 16GB

**032G** : 32GB

**X15** Flash IC grade

**C** : Commercial grade

**I** : Industrial grade

**X11** Controller

**J** : JMicon (HERMES Series)

**Y** Reserved for specific requirement

**Y** : Reserved for special request