



◆ Features

- SLC-NAND flash technology
- Optional thermal sensor to monitor SSD operating temperature
- Support Trim command set
- Support Native Command Queuing (NCQ)
- Support LDPC (Low Density Parity Check) ECC algorithm
- Support S.M.A.R.T. command set and utility
- Support Power Loss Protection
- Capacities from 8GB up to 128GB

◆ Specification

- **Compatibility** SATA Revision 3.2  
ATA-8 ACS4 command set
- **Declarations** RoHS & REACH compliant
- **Flash technology** SLC-NAND flash technology
- **Form-factor** Rugged Metal 2.5" 7mm height SATA SSD
- **Host interface** SATA 7-pin (data) + 15-pin (power)
- **Performance**
  - **Data transfer rate** SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s
  - **Sequential read** 480 MB/sec (Max.)
  - **Sequential write** 425 MB/sec (Max.)
- **Environmental**
  - **Operating temp.** STD. 0°C~+70°C/IND. -40°C~+85°C
  - **Non-operating temp.** STD. -20°C~+80°C/IND. -50°C~+95°C
  - **Humidity** 10% ~ 95% non-condensing
  - **Vibration** 80 Hz to 2K Hz, 20G, 3axes
  - **Shock** 0.5ms, 1500G, 3 axes
  - **Altitude** 70,000 feet
- **Power consumption**

- **Power requirement** +5V ± 5%
- **Reading mode** 1,700 mW (Max.)
- **Writing mode** 2,300 mW (Max.)
- **Idle mode** 315 mW (Max.)
- **Reliability**
  - **Wear-leveling** Static and Dynamic wear-leveling algorithms
  - **TBW** Up to 2,133 TBW at 128GB Capacity (Client workload by JESD-219A)
- **MTBF** > 3,000,000 hours
- **Erase counts** Up to 60,000 times
- **ECC** LDPC (Low Density Parity Check)
- **Physical specification**
  - **Weight (Max.)** 50g
  - **Dimension (WxLxH)** 69.90 x 100.00 x 7.00 (mm)
- **Conformal coating** Optional
- **Warranty**
  - **SLC STD. grade** 3 years or within 60,000 erasing counts
  - **SLC IND. grade** 5 years or within 60,000 erasing counts

◆ Part Number List

| Capacity | 0°C~+70°C           | Capacity | -40°C~+85°C         |
|----------|---------------------|----------|---------------------|
| 8GB      | SR7SF008G-PKCTC-(T) | 8GB      | WR7SF008G-PKITI-(T) |
| 16GB     | SR7SF016G-PKCTC-(T) | 16GB     | WR7SF016G-PKITI-(T) |
| 32GB     | SR7SF032G-PKCTC-(T) | 32GB     | WR7SF032G-PKITI-(T) |
| 64GB     | SR7SF064G-PKCTC-(T) | 64GB     | WR7SF064G-PKITI-(T) |
| 128GB    | SR7SF128G-PKCTC-(T) | 128GB    | WR7SF128G-PKITI-(T) |

◆ Part Number Decoder

|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| X1 | X2 | X3 | X4 | X5 | X6 | X7 | X8 | X9 | X10 | X11 | X12 | X13 | X14 | X15 | X16 | X17 | X18 | X19 | X20 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

Example

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| W | R | 7 | S | F | 1 | 2 | 8 | G | — | P | K | I | T | I | — | T | C |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|

**X1** Grade

S : Standard grade operating temp. 0°C~+70°C  
W: Industrial grade operating temp. -40°C~+85°C

**X2** The material of casing

R : Rugged metal casing

**X3** **X4** **X5** Product category

7SF : 2.5" 7 mm height SATA III SSD

**X6** **X7** **X8** **X9** Capacity

008G : 8GB      064G : 64GB  
016G : 16GB    128G : 128GB  
032G : 32GB

**X11** Controller

P : PHANES Series

**X12** Controller version

A, B, C, D....

**X13** Controller grade

C : Commercial grade  
I : Industrial grade

**X14** Flash IC brand

T : Toshiba SLC-NAND flash IC

**X15** Flash IC grade

C : Commercial grade  
I : Industrial grade

**X17** **X18** **X19** **X20** Reserved for specific requirements

Blank : Standard product w/o thermal sensor and conformal-coating  
T : Thermal Sensor (optional)  
C : Conformal coating (optional)