



**Features**

- MLC-NAND flash technology
- Support Trim command set
- Support Native Command Queuing (NCQ)
- Support S.M.A.R.T. command set and utility
- Support Power Loss Protection
- Capacities from 4GB up to 512GB

**Specification**

- **Compatibility** SATA Revision 3.1  
ATA-8 ACS2 command set
- **Declarations** RoHS & REACH compliant
- **Flash technology** MLC-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** 422 MB/sec (Max.)
  - **Sequential write** 147 MB/sec (Max.)
- **Environmental**
  - **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** 70 Hz to 2K Hz, 20G, 3 axes
  - **Shock** 0.5ms, 1500G, 3 axes
  - **Altitude** 70,000 feet

- **Power consumption**
  - **Power requirement** +5V ± 5%
  - **Reading mode** 170 mA (Max.)
  - **Writing mode** 310mA (Max.)
  - **Idle mode** 60mA (Max.)
- **Reliability**
  - **Wear-leveling** Static wear-leveling algorithms
  - **TBW** Up to 153.6 TBW at 512GB Capacity (Client workload by JESD-219A)
  - **Erase counts** Up to 3,000 times
  - **ECC** 40 bits per 1024 bytes block
- **Physical specification**
  - **Weight (Max.)** 50g
  - **Dimension (WxLxH)** 69.90 x 100.0 x 7.00 (mm)
- **Conformal coating** Optional
- **Warranty** 2 years or within 3,000 erasing counts

**Part Number List**

Capacity	0°C~+70°C	Capacity	-40°C~+85°C
4GB	SR7SF004G-JJCTMB-(T)	4GB	WR7SF004G-JJCTMB-(T)C
8GB	SR7SF008G-JJCTMB-(T)	8GB	WR7SF008G-JJCTMB-(T)C
16GB	SR7SF016G-JJCTMB-(T)	16GB	WR7SF016G-JJCTMB-(T)C
32GB	SR7SF032G-JJCTMB-(T)	32GB	WR7SF032G-JJCTMB-(T)C
64GB	SR7SF064G-JJCTMB-(T)	64GB	WR7SF064G-JJCTMB-(T)C
128GB	SR7SF128G-JJCTMB-(T)	128GB	WR7SF128G-JJCTMB-(T)C
256GB	SR7SF256G-JJCTMB-(T)	256GB	WR7SF256G-JJCTMB-(T)C
512GB	SR7SF512G-JJCTMB-(T)	512GB	WR7SF512G-JJCTMB-(T)C

Notes : HERMES-J Series from 4GB to 32GB; HERMES-I Series from 64GB and 512GB

**Part Number Decoder**

X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20
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**Example 1**

W	R	7	S	F	0	3	2	G	-	J	J	C	T	M	B	-	T	C	
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**Example 2**

W	R	7	S	F	5	1	2	G	-	J	I	C	T	M	B	-	T	C	
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**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**

7SF : 2.5" 7 mm height SATA III SSD

**X6 X7 X8 X9 Capacity**

004G : 4GB      064G : 64GB  
008G : 8GB      128G : 128GB  
016G : 16GB     256G : 256GB  
032G : 32GB     512G : 512GB

**X11 Controller**

J : HERMES Series

**X12 Controller version**

A, B, C, D ...I, J...

**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 MLC Technology**

B : Toshiba 15nm MLC

**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)

SLC  
oSLC  
MLC  
3D-NAND  
DRAM Module  
Adapter  
Card-drive