



Features

- MLC-NAND flash technology
- Support power protection via Tantalum Capacitors
- Support Trim command set
- Support Native Command Queuing (NCQ)
- S.M.A.R.T. command set
- Support Fast Erase and Secure Erase Functions
- Support Full-Drive Encryption.
- Capacities from 32GB up to 1TB

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" 9mm 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** 561 MB/sec (Max.)
 - **Sequential write** 349 MB/sec (Max.)
 - **4KB random read** 71.7K IOPS (Max.)
 - **4KB random write** 68.7K IOPS (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, 15G, 3 axes
 - **Shock** 0.5ms, 1500G, 3 axes
 - **Altitude** 70,000 feet

- **Power consumption**
 - **Power requirement** +5V ± 5%
 - **Reading mode** 350 mA (Max.)
 - **Writing mode** 580 mA (Max.)
 - **Idle mode** 120 mA (Max.)
- **Reliability**
 - **Wear-leveling** Global wear-leveling algorithms
Up to 1,800 TBW at 1TB Capacity
(Client workload by JESD-219A)
 - **TBW**
 - **Erase counts** Up to 3,000 times
 - **ECC** 66 bits per 1024 bytes block
- **Physical specification**
 - **Weight (Max.)** 100g
 - **Dimension (WxLxH)** 70.00 x 100.00 x 9.20 (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
32GB	SR2SR032G-MSCTMBUFE(USE)P	32GB	WR2SR032GMSCTMBUFE(USE)PC
64GB	SR2SR064G-MSCTMBUFE(USE)P	64GB	WR2SR064GMSCTMBUFE(USE)PC
128GB	SR2SR128G-MSCTMBUFE(USE)P	128GB	WR2SR128GMSCTMBUFE(USE)PC
256GB	SR2SR256G-MSCTMBUFE(USE)P	256GB	WR2SR256GMSCTMBUFE(USE)PC
512GB	SR2SR512G-MSCTMBUFE(USE)P	512GB	WR2SR512GMSCTMBUFE(USE)PC
1TB	SR2SR001T-MSCTMBUFE(USE)P	1TB	WR2SR001TMSCTMBUFE(USE)PC

Part Number Decoder

X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20
W	R	2	S	R	0	0	1	T	M	S	C	T	M	B	U	S	E	P	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" 9 mm height SATA III SSD with DRAM cache

X6 X7 X8 X9 Capacity

032G : 32GB 256G : 256GB
064G : 64GB 512G : 512GB
128G : 128GB 001T : 1TB

X10 Controller

M : HERCULES Series

X11 Controller version

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

X12 Controller grade

C : Commercial grade

X13 Flash IC brand

T : Toshiba NAND flash IC

X14 Flash IC type

M : MLC-NAND flash IC

X15 MLC Technology

B : Toshiba 15nm MLC

X16 X17 X18 Special function

UFE : Fast Erase function only
USE : Secure Erase function (supported by special firmware) & Fast Erase function

X19 H/W Encryption

P : Full-Drive Encryption

X20 Reserved for specific requirements

C : Conformal coating (optional)

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