



Features

- TOSHIBA BiCS Flash™ (3D-NAND) technology
- Built with DRAM cache
- 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
- Ultra-high random read/write speed
- Capacities from 128GB up to 4TB

Specification

- **Compatibility** SATA Revision 3.2
ATA-8 ACS4 command set
- **Declarations** RoHS & REACH compliant
- **Flash technology** 3D-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** 560 MB/sec (Max.)
 - **Sequential write** 525 MB/sec (Max.)
 - **4KB random read** 87K IOPS (Max.)
 - **4KB random write** 70K 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, 20G, 3 axes
 - **Shock** 0.5ms, 1500G, 3 axes
 - **Altitude** 70,000 feet

- **Power consumption**
 - **Power requirement** +5V ± 5%
 - **Reading mode** 912 mA (Max.)
 - **Writing mode** 1,066 mA (Max.)
 - **Idle mode** 603 mA (Max.)
- **Reliability**
 - **Wear-leveling** Static wear-leveling algorithms
 - **TBW** Up to 4,800 TBW at 4TB Capacity (Client workload by JESD-219A)
 - **Erase counts** Up to 3,000 times
 - **ECC** LDPC (Low Density Parity Check)
- **Physical specification**
 - **Weight (Max.)** 65g
 - **Dimension (WxLxH)** 69.90 x 100.00 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
128GB	SR7SR128G-VECT3	128GB	WR7SR128G-VECT3-C
256GB	SR7SR256G-VECT3	256GB	WR7SR256G-VECT3-C
512GB	SR7SR512G-VECT3	512GB	WR7SR512G-VECT3-C
1TB	SR7SR001T-VECT3	1TB	WR7SR001T-VECT3-C
2TB	SR7SR002T-VECT3	2TB	WR7SR002T-VECT3-C
4TB	SR7SR004T-VECT3	4TB	WR7SR004T-VECT3-C

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	7	S	R	0	0	4	T	-	V	E	C	T	3	-	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

7SR : 2.5" 7 mm height SATA III SSD with DRAM cache

X6 X7 X8 X9 Capacity

128G : 128GB 001T : 1TB
256G : 256GB 002T : 2TB
512G : 512GB 004T : 4TB

X11 Controller

V : MUSE Series

X12 Controller version

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

X13 Controller grade

C : Commercial grade

X14 Flash IC brand

T : Toshiba NAND flash IC

X15 Flash IC type

3 : BiCS 3D-NAND Flash IC

X17 X18 X19 X20 Reserved for specific requirements

C : Conformal coating (optional)

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