

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



Features

- Enhanced MLC-NAND flash by sophisticated aSLC firmware
- Semi-metal casing design
- Ultra-high random read/write speed
- Support S.M.A.R.T. command set and utility
- Customized logo by laser carving (MOQ requested)
- Capacities from 4GB up to 256GB

Specification

- **Compatibility** USB 3.1
- **Declarations** RoHS & REACH compliant
- **Flash technology** MLC-NAND flash technology
- **Form-factor** Pen drive
- **Host interface** 9 pins USB 3.0 Type A connector
- **Performance**
 - **Data transfer rate** FullSpeed, HighSpeed and SuperSpeed
 - **Sequential read** 147.7 MB/sec (Max.)
 - **Sequential write** 118.3 MB/sec (Max.)
 - **4KB random read** 14.4 MB/sec (Max.)
 - **4KB random write** 11.2 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, 15G, 3 axes
 - **Shock** 0.5ms, 1500G, 3 axes
 - **Altitude** 70,000 feet
- **OS supported** Windows series Embedded O.S. Linux, VxWorks and DOS

- **Power consumption**
 - **Power requirement** 5V ± 10% via USB port
 - **Reading mode** 203 mA(Max.)
 - **Writing mode** 189.8 mA(Max.)
 - **Idle mode** 40.2 mA(Max.)
- **Reliability**
 - **Wear-leveling** Dynamic, Static and Global wear-leveling algorithms
 - **TBW** Up to 503 TBW at 256GB Capacity (Client workload by JESD-219A)
 - **Erase counts** Up to 20,000 times
 - **ECC** 96 bits per 1024 bytes block
- **Physical specification**
 - **Weight (Max.)** 15g
 - **Dimension (WxLxH)** 17.60 x 62.10 x 8.40 (mm).
- **Conformal coating** Optional
- **Warranty** 2 years or within 20,000 erasing counts

Part Number List

| Capacity | 0°C~+70°C | Capacity | -40°C~+85°C |
|----------|--------------------|----------|---------------------|
| 4GB | SMUFD004G-HECTMBAS | 4GB | WMUFD004G-HECTMBASC |
| 8GB | SMUFD008G-HECTMBAS | 8GB | WMUFD008G-HECTMBASC |
| 16GB | SMUFD016G-HECTMBAS | 16GB | WMUFD016G-HECTMBASC |
| 32GB | SMUFD032G-HECTMBAS | 32GB | WMUFD032G-HECTMBASC |
| 64GB | SMUFD064G-HECTMBAS | 64GB | WMUFD064G-HECTMBASC |
| 128GB | SMUFD128G-HECTMBAS | 128GB | WMUFD128G-HECTMBASC |
| 256GB | SMUFD256G-HECTMBAS | 256GB | WMUFD256G-HECTMBASC |

Part Number Decoder

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| X1 | X2 | X3 | X4 | X5 | X6 | X7 | X8 | X9 | X10 | X11 | X12 | X13 | X14 | X15 | X16 | X17 | X18 | X19 | X20 |
| W | M | U | F | D | 2 | 5 | 6 | G | - | H | E | C | T | M | B | A | S | C | |

Example

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

M : Semi-metal casing

X3 X4 X5 Product category

UFD : USB Flash Disk

X6 X7 X8 X9 Capacity

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

X11 Controller

H : HERMIT 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

M : MLC-NAND flash IC

X16 MLC Technology

B : Toshiba 15nm MLC

X17 X18 aSLC Technology

AS : aSLC Technology extends MLC products' lifespan

X19 X20 Reserved for specific requirements

C : Conformal coating (optional)