



StorFly® M.2 Type 2280 SATA Solid-State Drive

Series 6 (Gen2), SATA-III (6Gb/s), 3D TLC

VSFDM8CI480G-V21

Product Brief - Rev. 1.0

See Datasheet for all details



Description

Virtium's StorFly® Series 6 M.2 is high-performance SATA-III 6Gb/s embedded solid-state drive (SSD) technology designed for the unique capacity and workload requirements of a broad range of embedded systems, including telco and networking, industrial PC and automation, medical diagnostics and imaging, transportation, defense command and control, and data recorders.

Features

Capacity

- 480 GB

3D TLC NAND

Sequential Performance

- 128kB Sequential Read: 550 MB/s (QD: 32)
- 128kB Sequential Write: 490 MB/s (QD: 32)

Random Performance

- 4kB IOPS Read: up to 75,000 (QD: 32)
- 4kB IOPS Write: up to 68,000 (QD: 32)

Power: 3.3V±5%

- 128kB Sequential Read: 1.90 W
- 128kB Sequential Write: 2.70 W
- 4kB Random Read: 2.10 W
- 4kB Random Write: 2.40 W
- Idle: 0.69 W

Temperature Ranges

- Industrial: -40°C to 85°C
- Non-Operating: -40°C to 85°C

Reliability

- Advanced LDPC ECC
- MTBF: >2M hours

Endurance

- JESD219A: 420 TBW
- Sequential: 1,485 TBW

vtGuard® Power Fail Protection

- Integrated power fail protection
- Preserves static data in the event of power failure
- Cache/buffer contents restored at power-on

SMART Attribute Reporting

- Monitors device health
- Anticipates and predicts failures

Mechanical Dimensions

- M.2 Type 2280-D2-B-M Form Factor
- Length x Width x Height mm (inches)
80.00 (3.150) x 22.00 (0.866) x 2.60 (0.102)

Compliance

- SATA Revision 3.1 (SATA-III 6Gb/s)
- ATA/ATAPI-8 (ACS-3)
- FCC, CE, UL, RoHS, WEEE

Environmental (Non-operating)

- Humidity (non-condensing): 5% to 95%
- Shock: 1500G, half-sine wave, 0.5ms duration
- Vibration: 20G, 20 Hz to 2000 Hz

Data Security

- Integrated AES-256 encryption (data-at-rest)
- Crypto Erase
- TCG/Opal 2.0-compliant SED⁽¹⁾

StorKit® Software - visit virtium.com to learn more.

- vtView®, vtSecure™, vtTools™

Note: (1) Available in parts with -T part number extension



Electrostatic Discharge (ESD) can damage this device. When handling the device, always wear a grounded wrist strap and use a static dissipative surface.



Any damage to the unit that occurs after its removal from the shipping package and ESD protective bag is the responsibility of the user.