Virtium
Solid State Storage and Memory

StorFly® M.2 Type 2242 SATA Solid-State Drive

Series 6 (Gen2), SATA-III (6Gb/s), pSLC

VSFDM4XI016G-V11-T

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
- 16 GB

pSLC NAND

Sequential Performance
- 128kB Sequential Read: 410 MB/s (QD: 32)
- 128kB Sequential Write: 170 MB/s (QD: 32)

Random Performance
- 4kB IOPS Read: up to 30,900 (QD: 32)
- 4kB IOPS Write: up to 43,700 (QD: 32)

Power: 3.3V±5%
- 128kB Sequential Read: 1.71 W
- 128kB Sequential Write: 1.51 W
- 4kB Random Read: 1.44 W
- 4kB Random Write: 1.52 W
- Idle: 0.68 W

Temperature Ranges
- Industrial: -40ºC to 85ºC
- Non-Operating: -40ºC to 85ºC

Reliability
- Advanced LDPC ECC
- MTBF: >2M hours

Endurance
- JESD219A: 312 TBW
- Sequential: 634 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 2242-D2-B-M Form Factor
- Length x Width x Height mm (inches)
  42.00 (1.650) x 22.00 (0.866) x 3.60 (0.142)

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

StorKit® Software - visit virtium.com to learn more.
- vtView®, vtSecure™, vtTools™

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.