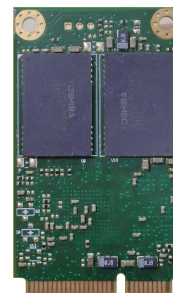**Virtium**
Solid State Storage and Memory

StorFly® 302 mSATA Solid-State Drive
Series 6 (Gen1), SATA-III (6Gb/s), SLC

VSF302PI032G-V11

Product Brief - Rev. 1.0
See Datasheet for all details

Description

Virtium's StorFly Series 6 mSATA is high performance SATA 6Gbps embedded solid-state drive (SSD) technology designed for an optimal blend of performance, endurance and cost. The device provides a unique solution that supports a broad range of workload and temperature requirements for embedded systems, including communications, networking, industrial automation, medical monitoring, gaming equipment, point-of-sale terminals, data recorders and transportation applications.

Features

Capacity
- 32 GB

SLC NAND

Sequential Performance
- 128kB Sequential Read: 530 MB/s (QD: 32)
- 128kB Sequential Write: 260 MB/s (QD: 32)

Random Performance
- 4kB IOPS Read: up to 69,500 (QD: 32)
- 4kB IOPS Write: up to 53,000 (QD: 32)

Power: 3.3V±5%
- 128kB Sequential Read: 2.20 W
- 128kB Sequential Write: 2.40 W
- 4kB Random Read: 1.80 W
- 4kB Random Write: 2.10 W
- Idle: 0.40 W

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

Reliability
- BCH ECC capable of correcting errors up to 66-Bit/1KB
- MTBF: >2M hours

Endurance
- JESD219A: 508 TBW
- Sequential: 3,176 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
- mSATA (MO-300) Form Factor
- Length x Width x Height mm (inches)
  50.80 (2.00) x 29.85 (1.175) x 3.60 (0.142)

Compliance
- SATA Revision 3.1 (SATA 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

Optional Data Security [1]
- 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™

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.