



Contact Information

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Avant MO-300 SSD

The Avant MO-300 SSD module combines enterprise class performance and reliability with low power operation to make the ideal embedded SSD module.

Providing an industry-leading bandwidth of more than 550MB/sec transfers, the Avant MO-300 SSD module can approach the limits of the SATA 6Gb/s interface on large transfers. Performance reaches enterprise class standards with up to 60,000 IOPS while providing advanced power management for low consumption or extended battery life.

A robust ECC algorithm and redundant storage technology protects the data. Efficient bad block management and reduced write amplification further bolster endurance. Drive health is monitored using an SSD-specific set of S.M.A.R.T. attributes. The combination of these techniques provides data protection unrivaled in the embedded storage industry.

Reduced Power Requirements

- No moving parts
- Super-low operating and standby power needs
- Power requirements notably reduced over a typical HD

Fast Performance

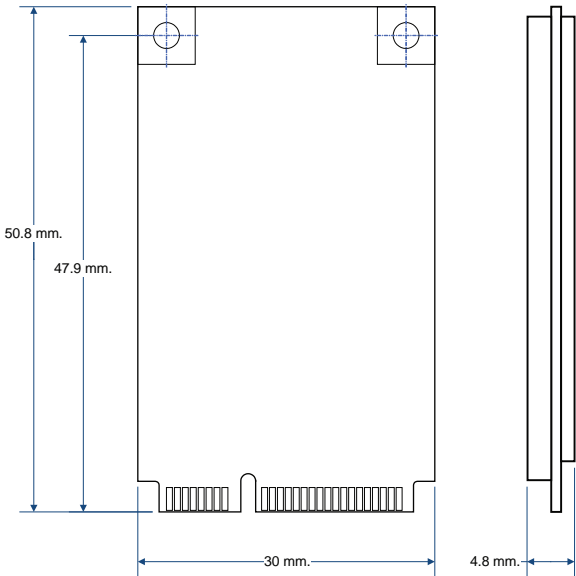
- Virtually zero spin up or seek times
- Zero rotational latency
- High sustained high-speed data transfers

Reliable

- No volatile memory elements
- Improved resistance to shock & vibration
- Predictable and manageable failure modes reduce IT costs

Improved Operation

- Noise and vibration free
- Virtually no heat emissions
- Lighter than conventional storage



Assembled in the U.S.A.

Part Number	Capacity	Voltage	Flash
AVSC01BC030M4	30GB	3.3V	Async
AVSC01BC040M4	40GB	3.3V	Async
AVSC01BC060M4	60GB	3.3V	Async
AVSC01BC090M4	90GB	3.3V	Async
AVSC01BC120M4	120GB	3.3V	Async
AVSC01BC180M4	180GB	3.3V	Async
AVSC01BC240M4	240GB	3.3V	Async
AVSC01BD030M4	30GB	3.3V	Sync
AVSC01BD040M4	40GB	3.3V	Sync
AVSC01BD060M4	60GB	3.3V	Sync
AVSC01BD090M4	90GB	3.3V	Sync
AVSC01BD120M4	120GB	3.3V	Sync
AVSC01BD180M4	180GB	3.3V	Sync
AVSC01BD240M4	240GB	3.3V	Sync

Avant MO-300 SSD - Technical Specifications

Features

JEDEC standard MO-300 form factor
 Lifetime performance – will not degrade over time
 TRIM support (O/S support required)
 Windows (32-bit & 64-bit), Linux, and Mac OSX
 SandForce 22xx family of controllers
 Ultra-efficient Block Management and Wear Leveling

Capacity

16GB to 240GB

Host Interface

SATA 6Gb/s, 3.0Gb/s support and 1.5Gb/s support
 Native Command Queuing: 32
 SMART attribute List: Extended

Performance

Sequential Read up to 560MB/s
 Sequential Write up to 530MB/s
 Random Read IOPS @ 4K blocks: up to 30K
 Random Write IOPS @ 4K blocks: up to 80K

Flash Memory Support

Supports MLC, eMLC and SLC type
 Number of Flash Buses: 8

Power Consumption

Typical (mW) <4W
 Sleep/Slumber: 750mW

Reliability

MTTF (PoH): 2M
 Up to 24 9-bit Symbols Correction per 512 9-bit Symbol
 Non-recoverable Read Errors: (Less than 1 sector per bits read) 10^{16}

Environmental

Operating Temperature 0°C to 70°C

Security

256-bit AES compliant Data Encryption
 User Selectable Password prior to boot
 User Selectable Password runtime
 Secure Erase (Factory Reset - ATA)

Physical

MO-300 Industry Standard Form Factor
 Weight <10g

