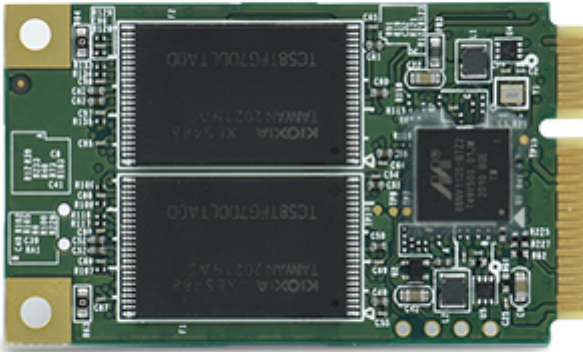


MSATA FLASHDISKS Solid State Mass Storage for mSATA/Minicard Socket



FEATURES

- SATA interface for full size mSATA / Minicard socket
- Up to 512GB capacity
- Wide temperature -40/+85C operation



◆ Products where used:

Product	Description
saturn	Rugged Apollo Lake x5-E3940 SBC with Data Acquisition and PCIe/104 Expansion
Aries	PC/104-Plus SBC with Intel E3800 CPU, Soldered RAM, & On-Board Data Acquisition
Zeta	Ultra-Small SBC Using COM Express Type 10 CPU Modules
Gemini	Rugged PCI/104-Express SBC and Carrier Board for COM Express Compact Type 6 CPU Modules
Venus	Rugged 3.5 Inch SBC with 7th Gen Core i7 CPU and PCIe/104
Helix	PC/104 SBC with Vortex86DX3 1GHz CPU and Data Acquisition

◆ mSATA Flashdisk Solid-State Storage

These flashdisks can be used in any multi-technology PCIe minicard / mSATA socket on our SBCs. All Diamond SBCs contain auto-select circuitry that identifies the type of module installed and selects the appropriate interface (PCIe / SATA).

Both SLC and MLC technologies are available. MLC is normally stocked; consult factory for leadtime on SLC models. All models are qualified for -40/+85C operation.

- mSATA flashdisk features:
 - SATA compatible interface
 - Single-level cell (SLC) flash modules for faster transfer speeds, lower power consumption, and higher cell endurance
 - Multi-level cell (MLC) flash modules for lower cost and higher storage density
 - Burst read/write of 300MB/s
 - Sustained read performance of up to 165MB/s (SLC), 155MB/s (MLC)
 - Sustained write performance of up to 150MB/s (SLC), 80MB/s (MLC)
 - Static wear-leveling scheme with dynamic block allocation increases life and optimizes performance
 - Built-in hardware ECC enables up to 16/24 bit correction per 1K bytes
 - Flash bad-block management
 - Self-Monitoring, Analysis and Reporting Technology (SMART)
 - Power failure management

- ATA secure erase
- TRIM enabled for improved performance
- Supports boot function for Windows Embedded Standard 7, Windows Embedded CE, and Linux
- Low power consumption:
 - MLC typical 475mA when active and 135mA in sleep mode
 - SLC typical 330mA when active and 95mA in sleep mode
- Dimensions: 50.8 x 29.85 x 6.0mm
- -40°C to +85°C operation
- RoHS compliant

◆ Ordering Information

◆ Models and Accessories

◀ mSATA Flashdisks ▶

available models:

FDMM-16G-XT	mSATA MLC Flashdisk, 16GB, extended temperature	Stocked
FDMM-32G-XT	mSATA MLC Flashdisk, 32GB, extended temperature	Stocked
FDMM-64G-XT	mSATA MLC Flashdisk, 64GB, extended temperature	Stocked
FDMM-128G-XT	mSATA MLC Flashdisk, 128GB, extended temperature	Special Order
FDMM-256G-XT	mSATA MLC Flashdisk, 256GB, extended temperature	Special Order
FDMS-16G-XT	mSATA SLC Flashdisk, 16GB, extended temperature	Stocked
FDMS-32G-XT	mSATA SLC Flashdisk, 32GB, extended temperature	Stocked
FDMS-64G-XT	mSATA SLC Flashdisk, 64GB, extended temperature	Special Order

Please [login](#) or [signup](#) for an online quote request.

www.diamondsystems.com | [Sunnyvale, California USA](#) | [+1-650-810-2500](tel:+1-650-810-2500) | sales@diamondsystems.com