

## SATA-DOM FLASHDISKS Solid State Storage for SATA Connector Mount



### FEATURES

Direct mount on 7-pin SATA connector

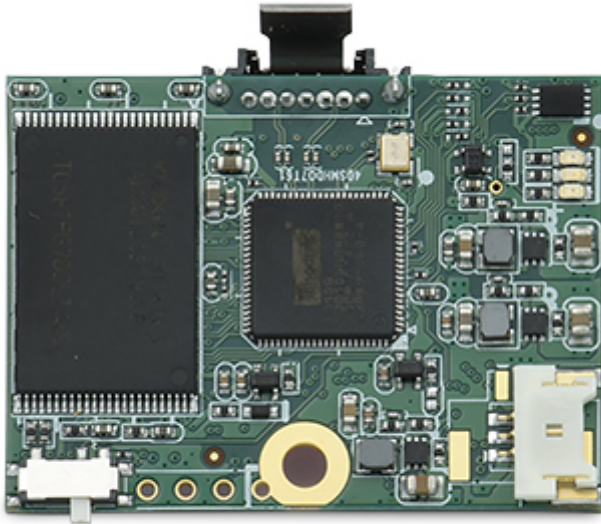
Obtains power from SATA connector, no cable needed

SLC and MLC technology options

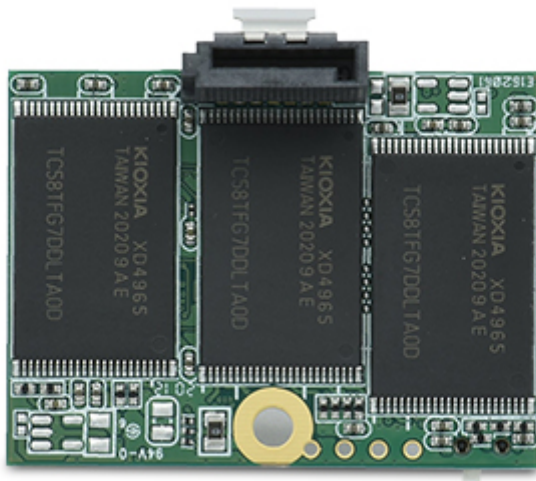
Up to 256GB capacity

Rugged mounting with screw-down tab

Wide temperature -40 to +85C operation



Top view



Bottom view

### ◆ SATADOM Flashdisk Product Support

#### Product

#### Description

**Aries**

PC/104-Plus SBC with Intel E3800 CPU, Soldered RAM, & On-Board Data Acquisition

**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

## ◆ **SATADOM Flashdisk Solid-State Storage**

SATA-DOM flashdisks mount directly on top of the designated 7-pin vertical SATA connector on select Diamond SBCs and are fixed in place with a standoff and screw for long-term resistance to shock and vibration. These flashdisks are tested and qualified for -40/+85C operation.

Diamond boards using SATA-DOM have a jumper that supplies +5V on one of the connector pins normally tied to Ground. The flashdisk obtains its power from this pin and does not need any auxiliary power cable. Note the jumper must be set properly according to the attached SATA disk. If an external SATA drive is attached to the connector, the jumper must first be switched to the Ground position.

Both SLC and MLC technologies are available. MLC is normally stocked; consult factory for leadtime on SLC models.

- SATADOM 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: 40.0 x 30.0 x 9.0mm
  - -40°C to +85°C operation
  - RoHS compliant

## ◆ **Ordering Information**

## ◆ **Models and Accessories**

### ◆ **SATA-DOM Flashdisks**

#### **available models:**

<b>FDSM-32G-XT</b>	SATADOM Flashdisk, MLC, 32GB, Pin 7 VCC, -40/+85C	Stocked
<b>FDSM-64G-XT</b>	SATADOM Flashdisk, MLC, 64GB, Pin 7 VCC, -40/+85C	Stocked
<b>FDSM-128G-XT</b>	SATADOM Flashdisk, MLC, 128GB, Pin 7 VCC, -40/+85C	Special Order
<b>FDSM-256G-XT</b>	SATADOM Flashdisk, MLC, 256GB, Pin 7 VCC, -40/+85C	Special Order
<b>FDSS-32G-XT</b>	SATADOM Flashdisk, SLC, 32GB, Pin 7 VCC, -40/+85C	Special Order
<b>FDSS-64G-XT</b>	SATADOM Flashdisk, SLC, 64GB, Pin 7 VCC, -40/+85C	Special Order

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