

# 6U SATA Storage Module

## FRONT REMOVABLE VME STORAGE

### DESCRIPTION

The 5055 is a 6U SATA storage module with dual front removable storage drives. It is configured to provide SATA I/O for dual 2.5" drives using a rear transition module or break out board via the PO connector. Each single drive can be removed independently for easy system upgrade, data transport or drive replacement. The 5055 may be utilized singularly or integrated as part of a multi-slot storage array using an external SATA RAID controller.

### Functional Features

- Choose the latest in solid state drive technology; SLC, MLC or eMLC or standard, enhanced or extended duty rotating drives
- Supports current drive capacities currently over 2TB per board
- 3Gbs data rates are supported
- Standard 6U x 4HP x 160mm VME form factor
- Drive activity LEDs
- Extended temperature operation from -40oC to +85oC
- Individual drive sleds are front-removable, (not hot pluggable)
- Rear Transition Module (RTM) provides rear SATA port connectivity
- RoHS compliant and lead-free
- Also available in 6U cPCI form factor

### Benefits

- High data rates for current application speeds
- Addresses high capacity storage needs
- Capable of providing RAID 0, 1 or 5 via software RAID
- Easy system upgrade, data transport or maintenance with front removability
- Operates in temperature extremes of -40°C to +85°C using solid-state drives
- Multi-slot expansion capability enables high capacity array design

### APPLICATIONS

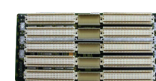
- › High capacity storage arrays in a wide range of defense applications including ground, shipboard and airborne systems
  - › Signal intelligence data storage
  - › Engine control systems data
  - › Mission data storage
- › Commercial and industrial data storage applications requiring high capacities, expandability and RAID protection.
- › Rugged applications requiring resistance to a wide range of temperature extremes as well as high shock and vibration resistance.

### Example Order Number: 5055200256GBSTSYE

Model 5055 with two 256GB SLC solid state drives, conformal coating, for use in extended temperature environments.



### RELATED PRODUCTS



- › RAID Controllers
- › Intel & Freescale Single Board Computers
- › Blade level networking boards (Ethernet, PCI Express)
- › FPGA configurable I/O solutions
- › Rackmount, desktop, and ATR chassis platforms
- › Ruggedization programs

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### ORDERING INFORMATION

Ordering Number	5055	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>4</b>														
<b>Configuration</b>														
1 = One 2.5" drive														
2 = Two 2.5" drives														
<b>5, 6</b>														
<b>Drive RPM</b>														
54														
72														
00 (solid state drive)														
<b>7, 8, 9, 10</b>														
<b>2.5" Drive capacity (configuration 2 - all drives same capacity)</b>														
xxxG														
xxxT														
Example														
500G = 500GB drive														
012T = 1.2TB drive														
<b>15</b>														
<b>Temperature Requirements</b>														
S = 0°C to +55°C														
E = -40°C to +85°C														
O = Other														
<b>14</b>														
<b>Conformal Coating</b>														
Y/N														
<b>11, 12, 13</b>														
<b>2.5" Drive Type</b>														
RSD = standard duty rotating														
RED = enhanced duty rotating														
RXD = extended duty rotating														
SSS = commercial solid state SLC														
SSM = commercial solid state MLC														
SSE = commercial solid state eMLC														
STS = extended temp solid state SLC														
STM = extended temp solid state MLC														
STE = extended temp solid state eMLC														

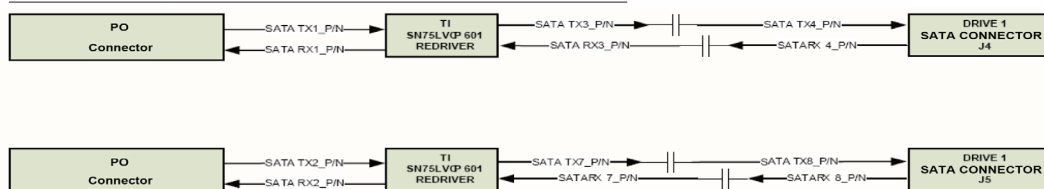
#### I/O Board Options:

5050-RTM, rear transition module

### BLOCK DIAGRAM AND ENVIRONMENTALS

General	The 5055 is a 6U SATA single slot (4HP) storage module with dual front removable drives accessed via dual rear SATA ports.
Input/Output	When attached to a host Single Board Computer (SBC), the 5055 provides direct access for up to two 2.5" SSD or rotating drives from the host SATA ports via PO and a rear transition module (model 5050-RTM).
Compatibility	The 5055 is directly compatible with 6U VME system architectures including single board computers and system chassis.
Power Requirements	<b>Input Power</b> <ul style="list-style-type: none"> <li>5V ±5% @ .004A 3.3V ±5% @ 0.16A</li> <li>Typical HDD, add 5V ±5% @ 1.1A</li> <li>Typical SSD, add 5V ±5% @ 0.8A</li> </ul>

Specification		With Typical HDD	With Typical SSD
Temperature	Operating (Ambient)	0°C to 60°C	-40°C to +85°C
Relative Humidity	Non-operating	-40°C to 65°C	-40°C to +85°C
Vibration (Sine)	Operating	8% to 90% Non-condensing	5% to 95% Non-condensing
Shock	Operating	1G (5 to 500 Hz)	5G (10 to 2000 Hz)
Altitude	Operating	400G (2 ms)	20G (11 ms)
Humidity:	Operating	40,000 ft	80,000 ft



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