

6U SATA Storage Module

FRONT REMOVABLE cPCI STORAGE

DESCRIPTION

The 6055 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 J3 connector. Each single drive can be removed independently for easy system upgrade, data transport or drive replacement. The 6055 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 MLC 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 cPCI form factor
- Drive activity LEDs
- Extended temperature operation from -40°C to +85°C
- Module is hot pluggable, individual drive sleds are removable and not hot pluggable
- Rear Transition Module (RTM) or Break out Board (BoB) provide SATA port connectivity from the rear
- RoHS compliant
- Also available in 6U VME

Benefits

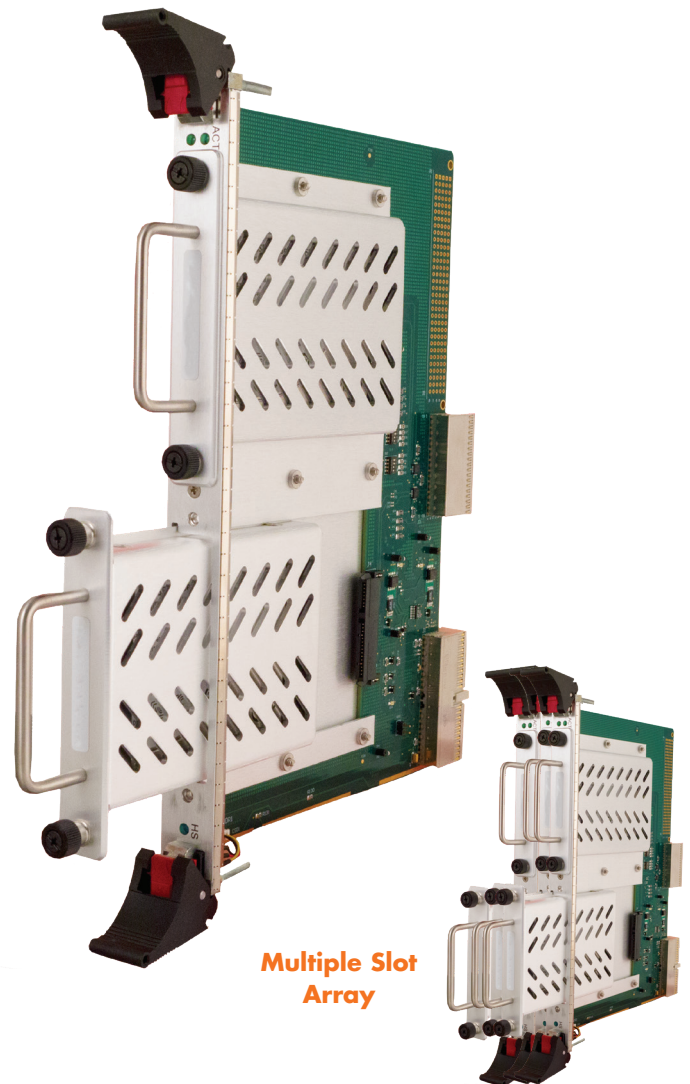
- High data rates for current application needs
- Addresses high capacity storage needs
- Capable of providing RAID 0, 1 or 5 via software RAID
- Easy system upgrade, data transport or maintenance with front removability
- Operates in temperature extremes of -40°C to +85°C using solid-state drives
-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

APPLICATIONS

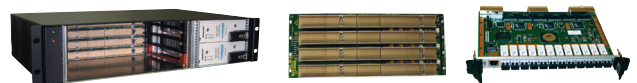
- High capacity storage requirements for a wide range of defense applications including ground, shipboard and airborne systems
 - Signal intelligence data storage
 - Engine control systems data
 - Mission data storage
- Commercial and industrial data storage applications requiring high capacities, expandability 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: 6055200256GBSTSYE

VMESor with one 1TB 2.5in rotating drive and one DVD R/W,
no conformal coating



RELATED PRODUCTS



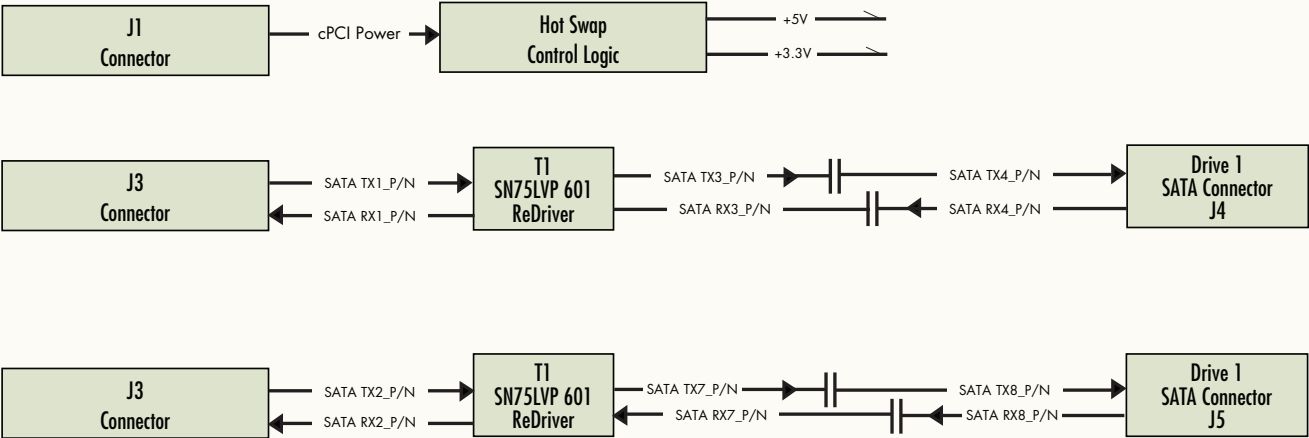
- Intel & Freescale Single Board Computers
- Blade level networking boards (Ethernet, PCI Express)
- FPGA configurable I/O solutions
- Rackmount, desktop, and ATR chassis platforms
- Ruggedization programs

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BLOCK DIAGRAM

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

6U VPX 6Gbps SATA Dual Removable Storage Module



Shock and vibration values are media dependent.

ENVIRONMENTALS

General	The 6055 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 6055 provides direct access for up to two 2.5" SSD or rotating drives from the host SATA ports via J3 and a rear transition module (model 6050-RTM).the host SATA ports via P4 and a rear transition module.
Compatibility	The 6055 is directly compatible with 6U cPCI system architectures including single board computers and system chassis.
Power Requirements	Input Power <ul style="list-style-type: none">5V ±5% @ .004A 3.3V ±5% @ 0.16ATypical HDD, add 5V ±5% @ 1.1ATypical SSD, add 5V ±5% @ 0.8A

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ORDERING INFORMATION

Ordering Number	6055	4	5	6	7	8	9	10	11	12	13	14	15
4													
Configuration 1 = One 2.5" drive 2 = Two 2.5" drives													
5, 6													
Drive RPM 54 72 00 (solid state drive)													
7, 8, 9, 10													
2.5" Drive capacity (configuration 2 - all drives same capacity) xxG xxxT Example 500G = 500GB drive 012T = 1.2TB drive													
I/O Board Model Numbers: 6050-RTM, rear transition module 6050-BoB, rear break out board													
17													
Temperature Requirements S = 0°C to +55°C E = -40°C to +85°C O = Other													
14													
Conformal Coating Y/N													
11, 12, 13													
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													

ENVIRONMENTALS

General	Each module is 6U high by 4HP (0.8in) wide by 160mm deep and compatible with VME64 (Front I/O Only) and VME64X (Front and Rear I/O) mechanical and electrical specifications. Weight: <2 pounds (configuration dependent).	
Input/Output	Direct SATA access to each drive through front panel SATA connectors or rear transition module via P0	
Compatibility	Model 5050 VME SATA Storage Modules are directly compatible with VME Single Board Computers supporting SATA I/O connectivity	
Power Requirements	Input Power Typical Power Required Hard Drive: +5 V +5/-3% @ 0.75 A per drive DVD/RW Drive: +5 V +5/-3% @1.2 A +3.3 V +5/-3% @ 0.03 A	
Environment	Operating Temp:	0° C to 45° C with DVD 0° C to 60° C with Commercial Drive -40° C to 85° C with Industrial SSD -20° C to +60° C (limited by DVD)
	Non-operating:	
	Operating shock	10Gs at 11 msecs (configuration dependent)
	Operating vibration:	2Gs, 20 to 2,000Hz (configuration dependent)
	Humidity:	5 to 95%, non-condensing

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