

# Ensemble 1000 Series SSD1250 and HDD1250 Modules

## Embedded Storage for Ensemble 1000

- Ultra-compact and rugged form factor with innovative conduction-cooled design for harsh environments
- Integrates industry-standard SATA hard disk or solid state storage drives
- Up to 250-GB storage per slot, chainable for expanded storage
- PCI Express® interface to root complex processing module



The Ensemble™ 1000 Series SSD1250 and HDD1250 Modules from Mercury Computer Systems bring embedded storage to the Ensemble 1000 family. It is specifically designed for use within the ultra-compact and rugged PowerBlock® 50 chassis. Providing a choice of either hard disk or solid state technology, both modules bring high-capacity, high-speed, high-reliability storage to your embedded platform, as your application demands.

### Storage Modules

The SSD1250 and HDD1250 are designed to integrate standard 2.5-inch laptop-size storage drives into the Ensemble 1000 architecture. The capacities and specifications of our storage modules continue to evolve with the latest in hard disk and solid state technology to provide you with a storage solution that meets the needs of your application. The Ensemble 1000 can incorporate multiple drives into a single system to chain together up to a terabyte of storage. Contact Mercury for the complete and current list of supported drives, or to request support and pricing for a particular drive.

### I/O Architecture

The SSD1250 and HDD1250 drive bays connect to the Slot-1 processing module through the switched PCI Express interconnect of the Ensemble 1000 system. An industry-standard I<sup>2</sup>C serial bus is also brought off-board to provide the same system monitoring and management functionality featured on other modules for Ensemble 1000.

## Mercury Professional Services

Customized configurations for the I/O subsystem are possible in addition to other customized system offerings at the board or system level. Consult with Mercury's professional services team to discuss your unique needs and requirements. With over 25 years of experience in addressing real-time multiprocessing complexities, Mercury can work with you to develop a custom solution, as required by your application. Our areas of expertise include embedded hardware design, algorithm optimization, and middleware framework development, as well as experience in meeting difficult environmental requirements.

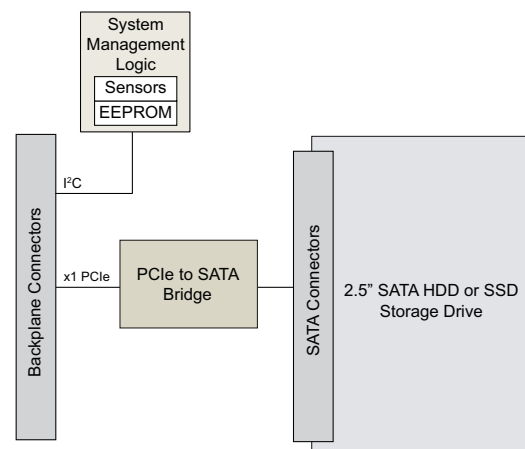


Figure 1. SSD1250/HDD1250 functional block diagram

## Specifications

### Mechanical

Size (with storage drive)	117 x 103 x 15 mm
Weight (drive-dependent)	206 g (HDD)

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### Software

Supported operating system	Linux®
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### SSD1250 Drive

Capacity	250 GB
Storage technology	MLC solid state drive
Performance	
Sustained transfer rate	130 MB/s read; 100 MB/s write
Environmental	
Temperature	
Operating	-10°C to +70°C
Storage	-55°C to +140°C
Shock	1500g
Vibration	20g

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### HDD1250 Drive

Capacity	250 GB
Storage technology	5400 RPM hard disk drive
Performance	
Sustained transfer rate	50 MB/s read; 60 MB/s write
Environmental	
Temperature	
Operating	0°C to 60°C
Storage	0°C to 70°C
Shock	325g
Vibration	1.5g

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For office locations and contact information, please call the corporate headquarters or visit our Web site at [www.mc.com](http://www.mc.com).

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