Ensemble 6000 Series
OpenVPX RTM-60S Rear Transition Module

Bringing I/O to the Ensemble 6000 Series

- Supports Ensemble 6000 Series switch modules
- Provides standard I/O to the rear transition
- Architected to meet OpenVPX™ design principles

The Ensemble™ 6000 Series OpenVPX RTM-60S Rear Transition Module from Mercury Computer Systems is designed as a VITA 46 VPX-compliant module in a 6U form factor, also compatible with OpenVPX™ system architecture design principles. This module is intended to support Ensemble 6000 Series 6U VPX switch modules. When integrated with the SFM6100, SMM6100, or SWM6100 modules, the RTM-60S brings user I/O from the backplane connectors to industry-standard interfaces. For systems where front panel I/O is not preferred, the RTM-60S can be used to bridge in and out of the switch modules in the Ensemble 6000 Series.

Standard Ethernet and Serial I/O
The RTM-60S makes accessible the external serial and Ethernet interfaces available on Mercury's 6U VPX switch module solutions. Dual RS-232 interfaces are provided, as well as dual 10/100/1000BASE-T Ethernet interfaces. Additionally, a 10/100BASE-T Ethernet interface is provided to support the remote system management capabilities of the SFM6100 and SMM6100 modules.

System Signals
A standard MicroDB15 interface provides access to the system signals on the switch module, allowing users to monitor the switch module's standard backplane system signals, including the Environmental Bypass and Maskable Reset signals.

Other Capabilities
The RTM-60S contains the necessary interfaces to be managed as an unintelligent FRU (Field Replaceable Unit) by the SFM6100, SMM6100, or SWM6100 6U VPX switch module. The RTM-60S can provide its FRU information, such as module name, model number, and serial number, to the managing switch module.

Open Standards Mean Ineroperability and Planning for the Future
The OpenVPX Industry Working Group is an industry initiative launched by defense prime contractors and COTS system developers, to take a proactive approach to solving the interoperability issues associated with the VITA 46 (VPX) family of specifications. This group has created an overarching System Specification defining VPX system architecture through pinouts definition to establish a limited set of application-specific reference solutions. These OpenVPX™ standard solutions provide clear design guidance to COTS suppliers and the user community, assuring interoperability across multi-vendor implementations. The OpenVPX System Specifications were ratified by the VSO in February 2010.

Specifications
Module
Compliant with the VITA 46.0 VPX standard
Designed to comply with the draft VITA 46.10
(Rear Transition Module) standard

Serial and Ethernet I/O
Two RS-232/RS-422 standard 9-pin DB9 serial interfaces
Two 10/100/1000BASE-T RJ45 Ethernet interfaces

System Signals
One standard MicroDB15 connector
Provides interface to Environmental Bypass, Maskable Reset, Chassis Test, and Memory Clear system signals

Environmental
Both 0.8" pitch and 1.0" pitch commercial variants are available.

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