

# Quartz 8257A

## Switchless 3U VPX SOSA aligned development chassis

Development platform for Mercury's SOSA aligned 3U VPX boards

- Access to data and control planes provided through RTM
- 1-slot, small footprint chassis
- Rear panel access to RF I/O, 100 GigE and chassis manager
- Supports VITA 67.3C



**The 8257A is a low-cost, SOSA aligned 3U VPX chassis ideal for developing applications on Mercury's SOSA aligned 3U VPX boards.\*** Providing the required power and cooling in a small desktop footprint, the chassis allows access to all required interfaces on these boards without the need for a larger, more expensive multi-slot chassis.

\*For a list of products supported by the 8257A, refer to "SOSA Aligned Companion Products" on page 3.

### DEVELOPMENT ENVIRONMENT

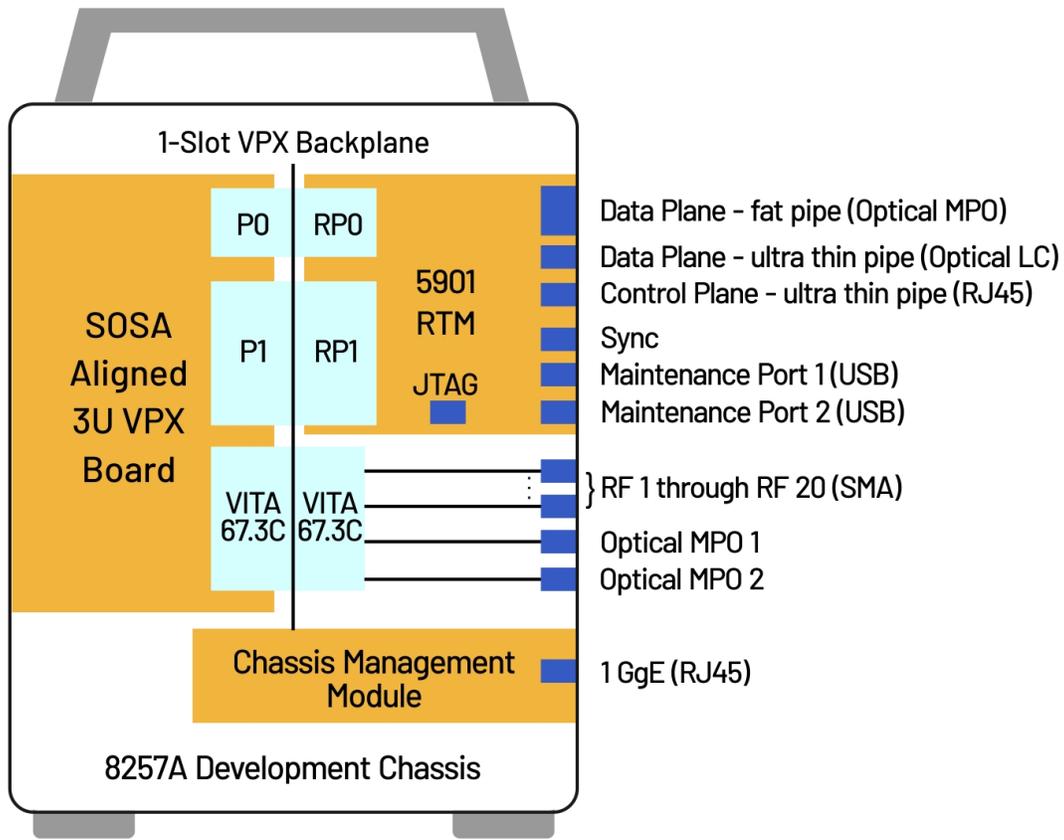
Many SOSA aligned systems are deployed with custom backplanes specific to the interconnect requirements of the application. The 8257A allows IP and software developers immediate access to a board's hardware in a simple 1-slot backplane. This can accelerate development time while a custom SOSA backplane is being defined or manufactured.

The 8257A's built-in forced-air cooling is designed to support conduction-cooled boards in an air-cooled chassis. This provides the convenience of development on the conduction-cooled boards in a desktop or laboratory environment.

### CHASSIS MANAGEMENT

Mercury's SOSA aligned development chassis utilizes Crossfield Technology LLC's VITA 46.11 and HOST aligned Chassis Management Module (CMM). This CMM is software upgradeable to the forthcoming SOSA v1.0 Technical Standard. The 8257A's CCM is an ideal platform for introducing developers to SOSA Out-of-Band System Management operation.





**REAR TRANSITION MODULE**

While conduction cooled chassis typically do not allow the use of a Rear Transition Module 5901 for deployment, the 8257A supports the Model 5901 RTM for use during development. This RTM allows convenient access to the board's Data Planes via optical interfaces and to the Control Plane through a standard RJ45 1 GigE interface, eliminating the need for a gigabit Ethernet switch card during development. In addition, two management ports, the multi-board sync interface, and a JTAG port are available on the RTM.

**REAR ACCESS PANEL**

The 8257A's rear panel features 20 SMA coaxial breakout connectors, providing direct connections to the VITA 67.3C's 20 RF backplane interfaces. For support of boards with optical interfaces, two optional MPO connectors allow connections using standard optical cables. A RJ45 connector delivers a 1 GigE connection for chassis management.

**SPECIFICATIONS**

Rear Panel Connections:

- RF: 20 SMAs
- Gigabit Serial: 2 optical MPOs
- 1GigE: 1 RJ45

Dimensions: 192.8 mm W x 307.8 mm D x 425.5 mm H

Weight: 17.8 lb

Power Supply: 300 Watts

Operating Temp: 0° to +50° C

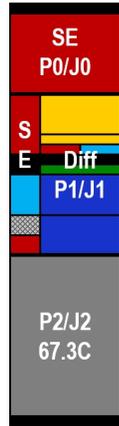
Storage Temp: -40° to +85° C

Relative Humidity: 5 to 95%, non-condensing

Power Requirements: 100 to 240 VAC, 50 to 60 Hz, 1000 W max.

**OpenVPX Compatibility**

The 8257A is compatible with the following module profile, as defined by the VITA 65 OpenVPX Specification:  
SLT3-PAY-1F1U1S1S1U2F1H-14.6.11-n



**ORDERING INFORMATION**

Model	Description
8257A	1- slot 3U VPX SOSA aligned development chassis

Options	Description
-110	Dual MPO optical interfaces

Contact Mercury for compatible option combinations and complete specifications.

**SOSA ALIGNED COMPANION PRODUCTS**

Model	Description
5550	8-Channel A/D & D/A Zynq UltraScale+ RFSoc Board
5553	8-Ch. A/D & D/A Zynq UltraScale+ RFSoc Gen 3 Board
5560	Versal HBM ACAP Processor Board
5585	8-Channel A/D Virtex UltraScale+ HBM FPGA Board
5586	Virtex UltraScale+ HBM FPGA Co-Processor Board
5901	Rear Transition Module for 555x Boards

**ACCESSORY PRODUCTS**

Model	Description
4811	Navigator FPGA Design Kit
4814	Navigator Board Support Package (BSP) for Linux
4815	Navigator Board Support Package (BSP) for Windows

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Mercury offers worldwide customers shorter development time, reliable, rugged solutions for a variety of environments, reduced costs, and mature software development tools. We offer free lifetime support from our engineering staff, which customers can depend on through phone and email, as well as software updates. Take advantage of our 40 years of experience in delivering high-performance radar, communications, SIGINT, EW, and data acquisition MIL-Aero solutions worldwide.



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