## mercury

# Model 8256

3U VPX SOSA aligned development platform for Quartz products

Ideal for Mercury's SOSA aligned RFSoC based Quartz boards

- High-bandwidth data streaming
- Waveform signal generator
- Communication receiver and transmitter
- Electronic Warfare transponder
- Analog I/O for digital recording and playback
- Sensor interfaces



The 8256 is a SOSA aligned 3U VPX chassis ideal for application development with Mercury's RFSoC based Quartz<sup>®</sup> data acquisition and processing boards. Working with our partners Elma Electronics Inc. and Crossfield Technologies LLC, the 8256 is designed to adhere to the emerging SOSA standard. It is a perfect platform for integrating Mercury's RFSoC based Quartz products with other SOSA aligned boards like the SOSA aligned SBCs from Concurrent Technologies and 40 gigabit Ethernet switch from Interface Concept.

The chassis backplane provides slots for up to four 5550 or 5553 Quartz RFSoC boards, a 5503 multi-board synchronization board, an SBC (Single Board Computer), Ethernet switch board, and a timing board. The 8256 also features a VITA 46.11 compliant chassis management controller.

The 8256's built-in forced-air cooling is designed to support conduction-cooled boards in a standard 19-inch rackmount profile chassis. This provides the convenience of development on the conduction-cooled boards in a desktop or laboratory environment.

#### **FEATURES**

- Developed in alignment with the SOSA™ Technical Standard
- Ideal development platform for Mercury's Quartz Models 5550 and 5553
  8-Channel A/D & D/A Zynq UltraScale+ RFSoC Processors
- 8 slots provide space for a range of acquisition and processing boards
- Optional rear panel RF and optical connections



#### **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. In SOSA aligned systems, the CMM will enable integration among SOSA functional elements, the System Manager, Plug-In Cards, and intelligent power supplies.

#### **CONVENIENT ACCESS TO RF AND OPTICAL INTERFACES**

The 8256 is designed for convenient access to RF and optical interfaces. Each RF payload slot can be optioned with 20 coaxial breakout connectors located on the back panel of the chassis, providing direct connections to the VITA 67.3C backplane connector. In addition, each RF payload slot can be optioned with two rear panel MPO adapters to provide access to the VITA 67.3C dual optical interfaces.

#### **SPECIFICATIONS**

Dimensions: 6U Chassis, 19" W x 17.25" D x 10.5" H

Weight: 28.2 lb

Power Supply: 964 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

#### **ORDERING INFORMATION**

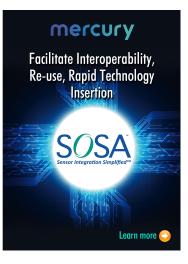
Model	Description
8256	SOSA Aligned 3U VPX Development Platform for Quartz products
Options	Description
-101	Installs VITA 67.3C interface in Slot 1
-102	Installs VITA 67.3C interface in Slot 2
-105	Installs VITA 67.3D interface in Slot 5
-106	Installs VITA 67.3C interface in Slot 6
-107	Installs VITA 67.3C interface in Slot 7
Contact Mercury for compatible option combinations and complete specifications.	

#### SOSA ALIGNED COMPANION PRODUCTS

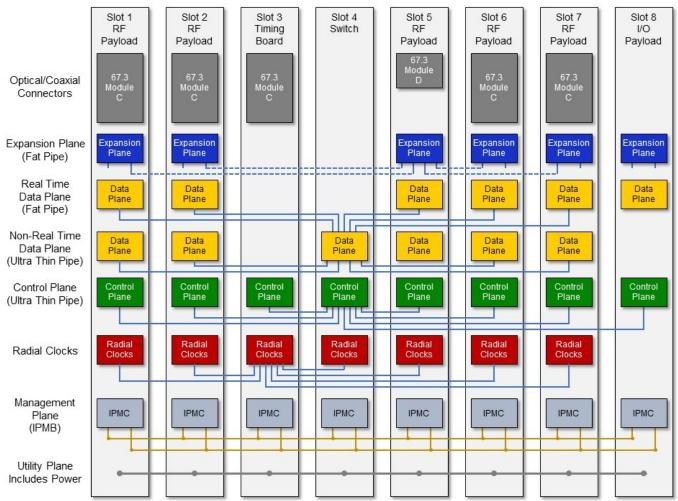
Model	Description
5550	8-Channel A/D & D/A Zynq UltraScale+ RFSoC Board
5553	8-Ch. A/D & D/A Zynq UltraScale+ RFSoC Gen 3 Board
5560	Versal HBM ACAP Processor Board
5585	8-Channel A/D Virtex UltraScale+ HBM FPGA Board
5586	Virtex UltraScale+ HBM FPGA Co-Processor Board
5901	Rear Transition Module for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

#### LEARN MORE ABOUT SOSA

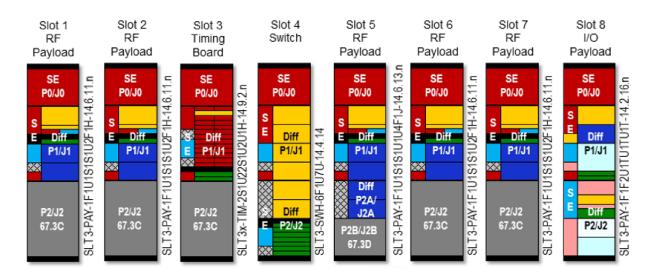
Click below to learn more about SOSA.



#### **MODEL 8256 BACKPLANE AND SLOT PROFILES**



\_\_\_\_\_ Note: Expansion Plane interfaces are not wired on backplane, but can be connected using the Meritec Cabling System





#### MODEL 8256 DEMO VIDEO

Click or scan below to view a video demo of the 8256.





## mercury

#### Corporate Headquarters 50 Minuteman Road Andover, MA 01810 USA +1 978.967.1401 tel +1 866.627.6951 tel +1 978.256.3599 fax

### International Headquarters Mercury International

Avenue Eugène-Lance, 38 PO Box 584 CH-1212 Grand-Lancy 1 Geneva, Switzerland +41 22 884 5100 tel

### Learn more

Visit: mrcy.com/go/MP8256

For technical details, contact: mrcy.com/go/CF8256



The Mercury Systems logo is a registered trademark of Mercury Systems, Inc. Other marks used herein may be trademarks or registered trademarks of their respective holders. Mercury products identified in this document conform with the specifications and standards described herein. Conformance to any such standards is based solely on Mercury's internal processes and methods. The information contained in this document is subject to change at any time without notice.



© 2024 Mercury Systems, Inc. 1-0-022724-DS-08256