Model 8256	SOSA Aligned Development Platform	3U VPX Chassis

Features

- Developed in alignment with the SOSA™ Technical Standard
- Ideal development platform for Pentek's 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
- Free lifetime applications support

QUARTZ

Applications

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

General Information

The Model 8256 is a SOSA aligned 3U VPX chassis ideal for application development with Pentek's RFSoC based Quartz 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 Pentek'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" rackmount profile chassis. This provides the convenience of development on the conduction-cooled boards in a desktop or laboratory environment.

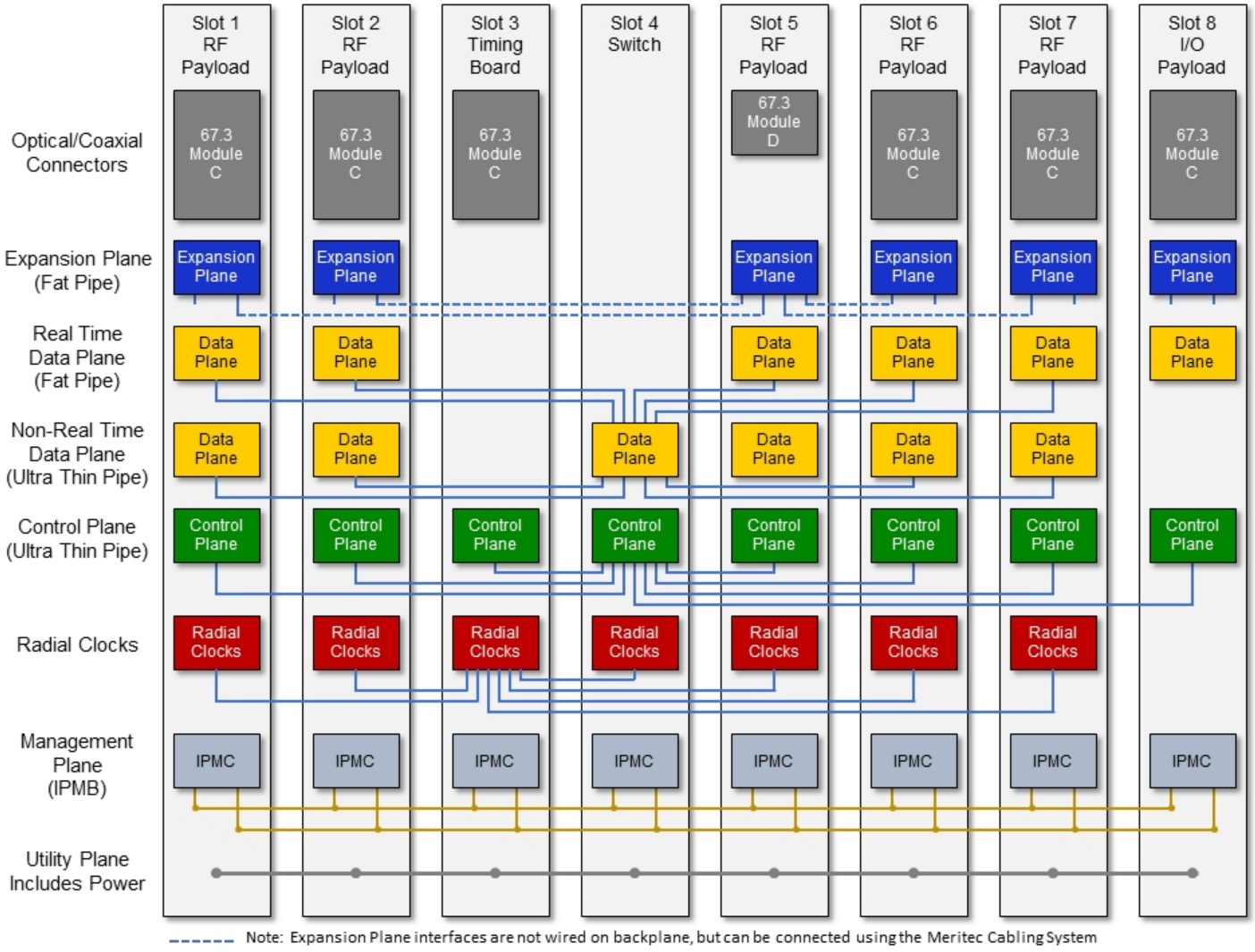
Chassis Management

Pentek'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.

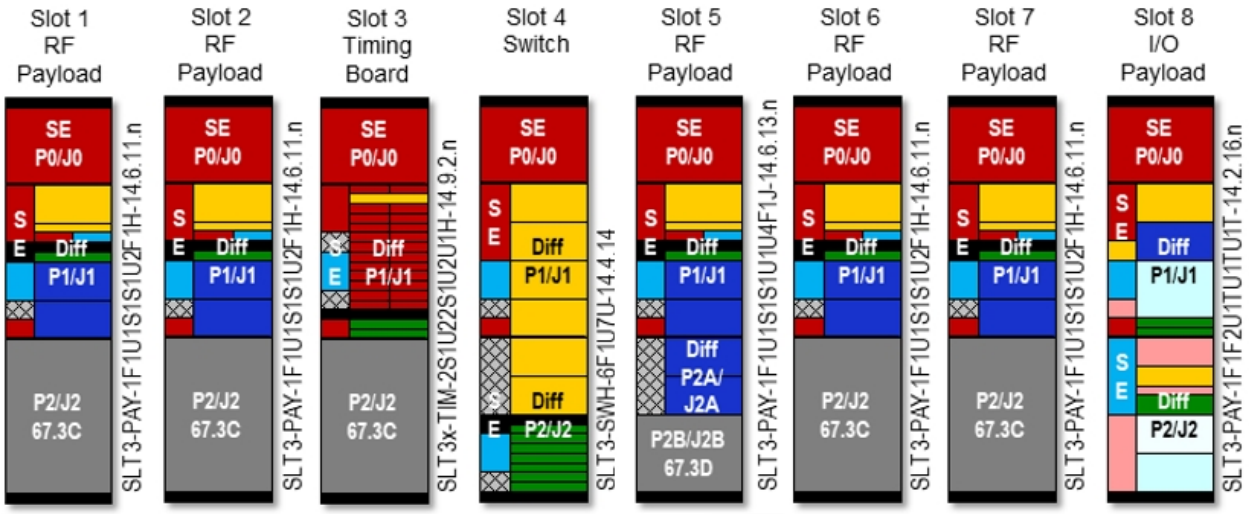
Convenient Access to RF and Optical Interfaces

The Model 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.

Model 8256 Backplane



Model 8256 Backplane Profiles



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 VAC, 60 Hz

Ordering Information

Model	Description
8256	SOSA Aligned 3U VPX Development Platform

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 Pentek for compatible option combinations and complete specifications of rugged and conduction-cooled versions. Storage and general options may change, so be sure to contact Pentek for the latest information.	

SOSA Aligned Companion Products

Model	Description
5550	8-Channel A/D & D/A Zynq UltraScale+ RFSoC Processor
5553	8-Channel A/D & D/A Zynq UltraScale+ RFSoC Gen 3 Processor
5510	Intel Xeon Processor Single Board Computer
5511	40 GbE Switch

Pricing and Availability

To learn more about our products or to discuss your specific application please contact your local representative or Pentek directly:

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Lifetime Applications Support

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