

Model 8257

1-slot 3U VPX development chassis for Quartz products

Ideal for developing applications on RFSoc based Quartz® boards

- 1-slot, small footprint chassis
- Optional dual MPO interfaces support 100 GigE
- Supports VITA 66.4
- Navigator® BSP for software development
- Navigator® FDK for custom IP development



The 8257 is a low-cost 3U VPX chassis ideal for developing applications on Mercury's 5950 or 5953 Quartz® RFSoc boards. Providing power and cooling to match the 5950 and 5953 in a small desktop footprint, the chassis allows access to all required interfaces on the 5950 and 5953 front panel and the 5901 rear transition module. The 8257 can be configured with optional rear-panel dual MPO optical connectors to support the dual 100 GigE interfaces on the 5950 and 5953.

The 5950 supports the Zynq UltraScale+ RFSoc Gen 1. The 5953 supports the Zynq UltraScale+ RFSoc Gen 3.

DEVELOPMENT ENVIRONMENT

At the heart of Models 5950 and 5953 is Xilinx's Zynq UltraScale+ RFSoc FPGA. It contains 8 channels of 4 GHz 12-bit A/Ds, 8 channels of 6.4 GHz 14-bit D/As and is enabled with a multiprocessor ARM architecture running Linux. The FPGA supports communication interfaces typically found on general purpose processors including: USB, RS-232, Ethernet, and DisplayPort.

The rear transition module of the 5950 and 5953 provides access to these interfaces as well as JTAG and general purpose I/O. This allows the 5950 or 5953, the 5901 rear transition module, and the 8257 chassis to operate as a stand-alone 1-slot development platform. Developers can connect a notebook or desktop PC with Xilinx's Vivado Design Suite and Mercury's Navigator Design Suite and develop, run and debug their application on the 5950 or 5953.

Quartz 8257

OPTICAL INTERFACE

The 8257 can be optioned with optical support, providing a path from the VITA 66.4 backplane interface on the 5950 and 5953 to the exterior of the chassis with standard MPO connectors. While the built-in functions of the 5950 and 5953 include a dual 100 GigE interface, data acquisition, and waveform generator engines, the 8257 chassis supports high-speed data streaming through the optical interface.

THE QUARTZ FAMILY

Quartz brings the performance and high density integration of the RFSoc to a wide range of different application spaces with a uniquely flexible design path. Quartz is available in standard form factors like the 5950 and 5953 3U VPX boards, or as the Model 6001 or 6003 QuartzXM, a small 2.5" x 4" module.

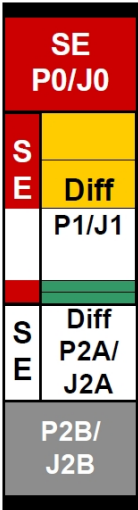
With the QuartzXM Carrier Design Kit, the 6001 or 6003 can be deployed on application-specific custom carriers. In the custom carrier environment, the 5950 or 5953, combined with the 8257, provides a path for engineers to immediately start software and IP development while a hardware carrier design is developed in parallel.

SPECIFICATIONS

- Dimensions: 192.8mm W x 307.8mm D x 425.5mm 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 8257 is compatible with the following module profile, as defined by the VITA 65 OpenVPX Specification:
SLT3-PAY-1F1U1S1S1U1U2F1H-14.6.11-12

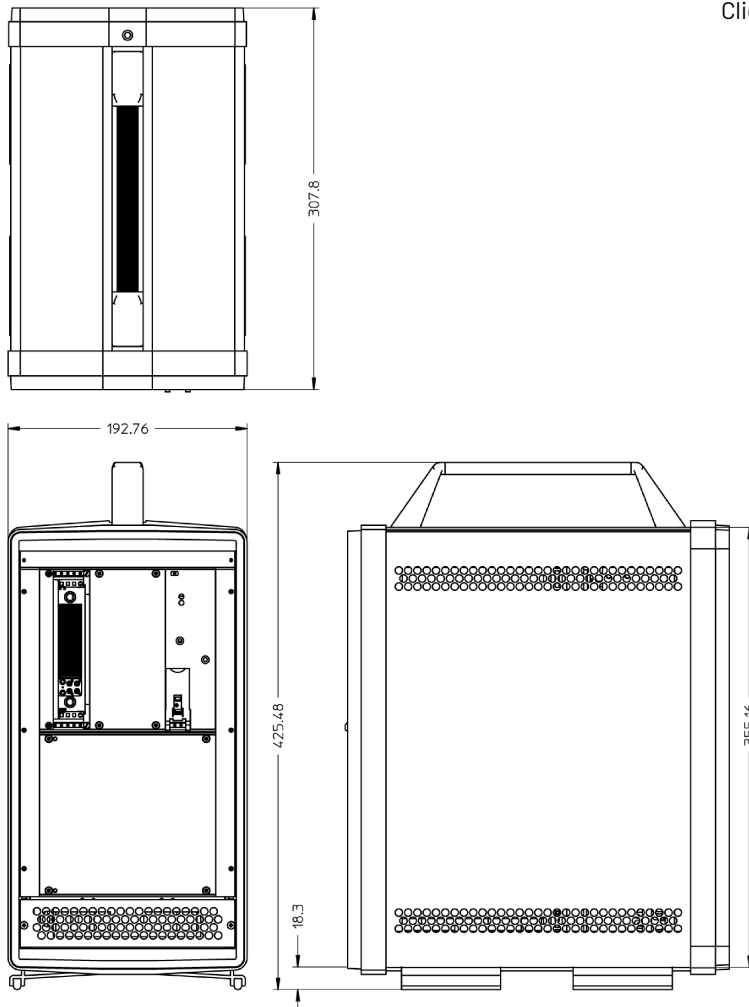


ORDERING INFORMATION

Model	Description
8257	1-Slot 3U VPX Development Chassis for Quartz Products

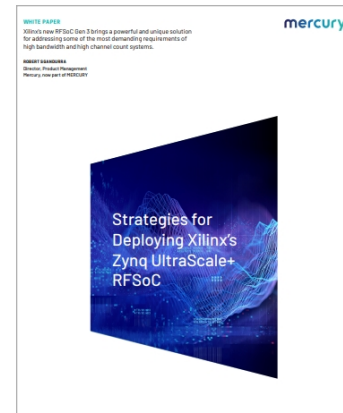
Options	Description
-110	Dual MPO optical interfaces
Contact Mercury for compatible option combinations and complete specifications.	

MODEL 8257



STRATEGIES FOR DEPLOYING XILINX'S RFSOC

Click below to read a white paper about Xilinx's RFSoc.



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

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