

3U OPENVPX BACKPLANE ALIGNED WITH SOSA™

2 slots with VITA 67.3c aperture in slot 2

DESCRIPTION

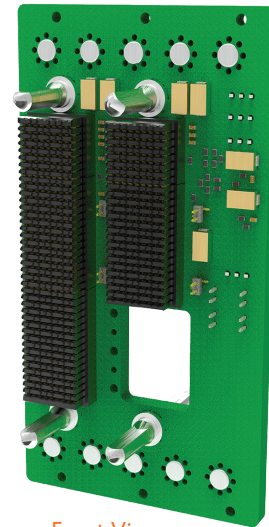
Designed in alignment with The Open Group® Sensor Open Systems Architecture™ Technical Reference Standard (SOSA), this 3U backplane offers 2 PIC (Plug in Card) slots to support the defense industry's hardware and software convergence initiatives per the DoD's Modular Opens Systems Approach (MOSA) and CMOSS (C5IR/EW Modular Open Suite of Standards). It provides the foundation for high-performance mission-critical systems requiring lower lifecycle costs and rapid technology insertion. It enables complex, high speed signal processing systems with the latest optical fiber and RF connectivity as well as slot profiles for SBCs and payload expansion.

The backplane supports high-speed signals on all data paths and VITA 67.3c aperture in slot 2.

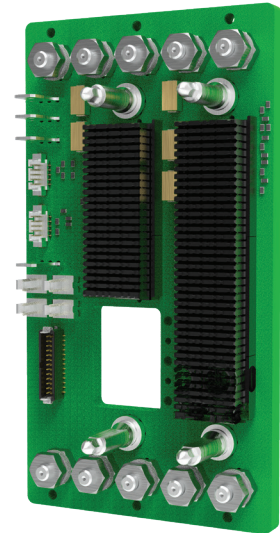
Developers can use the backplane as configured or work with Elma to identify your specific profile configuration needs.

FEATURES

- Slot profiles in alignment with the SOSA Technical Standard Version 1.0
- Two-slot 3U OpenVPX slots backplane aligned to SOSA
 - Slot 1: SLT3-PAY-1F1F2U1T1U1T-14.2.16-n, I/O Intensive Slot
 - Slot 2: SLT3-PAY-1F1U1S1S1U2F1H-14.6.11-n, Compute Intensive Payload Slot
- Power studs
- Matched length, low skew REF and AUX clocks
- IPMC header for external chassis manager
- Control and Data Plane links routed, designed for 25 Gbps data rates and support 100GBASE-KR4
- Routed Expansion plane links support PCIe Gen-4 data rates
- Maintenance serial ports routed to one header
- Unrouted signals pass to Rear Transition Module connectors, and are configured to support RTMs or Meritec cables
- "Thin walled" connectors on the bottom front VPX wafer connector on slots with VITA 67.3 apertures to allow non VITA 67.3 boards to plug in.



Front View



Rear View

BOARD SPECIFICATIONS

- 16 layers
- 1 oz and ½ oz power and ground layers
- PCB Tachyon 100G
- PCB 0.212" thick

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MECHANICAL SPECIFICATIONS

- 3U height
- 5.07" tall x 2.77" wide

BENEFITS

- Supports DoD's Modular Open Systems Approach (MOSA) initiative
- Supports current Ethernet and PCI Express standards
- Helps accelerate development of a common, modular architecture across critical C5ISR and EW systems
- Contributes to optimized SWaP requirements and lower life-cycle costs for rapid technology insertion

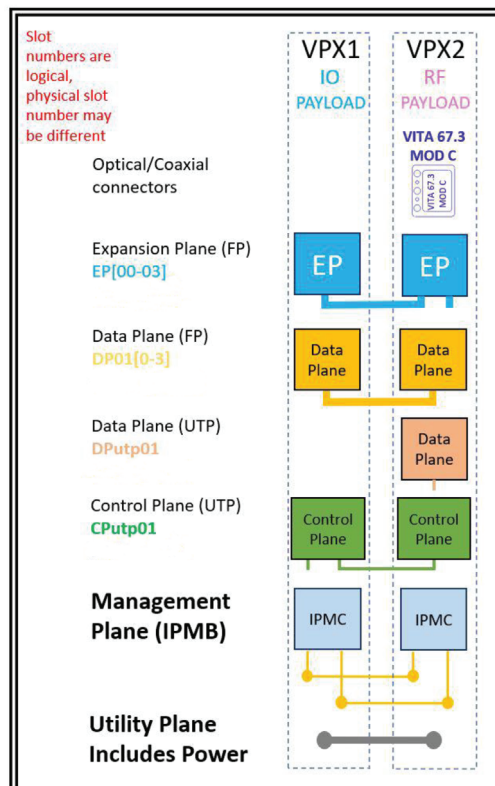
TOPOLOGY**BACKPLANE DESIGN**

This full-featured backplane has cutting edge interconnect technology and a range of OpenVPX slot profiles aligned with SOSA guidelines.

1SVX302AMP-1X31:

Slot 1: SLT3-PAY-1F1F2U1TU1T1U1T-14.2.16-n

Slot 2: SLT3-PAY-1F1U1S1S1U2F1H-14.6.11-n

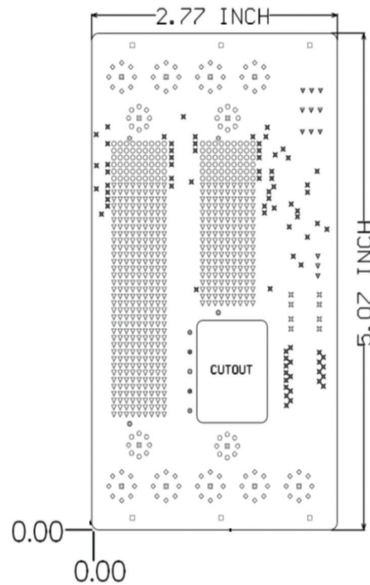


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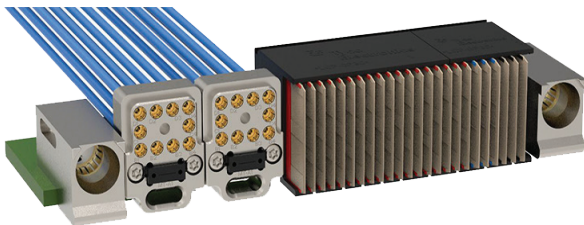
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LINE DRAWING

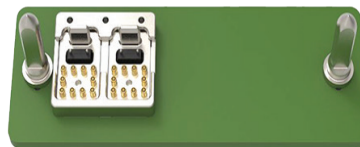
BACKPLANE DESIGN

**VITA 66.5 OPTICAL AND 67.3 RF CONNECTOR EXAMPLES**

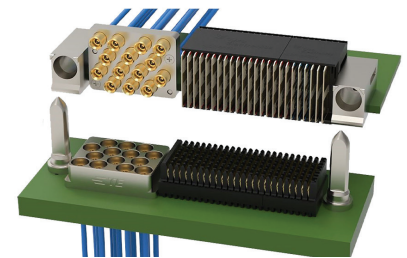
FOR USE IN BACKPLANE APERTURES



DOUBLE HYBRID



BACKPLANE

VITA 67.3c MODULE WITH
14 POS SMPM**APPLICATIONS**

OpenVPX backplanes aligned to SOSA are used in embedded computing systems that enable high speed data processing in critical defense and industrial applications, such as:

- › Mission control
- › Sensor based systems
- › Surveillance
- › Radar and other beamforming applications
- › Weapons control
- › Target tracking and display
- › Navigational control
- › Threat detection
- › Process monitoring
- › Environmental monitoring

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RELATED PRODUCTS



- › Convection or conduction cooled load boards
- › Rear Transition Modules for I/O
- › Intel and ARM based Single Board Computers (SBCs)
- › NVIDIA based, high performance GPGPU cards
- › Cables, RF connectors, and optical connectors
- › 19" rackmount, rugged ATR and Small Form Factor enclosures and chassis platforms
- › Cables, RF connectors, and optical connectors

ORDERING INFORMATION

Height	# Slots	Description	Payload Slots Profile	Model Number
3U	2	3U 2-slots SOSA-aligned backplane with VITA 67.3c aperture in RF payload slot, 25Gbps data rate	14.6.11-0	1SVX302AMP-1X31

RoHS-3 compliant assemblies of these part numbers are available upon request.
Upon request we can provide VITA 66/ VITA 67 connector modules installed in the backplane apertures.



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