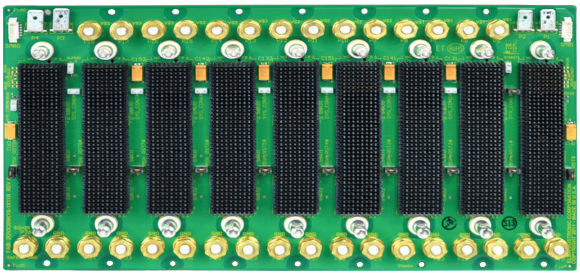
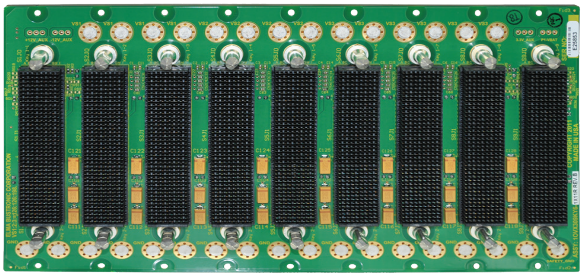
ELMA Backplanes

3U 9-Slot OpenVPX Backplane

BKP3-CEN09-15.2.17-n

ELMA Your Solution Partner





Description

OpenVPX (VITA 65) defines a reliable and transparent way to ensure the interoperability between the VPX Modules from different vendors as well as the compatibility between backplane and slot configurations with similar VPX modules.

The OpenVPX (VITA 65) specification defines the various potential backplane configurations via profiles topologies. These backplane profiles provide information about the data rate, routing topology and the fabric topology.

Designed to VITA 65 design principles, the 9-slot OpenVPX backplane features a hierarchical star fabric. Three versions of the BKP3-CEN09-15.2.17-n backplane have been designed:

1) With expansion plane
2) Without expansion plane
3) Without expansion plane and open Slot 3

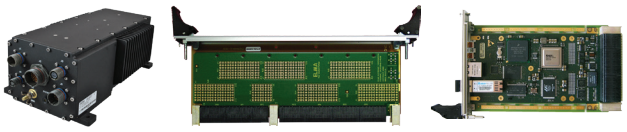
Features

- BKP3-CEN09-15.2.17-n backplane profiles compliant with VITA 65 specification
- Universal ground pattern according to the VITA 65 (OpenVPX)
- 1 x Fat Pipe Fabric Data Plane (Fat Pipe = 4 x Lanes)
- 1 x Ultra Thin Pipe star Control Plane + 1 x Ultra Thin Pipe to RTM (Ultra Thin Pipe = 1 x Lane)
- Expansion plane depends on version
- Switch slot (Slot 4) conforms with OpenVPX slot profile SLT3-SWH-6F8U-14.4.9
- High speed EPT Velox connector

Applications and Related Products

Highly integrated applications such as:

- Integrated display processing, mission management and navigational control for avionics systems
- Industrial monitoring, medical equipment, and night-vision systems requiring enhanced graphics capabilities
- Shipboard systems for target tracking and high definition displays
- Applications requiring a mix of I/O options, high compute density and enhanced graphics



- Load boards convection or conduction cooled
- Rear Transition Modules for I/O
- Intel & Freescale Single Board Computers
- Blade level networking boards (Ethernet, PCI Express)
- Rackmount, desktop, and ATR chassis platforms
- Ruggedization programs

VPX

3U 9-Slot OpenVPX Backplane

BKP3-CEN09-15.2.17-n

VPX Backplanes

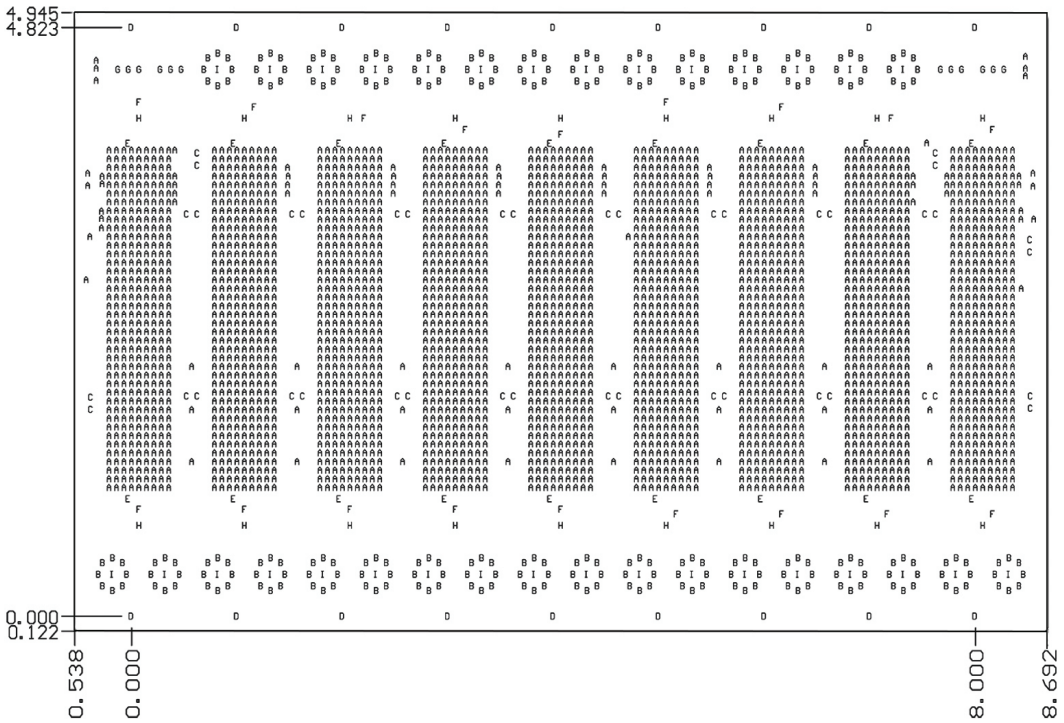
Board Specifications

- 18-layer stripline design
- 2 oz. copper power and ground
- 0.212" thick PCB, FR-4 or equivalent

Mechanical Specifications

- 5.067" high with 3 slots on 1" pitch for 6U VPX cards
- EPT Velox connectors; VITA 60 connectors optional

Line Drawing



Backplane Profile

Profile name	Part Number	Expansion Plane	Slot Profiles and Section			
			Slot 1 Payload	Slot 2-3 Payload	Slot 5-9 Payload	Slot 4 Payload
BKP3-CEN09-15.2-17-n	1OVX309KX6-1X11R	Yes	SLT3-PAY-3F2U-14.2.13	SLT3-PAY-1F2U-14.2.12	SLT3-PAY-1F2F2U-14.2.2	SLT3-SWH-6F8U-14.4.9
BKP3-CEN09-15.2-17X-n	1OVX309KY6-1X11R	No	SLT3-PAY-3F2U-14.2.3	SLT3-PAY-1F2U-14.2.12	SLT3-PAY-1F2U-14.2.12	SLT3-SWH-6F8U-14.4.9
BKP3-CEN09-15.2-17X-n	1OVX309KZ6-1X11R	No / Open Slot 3	SLT3-PAY-2F2U-14.2.3	(2) SLT3-PAY-1F2U-14.2.12	SLT3-PAY-1F2U-14.2.12	SLT3-SWH-6F8U-14.4.9

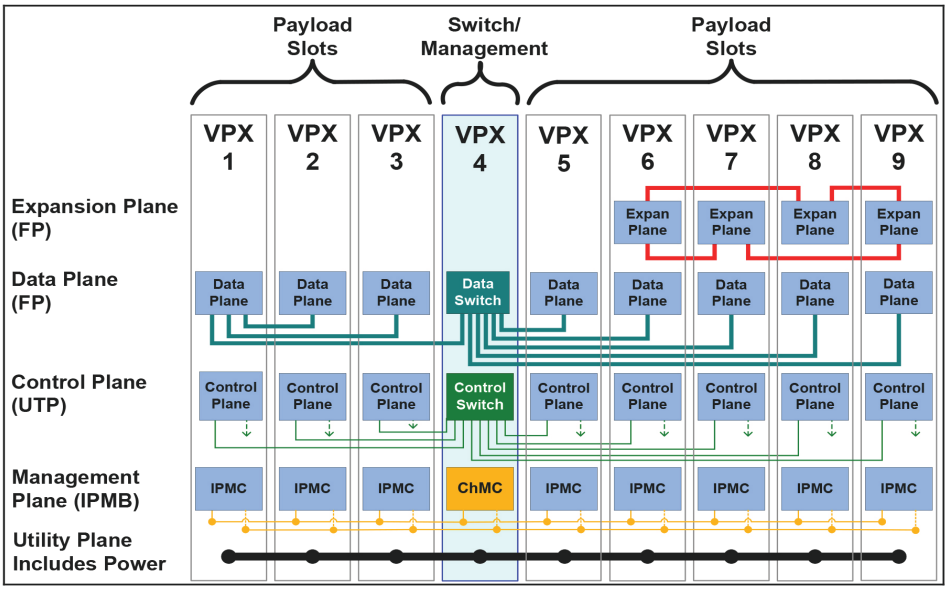
3U 9-Slot OpenVPX Backplane

BKP3-CEN09-15.2.17-n

VPX Backplanes

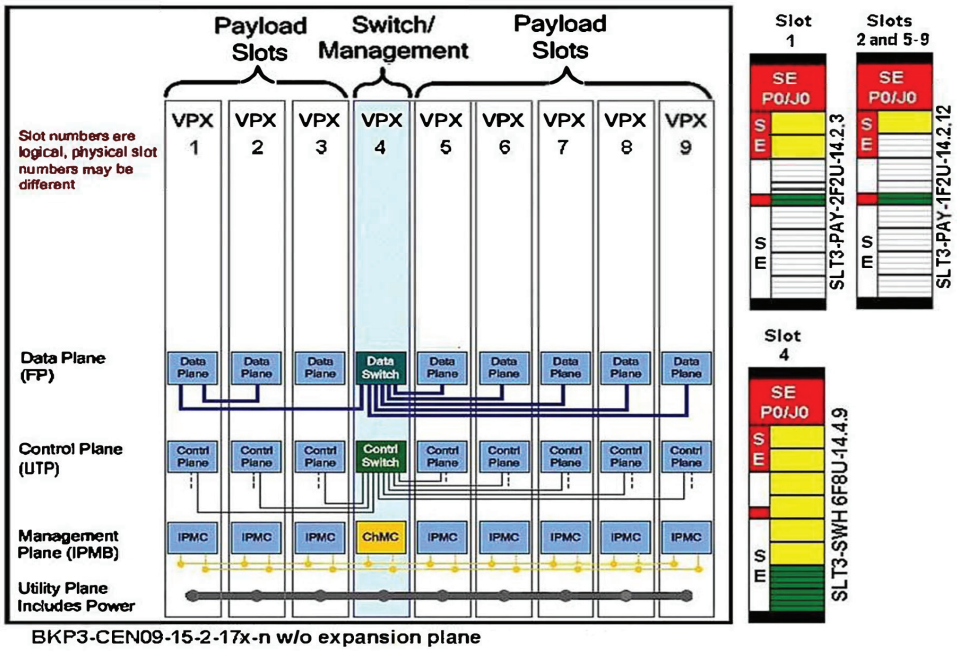
Backplane Topology

BKP3-CEN09-15.2.17-n with Expansion Plane



BKP3-CEN09-15.2.17-n with Expansion Plane

BKP3-CEN09-15.2.17X-n No Expansion Plane



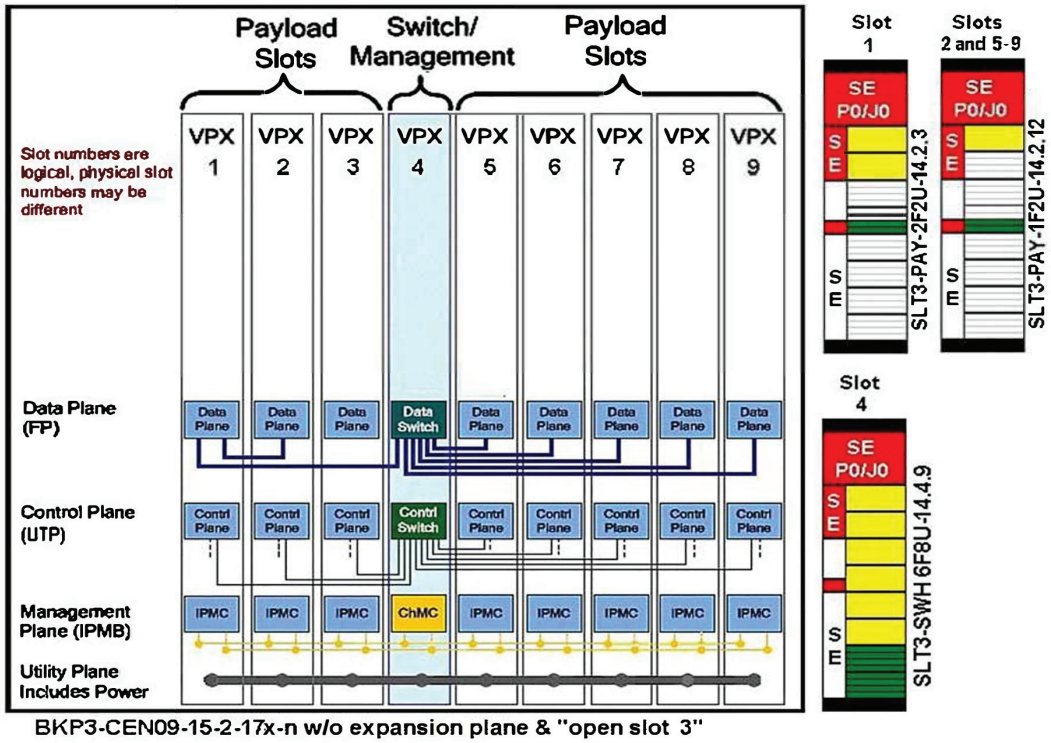
BKP3-CEN09-15-2-17x-n w/o expansion plane

3U 9-Slot OpenVPX Backplane

BKP3-CEN09-15.2.17-n

VPX Backplanes

BKP3-CEN09-15.2.17X-n Without Expansion Plane, and "Open Slot 3"



BKP3-CEN09-15-2-17x-n w/o expansion plane & "open slot 3"

Order Information

Height	Total Slots	Description	Profile Number	Part Number
3U	9	Hierarchical star, expansion and control planes	BKP3-CEN09-15.2-17-3	1OVX309KX6-1X11R
3U	9	Hierarchical star, no expansion plane; control plane	BKP3-CEN09-15.2-17x-3	1OVX309KY6-1X11R
3U	9	Hierarchical star, no expansion plane; control plane; open slot 3	BKP3-CEN09-15.2-17x3	1OVX309KZ6-1X11R

Please contact our sales for more details.

China: +86 21 5866 5908
France: +33 437 06 21 10
Germany: +49 7231 97 34 0
Israel: +972 3 930 50 25
Singapore: +65 6479 8552
Switzerland: +41 44 933 41 11
United Kingdom: +44 1234 838 822
United States: +1 510 656 3400

For other countries, please visit our website.