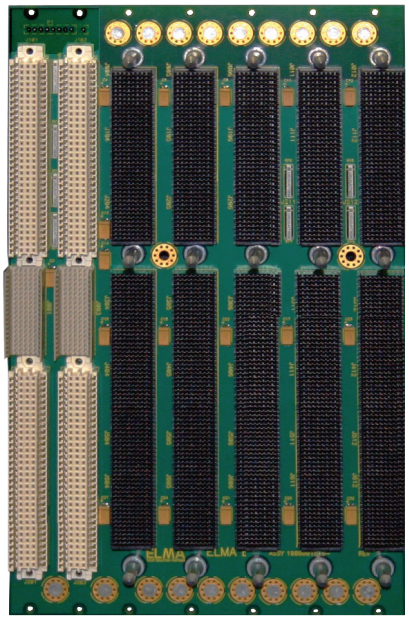
ELMA Backplanes

6U 7-Slot OpenVPX Backplane

BKP6-HYB07-11.2.20-n

ELMA Your Solution Partner



Description

OpenVPX can be compatible with legacy systems in "hybrid" backplanes. The VMEbus signals can go across the MulliGig high-speed connectors to the legacy VME/64x slots.

The 7 slot (5 VPX slots + 2 legacy VME64x slots) has a slot pitch of 0.8" in slots 1 -2 and 1.0" for the 5 VPX slots 3-7. Slots 3-4 have VME bussing on the J2 connector per VITA 46.1 and slots 3-7 have a full mesh implemented on the J1 connector. VPX slots 3-7 conform to IEEE 1101.10 and VITA 46.0, 46.3 and 46.10 as well as 46.1 where specified to be fully meshed with four fabric channels – one channel from each slot to each of the other four slots. The flexible design offers a combination of VME/64x only, VPX w/VME bussed slots, meshed VPX slots, and VPX-only slots.

Features

- Compliant to ANSI/VITA 65-2012 and ANSI/VITA 46.0-2013
- Offers a highly flexible interconnect scheme that can support either differential or single ended connection
- Hybrid VPX backplane with legacy VME64x slots
- Rugged Eurocard form factor in 6U height
- Provides built in ESD ground protection in every slot

Board Specifications

- 16 layer stripline design
- 2 oz. power and ground
- PCB FR-4 or equivalent
- PCB 0.213" thick

Mechanical Specifications

- 6U height
- 7 slots (5 VPX, 2 VME64x)
- Velox connectors

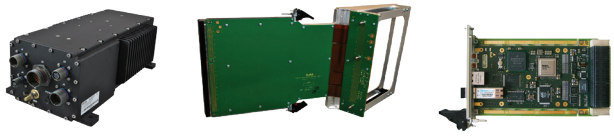
Slot Profiles

- Slot 3 - 4: SLT6-BRG-4F1V2T-10.5.1
- Slot 5 - 7: SLT6-PAY-4F2T-10.2.2

Related Products and Applications

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

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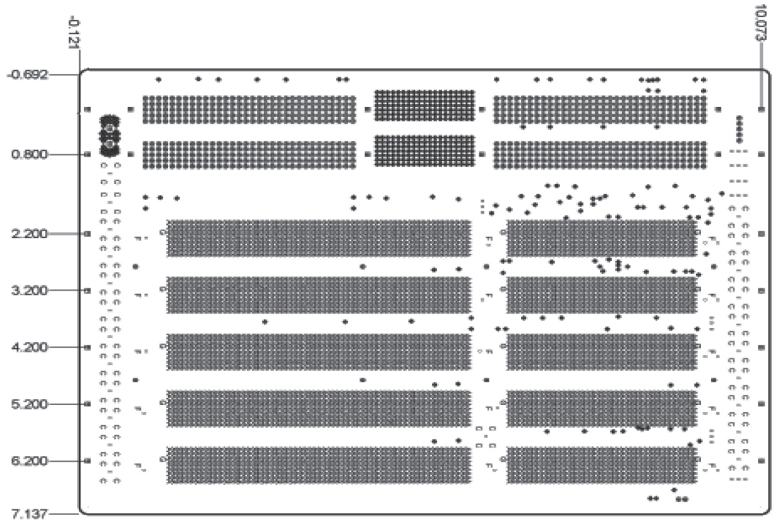
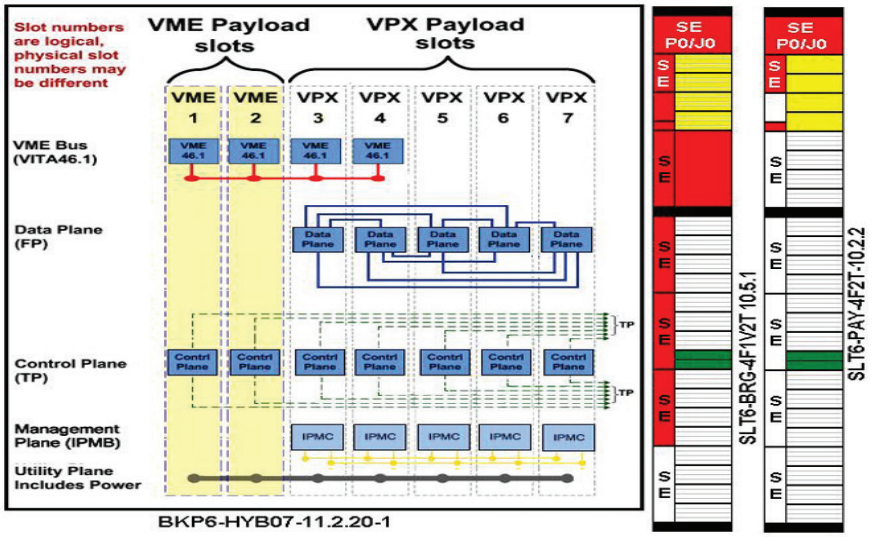
VPX Backplanes

Line Drawing



Backplane Topology



Order Information

Height	Total Slots	Description	Profile Number	Part Number
6U	7	5 VPX mesh slots with 2 legacy VME64x	BKP6-HYB07-11.2.20-1	1OVX607EX1-1201R
6U	7	5 VPX mesh slots with 2 legacy VME64x, no RTM connectors	BKP6-HYB07-11.2.20-1	1OVX607EX1-1200R

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