VPX Evaluation Platform with *Bi=/=Plane* Backplane
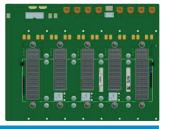
VPX™

Available in 3U & 6U

Introducing the latest models in the 2nd Generation RackPak/V5-1.4Dev family

Our 2nd Generation RackPak/V5-1.4Dev offers the next level of flexibility in VPX development platforms. Not only can the customer exchange the type of card guides (convection, conduction, AFT) in a blink of an eye but now also the signal backplane. Thanks to *Bi=/=Plane* technology, power and signal parts of a VPX backplane are separate PCB assemblies. This enables uncompromised signal quality along with **faster turn around** for the design of custom profiles.

➢ Simple mechanical fixtures allow the central signal backplane to be **quickly and easily exchanged** allowing customers to switch backplane profiles.

➢ Separate signal backplane has PCB stack-up optimised for ultimate **high-speed performance** without compromises for power distribution

➢ The signal backplane PCB assembly can be purchased separately with any VPX profile for 5 slots.

➢ **Fast turn around** of custom profile backplane designs

➢ Choice of card guides for forced convection, conduction and AFT (Air-Flow-Through) cooling.

➢ **High-speed *Air-/-Plane*®** technology for 25Gbps per differential pair.

➢ A VITA 46.11 compliant Chassis Manager with **remote access** over network and RS232

powerBridge
Computer

Ehlbeek 15a
30938 Burgwedel
fon 05139-9980-0
fax 05139-9980-49

www.powerbridge.de
info@powerbridge.de

Standard Product Features

Card Slots
- Slot count: 5
- Horizontal pitch: 1.5"
- Forced air cooling
- Card guide options for front cards:
  - Convection cooled cards
  - Conduction cooled cards
  - AFT cards (VITA 48.8)
- VITA 46.10 card guides for RTMs
- Other slot counts/pitches are available upon request

Backplane
- Standard off the shelf **Bi=/=Plane**
  - Power and Utility Only (PUO)
  - RTM connectors
  - For 3U & 6U cards
- BKP3-DIS05-15.3.2
- BKP3-CEN05-15.3.3
- BKP6-DIS05-11.2.16
- BKP6-CEN05-11.2.5

- Custom on request
  - **Air-/-Plane®** technology for 25Gps per DiffPair
  - SOSA slot profiles

Cooling
- ΔT (inlet/outlet) based
- User controlled
- VPX card controlled (with Chassis Manager card fitted)

Display
- Inlet/outlet air temperatures
- Fan speed
- Supply voltages
- System power

Power
- Total consumption: up to 2000W
- Power input 230/110 VAC
- Total Power Output = 1600W
  - 3V3@42A (3U only),
  - 5V@34A,
  - P12V@133A,
  - 3V3(AUX)@5A,
  - P12V(AUX)@5A,
  - M12V(AUX)@1.25A

System Management
- Built-in µC
  - for power control and basic cooling
- VITA 46.11 compliant Chassis Manager card (option)
  - With PigeonPoint ChMM700
  - Ethernet (100BaseT)
  - RS232 (DB9)

Chassis Dimensions
Height 460mm (3U version)
         593mm (6U version)
Width 351mm
Depth 435mm

Environment
- 90-260VAC
- 0-35°C ambient temperature
- non-condensing

Field Replaceable Modules
- Card Guides
- Chassis Management Controller
- Signal backplane

Customisation

This datasheet describes a default configuration for this system. The default configuration ships with a VITA compliant "power & utility only" backplane for cable access to all differential and single-ended signals via the RTM connectors.
RackPak/V5-1.4Dev is designed to accommodate multiple backplane profiles, power supply options and cooling configurations.

Compliance

- ANSI/VITA 46.0   VPX Baseline
- ANSI/VITA 46.10   VPX Rear Transition Module
- ANSI/VITA 46.11   VPX System Management
- ANSI/VITA 48.1   Mechanical Specifications for Microcomputers REDI Air Cooling
- ANSI/VITA 48.2   Mechanical Specifications for Microcomputers REDI Conduction Cooling
- ANSI/VITA 48.8   VPX REDI air-flow-through card guides
- ANSI/VITA 67.0   VPX Coaxial Interconnect
- ANSI/VITA 65   OpenVPX System Standard

Ordering information

C-Frame fitted with Power & Utility Bi=/=Plane backplane

Card Frame	Card Guides	Power Supply	Chassis Manager Card
• 3U • 6U	• Conduction • Convection • AFT	• Single • Dual (110 VAC only)	• ChMM-700 • Not fitted

Options

- Chassis Management Controller with PigeonPoint ChMM-700

- Card guide kit for convection cooling, Five card slots, for VITA 48.1 compliant cards

- Card guide kit for conductive cooling: Five card slots, for VITA 48.2 compliant cards

- Card guide kit for VITA 48.8 AFT cooling: Five card slots, 1", 1.2" and 1.5" pitch

- Signal backplane: choose your preferred VPX 5 slot profile or custom signal tracking