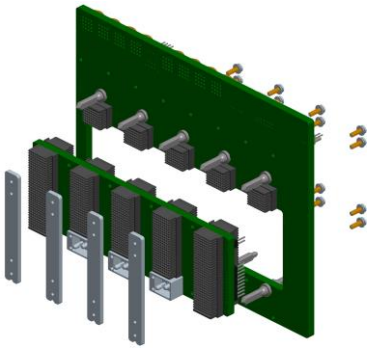
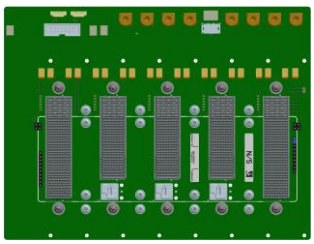
# VPX Evaluation Platform with Bi=/=Plane Backplane



## Available in 3U & 6U

*Introducing the latest models in the 2nd Generation C-Frame family*

Our 2nd Generation C-Frame 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

**COMTEL Electronics GmbH, Phone: +49 89 43 77 89 –0,**
**Sales: sales@comtel-online.com Web: www.comtel-online.com**

# C-FRAME DATASHEET

## 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 | 460mmm (3U version)<br>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

**COMTEL Electronics GmbH, Phone: +49 89 43 77 89 - 0,**
**Sales: sales@comtel-online.com Web: www.comtel-online.com**

# C-FRAME DATASHEET

## 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.
C-Frame 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<br>• 6U | • Conduction<br>• Convection<br>• AFT | • Single<br>• Dual (110 VAC only) | • ChMM-700<br>• 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

**COMTEL Electronics GmbH, Phone: +49 89 43 77 89 - 0,**
**Sales: sales@comtel-online.com Web: www.comtel-online.com**