

# VTX870

## 7U VPX Benchtop Chassis, Six 3U Slots with RTM Support



VTX870

## Key Features

- Open VPX benchtop development platform
- Dedicated Switch/management slot
- Up to five 3U VPX payload slots
- Compatible with 0.8 Inch, 0.85 Inch and 1.0 Inch modules
- Support for Rear Transition Modules (RTMs)
- Redundant cooling in push/pull bottom-to-top airflow configuration
- Front panel system health display
- Optional JTAG Switch Module (JSM)
- Removable side panels for ease of board probing

## Benefits

- 800 W AC Power Input or 650 W DC input
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



**vadatech**  
THE POWER OF VISION



# VTX870

The VTX870 is a VPX chassis with six 3U VPX slots. The chassis can accept 0.8 Inch, 0.85 Inch and 1.0 Inch pitch modules. The chassis is ideal for commercial deployment. The side panels on both the front and rear slots are removable for ease of probing and debugging a module.

## Power Supplies

The VTX870 has a single AC input power supplies to provide 800 W or 650 W DC input. The chassis supplies 95 W/slot and the AC input is universal.

## Cooling and Temperature Sensors

The VTX870 provides cooling to the VPX slots designed to meet ANSI/VITA 65 providing 18 CFM per slot at 0.24 in-H<sub>2</sub>O @ 5000 feet. The VTX870 provides push/pull cooling to the RTM slots.

## Backplane

The backplane provides five 3U VPX payload slots in a star configuration, fully compliant to VITA 46.0 baseline specification with additional support to the RTMs, compliant to VITA 46.10 and OpenVPX VITA 65.

## JSM

There is an optional JTAG Switch Module to provide JTAG access to the front.



Figure 1: VTX870 Chassis Front View



Figure 2: VTX870 Chassis Rear View

# Backplane Connections

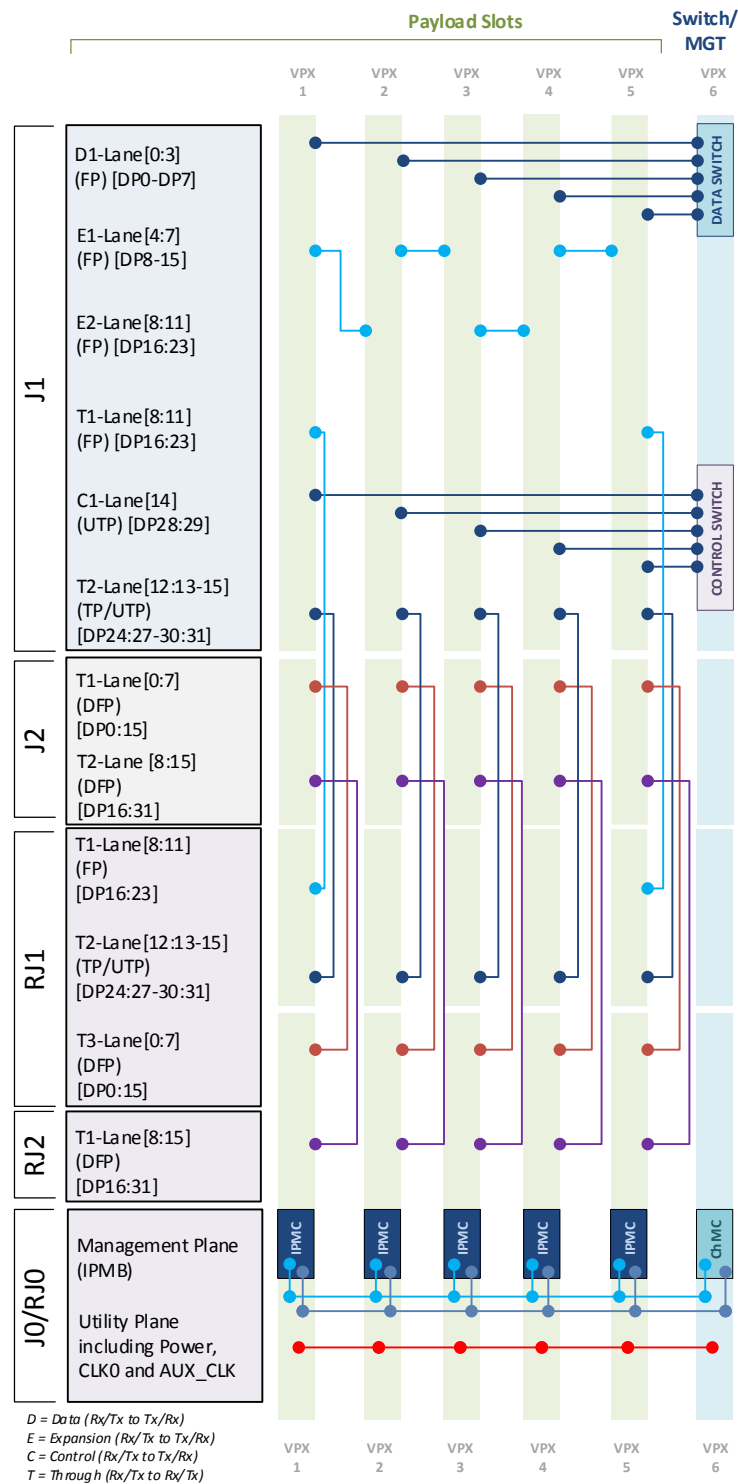


Figure 3: VTX870 Backplane Connections

The initial offering on VTX870 is based on backplane profile BKP3-CEN06\_15.2.2-N. VadaTech can also design additional VITA standard backplane profiles for customer specific applications. Please contact your local sales team for more information.

# Chassis Layout



Figure 4: VTX870 Chassis Layout - Front



Figure 5: VTX870 Chassis Layout - Rear

# Specifications

| Architecture   |            |   |
|----------------|------------|---|
| Physical       | Dimensions | Height: 7U  |
|                |            | Width: 8.45"  |
|                |            | Depth: 12.5"  |
|                |            | Weight: TBD lbs   |
| Type           | VPX Shelf  | 5 Payload Slots up to 1.0" pitch with a dedicated Switch/management slot  |
| Standards      |            |   |
| VPX            | Type       | VITA 46.0 Baseline Specification  |
| Configuration  |            |   |
| Power          | VTX870     | 800 W AC input or -48V DC   |
| Environmental  |            | See Ordering Options  |
| Cooling        |            | Bottom to Top   |
| Other          |            |   |
| MTBF           |            | MIL Hand book 217-F@ TBD hrs  |
| Certifications |            | Designed to meet FCC, CE and UL certifications, where applicable          |
| Standards      |            | VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards |
| Warranty       |            | Two (2) years   |

## INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

# Ordering Options

## VTX870 – A00-D00-0HJ

|  |   |   |
|--|---|---|
| <b>A = Power supply</b><br>0 = 800 W (AC)<br>1 = 650 W (-48V DC) | <b>D = JSM</b><br>0 = No JSM<br>1 = JSM |   |
|  |   | <b>H = Environmental</b><br>See Environmental Specification Table below                                       |
|  |   | <b>J = Conformal Coating</b><br>0 = No coating<br>1 = Humiseal 1A33 polyurethane<br>2 = Humiseal 1B31 acrylic |

## Environmental Specification\*

| Option H              | H = 0                   |  |
|-----------------------|-------------------------|--|
| Operating Temperature | AC1*<br>(-5°C to +55°C) |  |
| Storage Temperature   | C1*<br>(-40°C to +85°C) |  |
| Operating Vibration   | V2*<br>(0.04 g2/Hz max) |  |
| Storage Vibration     | OS1*<br>(20g)           |  |
| Humidity              | 95% non-condensing      |  |

Notes: \*Please contact VadaTech Sales for other specification

## Related Products

VPX518



- AMC FPGA carrier for FMC per VITA 57
- Xilinx Zynq-7000 FPGA in FFG-900 package(XC7Z100 or XC7Z045) with embedded ARM®
- Supported by DAQ Series™ data

VPX592



- 3U FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 46 and VITA 57
- Xilinx Kintex UltraScale™ XCKU115 FPGA
- High-performance clock jitter cleaner

VPX599



- 3U FPGA Dual DAC and dual ADC per VITA 46
- Xilinx Kintex UltraScale™ XCKU115 FPGA
- Dual ADC @ 6.4 GSPS 12-bits

# Contact

## VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

## Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

## VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

[info@vadatech.com](mailto:info@vadatech.com) | [www.vadatech.com](http://www.vadatech.com)

# Choose VadaTech

## We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

## We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

## We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

## We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited



**vadatech**  
THE POWER OF VISION

## Trademarks and Disclaimer

The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.

© 2018 VadaTech Incorporated. All rights reserved.  
DOC NO. 4FM737-12 REV 01 | VERSION 1.5 – SEP/18