VT884

3U MicroTCA Chassis, 12 AMCs Mid-size, 40G

VT884

Key Features

- Twelve mid-size single module AMC slots (option for double-width modules)
- Dual MicroTCA Carrier Hub (MCH)
- PinoutPlus™ support, 2nd tongue on all AMC slots
- Front to back cooling
- Up to 85W per AMC slot
- AMC.1, AMC.2, and AMC.3 compliant
- TCLKA, TCLKB, TCLKC, TCLKD and FCLKA with advanced redundancy capability
- Redundant 2+1 power supply
- JSM Support

Benefits

- Vast performance density with dual 40G across 12 slots in a 3U chassis
- High bandwidth local interconnects via innovative PinoutPlus™
- Redundant, hot-swappable power
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

μTCA®

40G

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The VT884 is a 3U MTCA chassis that provides twelve mid-size AMC slots that can accept any AMC.1 (Ports 4 to 11), AMC.2 (Ports 0 and 1) and AMC.3 (Ports 2 and 3 are routed to adjacent slots). It provides FCLKA, TCLKA, TCLKB, TCLKC and TCLKD to each slot with clock redundancy between the two MCH modules. The Chassis has 40GbE capabilities.

With dual MCH installed the VT884 routes dual 40G to each slot on Ports 4-7 and 8-11. The module provides Private lanes on the PinoutPlus™ on tongue 2, providing 16 lanes of high-bandwidth point-to-point connectivity. The use of the tongue 2 connector complies with the AMC.0 specification.

The power supplies, air filter and fan trays are all hot swappable.

Figure 1: VT884 Front View

Power Supplies

The VT884 can have up to three 1100W power supplies. The input voltage is from 110-240V AC (frequency from 47-63 Hz).

Cooling and Temperature Sensors

The VT884 has intelligent cooling units with redundant fans. The cooling airflow is from front to back. The removable air filter has a switch to detect its presence and can be monitored for when it needs to be replaced.

Numerous temperature sensors monitor the intake and the outtake air temperature throughout the unit.

Telco Alarm

The VT884 is fitted with a Telco alarm that constantly monitors the chassis for any anomalies and alerts the user by LED indication on the Front Panel. It has its own dedicated slot and can be directly accessed via a Micro DB-9 connector.

Figure 2: VT884 Rear View

FRU Information and Carrier Locator

The VT884 has FRU information and a Carrier Locator. The Carrier Locator is assigned by easily accessible mechanical dip switches. The MCH reads the Locator via its private I2C bus.

Scorpionware™ Software

VadaTech's Scorpionware software can be used to access information about the current state of the Shelf or the Carrier, obtain information such as the FRU population, or monitor alarms, power management, current sensor values, and the overall health of the Shelf. The software GUI is very powerful, providing a Virtual Carrier and FRU construct for a simple, effective interface.

Chassis Configuration

Front View

	MCH 2		MCH 1
	Telco Alarm	Back Plane Connector slot	JSM
	AMC B6 AMC12	AMC B4 AMC8	AMC B2 AMC4
	AMC A6 AMC11	AMC A4 AMC7	AMC A2 AMC3
	AMC B5 AMC10	AMC B3 AMC6	AMC B1 AMC2
	AMC A5 AMC9	AMC A3 AMC5	AMC A1 AMC1
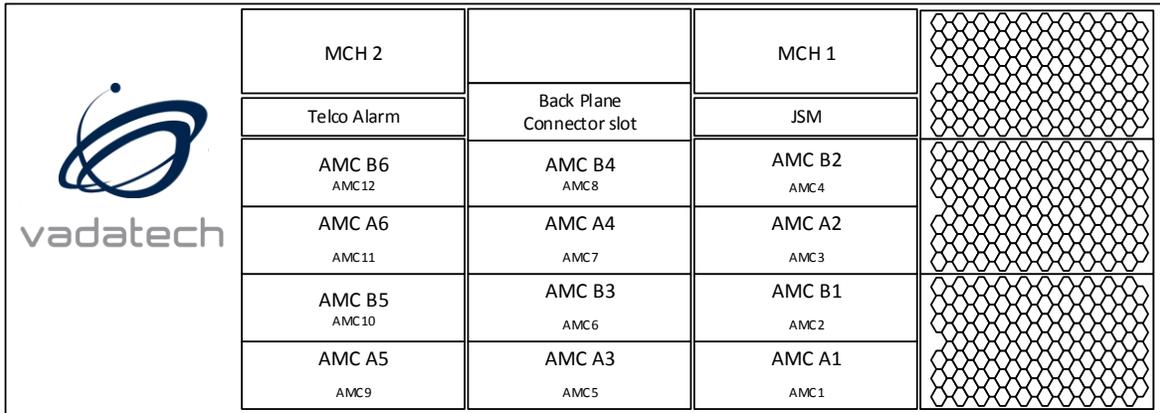
Rear View
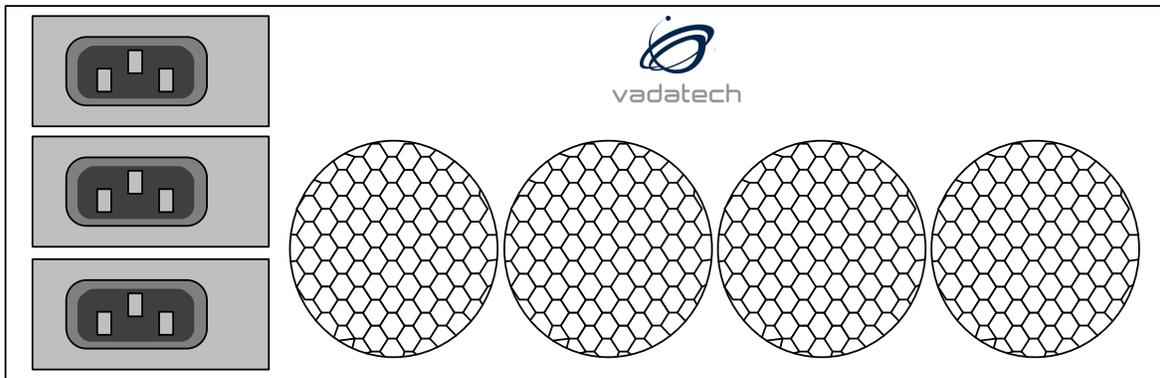
Figure 3: VT884 Chassis Layout

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Air Flow
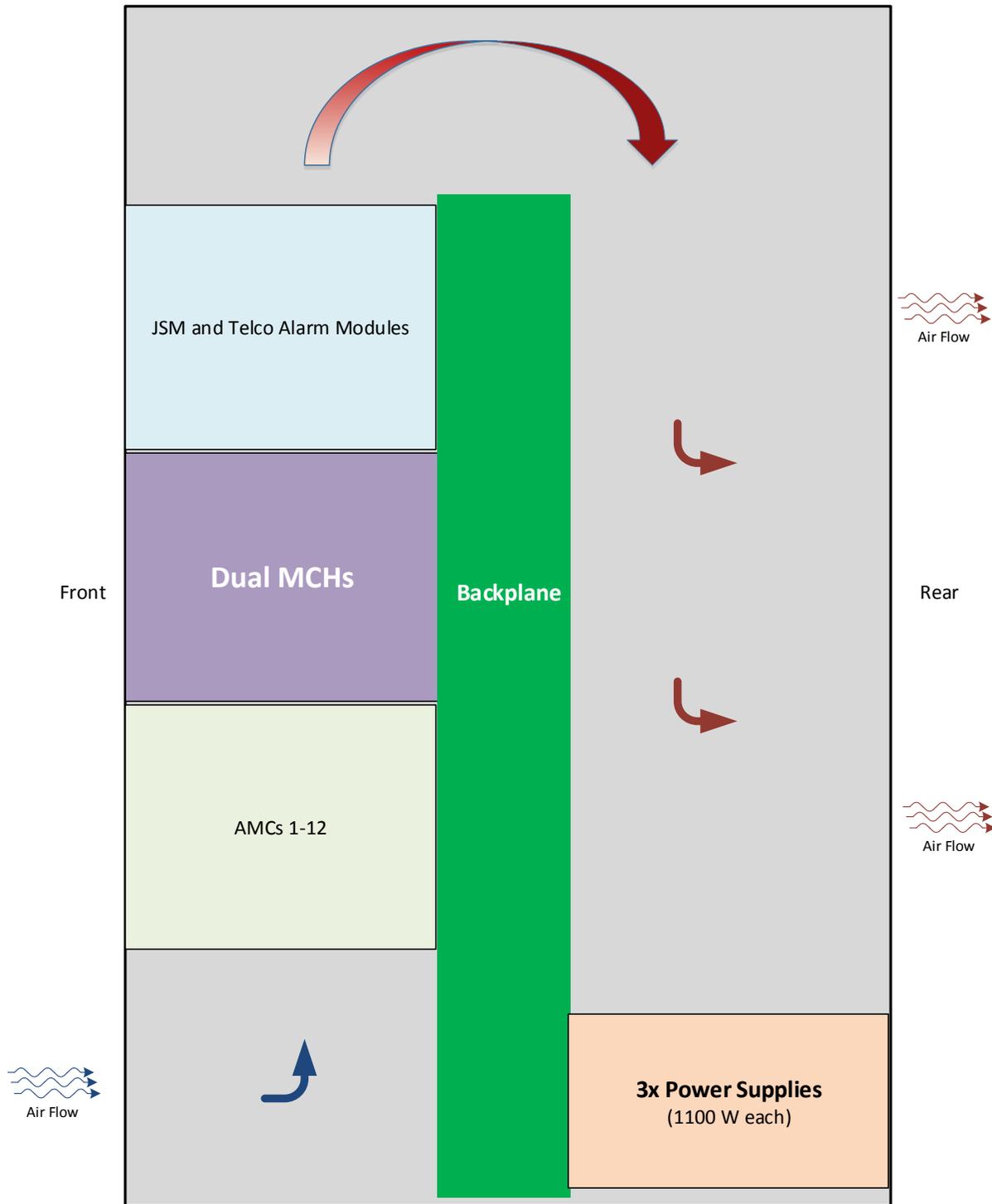
Figure 4: VT884 Top Level Functional Block Diagram

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Backplane Connections
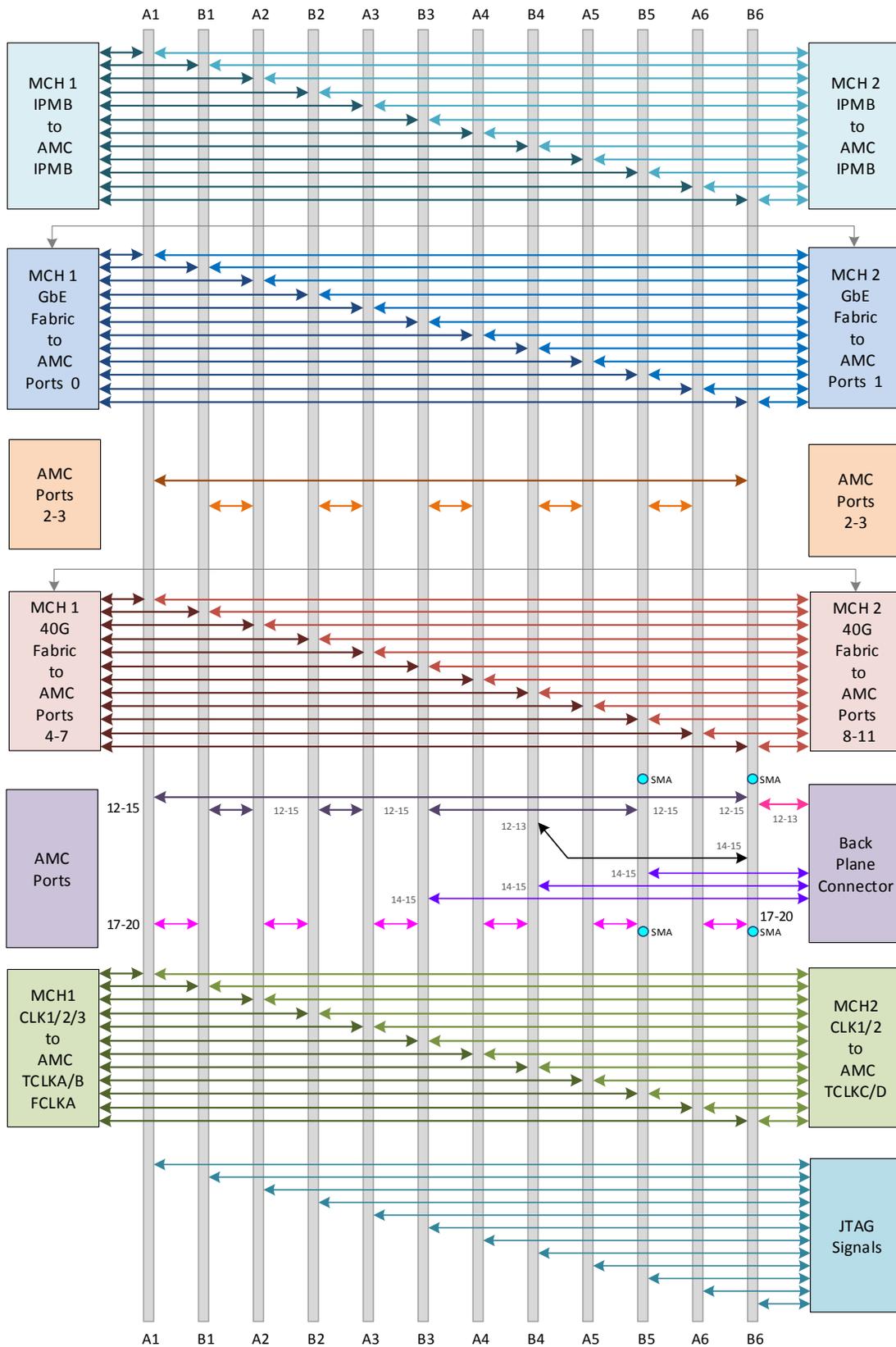
Figure 5: Backplane Connections on Primary AMC Connector

VT884 – 3U MicroTCA Chassis, 12 AMC Mid-size, 40GbE
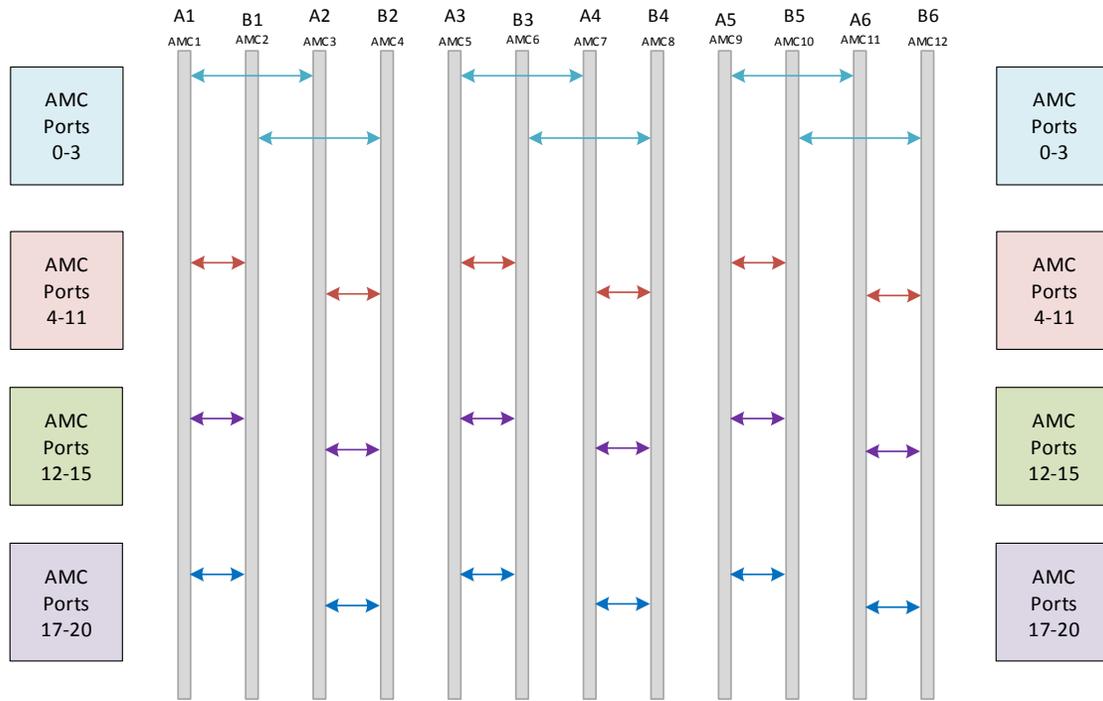
*Figure 6: Backplane Connections on Secondary Connector (Tongue 2*
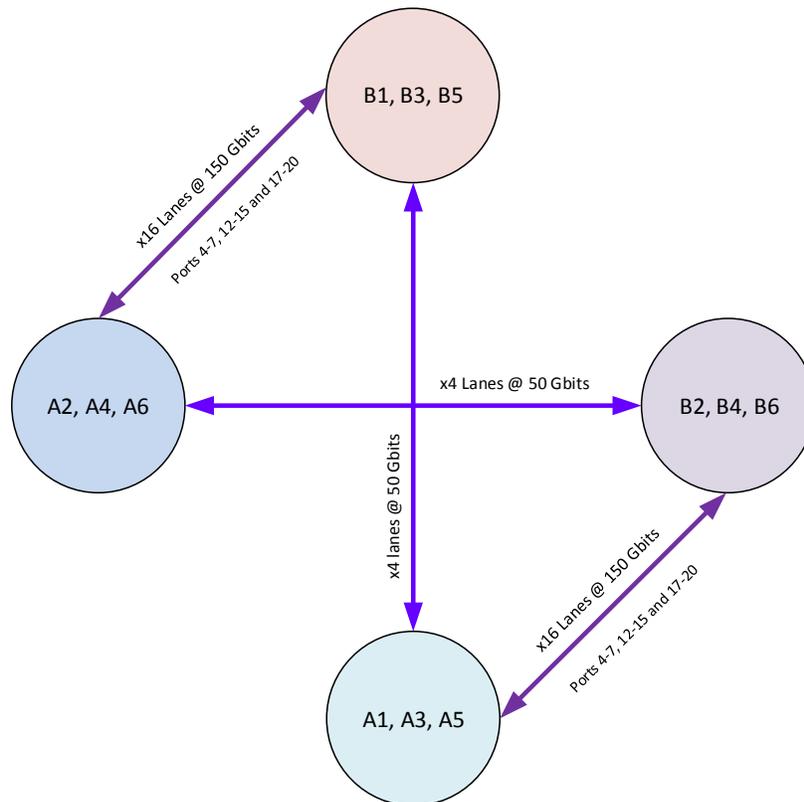
Figure 7: Backplane Speed on Secondary Connectors (Tongue 2)

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Specifications

Architecture		
Physical	**Dimensions**	Height: 3U
		Width: 19"
		Depth: 23.6"
Type	**MTCA Shelf**	12 AMC.0 Mid-size Slots
Standards		
MTCA	**Type**	PICMG MicroTCA.0
AMC	**Type**	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
Module Management	**IPMI**	IPMI v2.0
Configuration		
Power	**VT884**	1100W per supply (up to three)
		110-240V AC with frequency from 47-63 Hz or DC -36V to -75V
Environmental	**Temperature**	See Ordering Options
		Storage Temperature: –40° to +90°C
	Vibration	0.5G RMS, 20-20,000 Hz random (Operating): 6G RMS (non-operating)
	Shock	30G on each axis
	Relative Humidity	5 to 95% non-condensing
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		One (1) year, see VadaTech Terms and Conditions

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

VT884 – ABC-000-00J

A = Power Supply		J = Temperature Range and Coating
1 = Single (1100W, AC) 2 = Dual Supply (1100W, in 1+1 redundant, AC) 3 = Dual Supply (2200W, non-redundant, AC) 4 = Triple Supply (2200W, 2+1 redundant, AC) 5 = Single (1100W, DC -36V to -75V) 6 = Dual Supply (1100W, in 1+1 redundant, DC) 7 = Dual Supply (2200W, non-redundant, DC) 8 = Triple Supply (2200W, 2+1 redundant, DC)		
B = Second Tongue		
0 = No Second Tongue 1 = Second Tongue		
C = JSM		**J = Temperature Range and Coating**
0 = No JSM 1 = JSM		0 = Commercial, No coating 1 = Commercial, Humiseal 1A33 Polyurethane 2 = Commercial, Humiseal 1B31 Acrylic 3 = Industrial, no coating 4 = Industrial, Humiseal 1A33 Polyurethane 5 = Industrial, Humiseal 1B31 Acrylic 6 = Extended, Humiseal 1A33 Polyurethane 7 = Extended, Humiseal 1B31 Acrylic

Related Products

AMC515

- AMC FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 57
- AMC Ports 4-11 are routed to FPGA (protocols such as PCIe, SRIO, XAUI, etc. are FPGA programmable)
- Xilinx Virtex-7 XC7V2000T in 1925 package

AMC720

- Intel® Xeon™ E3 processor
- Conduction cooled version available
- PCIe Gen2 (Gen3 on v2 option) x4 on Ports 4-7 and 8-11 or single PCIe x8 on Ports 4-11 (AMC.1)

UTC018

- Double-module, 12 HP height module per AMC.0
- Universal AC input (85V to 265V), 1000W
- Provides power up to 12 AMCs, 2 MCHs and Cooling Units

Contact

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