DC Power Module, 792W

KEY FEATURES

- Double-module, full-size module per AMC.0
- Dual DC input (–36V to –75V)
- 792W (available in 396W)
- Modules can be turned on without an MCH
- Available in UTCA.3 conduction cooled
- Two banks of 256K Flash for redundancy
- Hot swappable
- Dual IPMI bus
- 32–bit RISC processor
- Blue, red, amber and red LEDs
- IPMI 2.0 and HPM.1 compliant
- Menu driven software for ease of configuration
- Current sensor per slot
- External as well internal WDT

Benefits of Choosing VadaTech

- DC PSU for MicroTCA (792W)
- Very low ripple voltage
- Support for power module redundancy
- Efficient re-use of existing designs/components reduce costs
- Electrical, mechanical, software and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, speciality modules, and test/dev product from one source

The VadaTech UTC013 is a 792W power module (available in 396W) for use in a µTCA chassis. The power module runs at 95% efficiency when running at maximum load. This results in over 752W available to the system. It is fully compliant with the MicroTCA.0 revision 1.0 specification; including dual-redundant I2C buses (IPMB-0).

The UTC013 is hot-swappable and fully redundant when used in conjunction with a second instance of the module. It provides power to the twelve slots, two MCHs (MicroTCA Carrier Hubs) as well as the CUs (Cooling Units).

Multiple temperature sensors are included on-board to monitor for over-temp conditions within the module. The current is continuously measured for each of the modules and reported to MCH for any fault.

Once installed in the system the firmware is upgradable via the shelf manager. The UTC013 can be configured to power and enable the modules without the presence of an MCH.

VadaTech can modify this product to meet special customer requirements. Contact us to discuss your application.

IPMI FUNCTIONALITY

The UTC013 is IPMI 2.0 and HPM.1 compliant with optional IPMI commands including warm/cold reset, re-arm sensor events, get device GUID, and get/set the hysteresis, threshold, and/or sensor event enable. The PMs follow the ATCA specification in fail-over for redundant IPMB-0 and FRU LED control.   The units also have power channel control, get power channel status, PM reset, get PM status, and PM heartbeat. Temperature and current sensors are also included.

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and µTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.
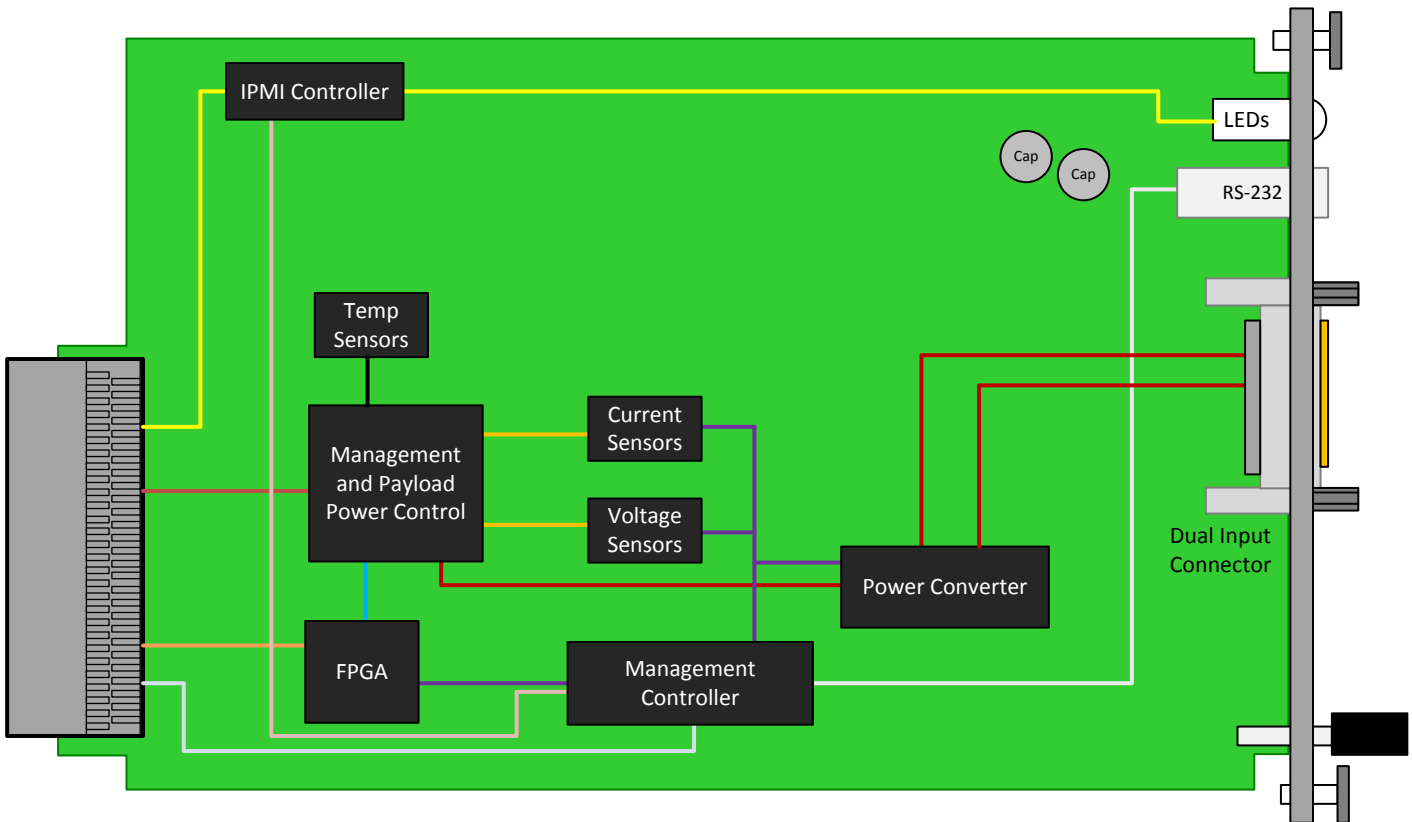
BLOCK DIAGRAM

Figure 1: UTC013 Block Diagram

Figure 2: Front Panel

SPECIFICATIONS

Architecture			
Physical	Dimensions	Width: 5.85" (148.5 mm)	
		Depth 7.11" (180.6 mm)	
Type	AMC Power Module	Intelligent power controller for µTCA chassis	
Standards			
Module Management	IPMI	IPMI version 2.0	
	ATCA	PICMG 3.0 Revision 2.0 (AdvancedTCA)	
	AMC	PICMG AMC.0 Revision 1.0 (AdvancedMC)	
	µTCA	PICMG MicroTCA.0 Revision 1.0	
	HPM	HPM.1 Revision 1.0	
Power	UTC0013	792W supply with 95% efficiency, providing over 752W to the system)	
Environmental	Temperature	Operating Temperature: 0° to 65°C with air flow greater than 400 LFM (available in µTCA.3)	
		Storage Temperature: –40° to +90°C	
	Vibration	1G, 5 to 500Hz on each axis	
	Shock	30Gs on each axis	
	Relative Humidity	5 to 95 per cent, non-condensing	
Front Panel	External Interface	RS-232 front panel access	
	LEDs	IPMI management control: blue, red, amber, green and fuse indicator for each input rail	
	Switch	Hot swap switch input with ±15 KV ESD protection	
	Input Power	–36V DC to –75V DC	
	Temperature Sensor	Multiple temperature sensors on-board	
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		
Compliance	RoHS and NEBS		
Warranty	Two (2) years		
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		

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vadatech
THE POWER OF VISION

ORDERING OPTIONS

UTC013 – ABC – 000 – 0HJ

A = Power
1 = 396W
2 = 792W

B = Specification
0 = uTCA.0*
1 = uTCA.1
2 = uTCA.3

C = Module Size
0 = 6 HP, Standard
1 = 8 HP, Extended*

H = Temperature Range

1 = Commercial (0° to +65°C)
2 = Industrial (-20° to +70°C)
3 = Military (-40° to +80°C)

J = Conformal Coating
0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

* For use with Vadatech 2U chassis. such as VT812 and VT814

RELATED PRODUCTS

UTC003 MCH	UTC020 Power Module 1000W DC	UTC011 Power Module Conduction Cooled

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