

DC Power Module, 241W or 460W - UTC014



KEY FEATURES

- Single module, full-size per AMC.0
- 10 to 36 VDC input for 241W option and 18 to 36 VDC input for 460W option
- Support for power module redundancy
- Dual IPMI bus
- 32-bit RISC processor
- Two banks of 256K flash for redundancy
- Field upgradable
- IPMI 2.0 compliant
- HPM.1 compliant
- Without the presence of an MCH the modules can be turned on
- · Menu driven software for ease of configuration
- · Current measure for each module
- External as well as internal WDT



Benefits of Choosing VadaTech

- 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 UTC014 is a 241/460W power module for use in a μ TCA chassis. The power module runs at 84% efficiency when running at maximum load. This results in 200/400W (available to the system). It is fully compliant with the MicroTCA.0 and MicroTCA.1 specifications; including dual-redundant I²C buses (IPMB-0).

The UTC014 is 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.

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.

The firmware is upgradable via HPM.

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

SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 2.89" (73.5 mm)
		Depth 7.11" (180.6 mm)
Туре	AMC Power Module	Intelligent power controller for µTCA chassis, signle
Standards		
Module Management	IPMI	IPMI version 2.0
	AMC	PICMG AMC.0 Revision 1.0 (AdvancedMC)
	μTCA	PICMG MicroTCA.0 Revision 1.0
	ATCA	PICMG 3.0 Revision 2.0 (AdvancedTCA)
	HPM	HPM.1 Revision 1.0
Power	UTC0014	241/460 W
Environmental	Temperature	Operating Temperature: -5° to 55°C (air flow > 400LFM) industrial and military versions also available (See environmental spec sheet)
		Storage Temperature: –40° to +85°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
	Mechanical	Hot swap handle
	Input Power	10 to 36V DC for 241W option and 18 to 36V DC for 460W option
	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	



IPMI FUNCTIONALITY

The UTC014 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

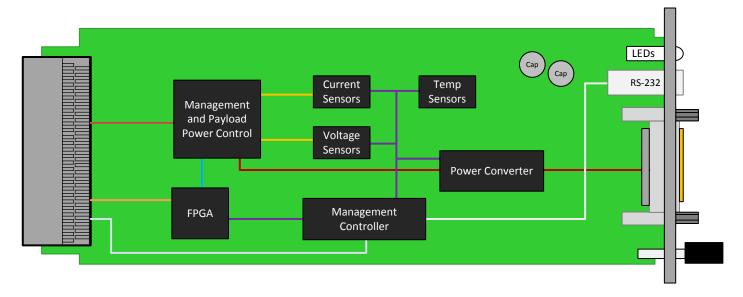


Figure 1: Block Diagram



Figure 2: Front Panel



ORDERING OPTIONS

UTC014 - A00 - 000 - GHJ

A = Input Power

1 = 241W (input voltage 10 to 36V)

2 = 460W (input voltage 18 to 36V)

G = Front Panel Type

 $0 = \mu TCA.0$

 $1 = \mu TCA.1$

H = Temperature Range

1 = Commercial (-5° to +55°C)

2 = Industrial (-20° to +70°C)

 $3 = Military (-40^{\circ} to +85^{\circ}C)$

J = Conformal Coating

0 = None

1 = Humiseal 1A33 Polyurethane

2 = Humiseal 1B31 Acrylic

RELATED PRODUCTS







EXP100 Express Development Chassis

UTC004 Gen 3 MCH AMC720 Processor AMC



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