UTC018

AC Power Module, 1000W

UTC018

Key Features

- Double-module, 12 HP height module per AMC.0
- Universal AC input (85 to 265V), 1000W
- Provides power up to 12 AMCs, 2 MCHs and Cooling Units
- Very low ripple voltage on +12V
- Hot swappable with two banks of 256K flash for redundancy
- Dual IPMI bus
- 32-bit RISC processor

Benefits

- Highest power AC PSU for MicroTCA in industry (1000W)
- Support for power module redundancy
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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UTC018

The UTC018 is a 1000W AC Power Module for use in a MicroTCA chassis. It is fully compliant with the MicroTCA.0 Revision 1.0 specification; including dual-redundant I^{2}C buses (IPMB-0).

The module is 12 HP, taking two full-size slots in a chassis It is hot-swappable and fully redundant when used in conjunction with a second module.

Multiple temperature sensors are included onboard to monitor for over-temperature conditions within the unit. 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 UTC018 can be configured to power and enable the modules without the presence of an MCH during development.

IPMI Functionality

The UTC018 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.
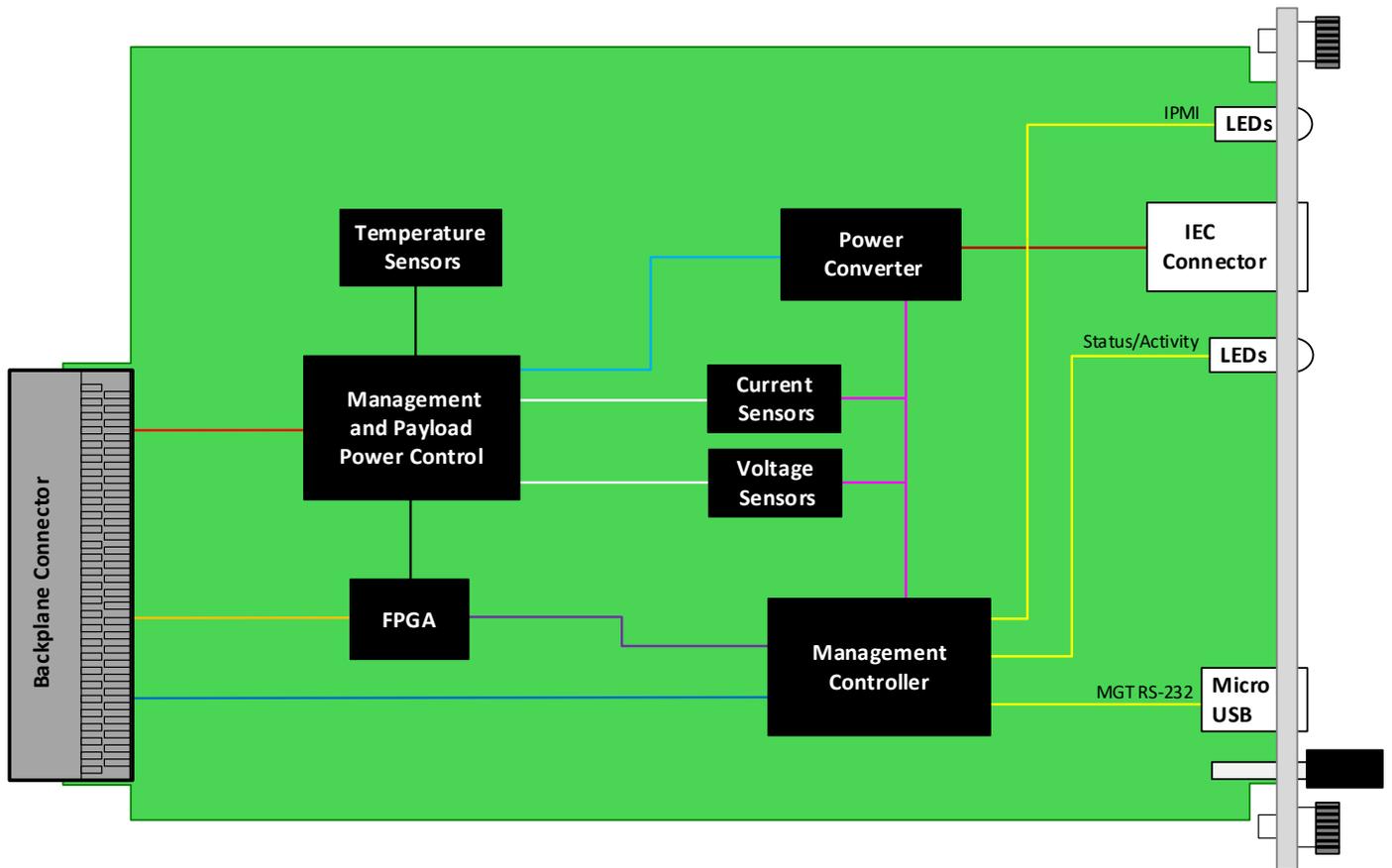

Figure 1: UTC018

Block Diagram

Figure 2: UTC018 Functional Block Diagram

Front panel

Figure 3: UTC018 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 MTCA chassis

Standards		
MTCA	**Type**	PICMG MTCA.0 Revision 1.0
AMC	**Type**	PICMG AMC.0 Revision 1.0
ATCA	**Type**	PICMG 3.0 Revision 2.0
Module Management	**HPM**	HPM.1 Revision 1.0
	IPMI	IPMI v2.0

Configuration		
Power	**UTC018**	1000W supply
		Input 85 to 265V AC (Input current 6.8A/3.4A) with frequency 47 to 63 Hz
Environmental	**Temperature**	See ordering options and environmental spec sheet
		Storage Temperature: –40° to +90°C
	Vibration	1G, 5 to 500 Hz each axis
	Shock	30Gs each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	**External Interface**	RS-232 front panel access
	LEDs	IPMI management control
		Activity/Status LEDs
		Fuse indicator for each input rail. Power state per slot
	Switch	Hot-swap switch input with ±15 kV ESD protection
	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
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

UTC018 – 000-000-0HJ

	H = Operating Temperature
	1 = Commercial (–5° to +55°C)
	2 = Reserved
	3 = Reserved

	J = Conformal Coating*
	0 = No coating
	1 = Humiseal 1A33 Polyurethane
	2 = Humiseal 1B31 Acrylic

Related Products

UTC003

- 400 MHz RISC CPU with 64 MB DDR for MTCA Carrier Management Controller (MCMC) and Shelf Manager
- Single width, full height module per AMC.0
- Fail-over with dual UTC003 in system

UTC011

- Single-width, full-height module per AMC.0
- Dual 10 to 36V DC input for 241W option and 18 to 36V DC input for 460W option
- Support for power module redundancy

UTC020

- Single module, full-size per AMC.0
- Dual -36V DC to -75V DC input, 936W (available in 468W)
- Hot swappable with support for power module redundancy

Contact

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