





## **KEY FEATURES**

- Complete ATCA 3.x IPMI compliant reference design with software
- Manages up to Eight AMC slots on an ATCA carrier
- 32-bit RISC processor
- Integrated 512K flash, WDT, A/D, dual I<sup>2</sup>C, dual SPI, etc.
- 64-pin HVQFN package
- Payload communication via any of the interfaces (I2C, RS232 or SPI)
- No up-front costs
- No royalties
- GCC tool chain
- Used on VadaTech ATCA products
- Development kit is available if needed (Reference VadaTech ATCO01 product)

The VadaTech VT027 is a reference schematic which provides a complete hardware and software solution that occupies only a 20mm x 20mm space on the ATCA module and dissipates less then 0.3 watts. The VT027 can manage up to eight AMC slots on an ATCA carrier. Two LPC2138s are utilized in the design, one running as the master and the second as a slave.

The VT027 provides the quickest way to design for the ATCA form factor without prior IPMI knowledge. The VT027 firmware is field upgradeable and configurable via the I<sup>2</sup>C bus.

In most cases the VT027 can provide all the functionality needed for ATCA IPMI without modification. If support is required, VadaTech will provide support at minimal charge. For customers wanting to customize the binary, the VT027 development kit is all that is needed to add enhancements. The development tools are based on the GCC tool chain.

The VT027 is the most cost-effective solution in the market. The LPC2138's can be purchased from VadaTech pre-programed.

An NDA is required to obtain the reference schematic.



# **SPECIFICATIONS**

Standard		
PICMG	3.x	IPMI specification
AMC	Туре	AMC.0 IPMI specification
Configuration		
Power	VT027	< 0.3W
Environmental	Temperature	Operating Temperature: -40° to 85° C
		Storage Temperature: -40° to +125° C
Other		
Trademarks	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedMC <sup>TM</sup> and the AdvancedTCA <sup>TM</sup> logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

# Key Software Features:

- IPMI Version 2.0
  - FRU Inventory Access and Update
  - Device SDR Repository Access and Update
  - Initialization Agent
  - Temperature Sensors
  - Settable / readable sensor Thresholds and Hysteresis
  - Sensor Event Generation
  - Basic Mode Serial Messaging (Payload Interface)
  - Warm Reset
  - Cold Reset
  - Get self Test Results
- PICMG ATCA Version 3.x
  - IPMB-0
  - IPMB Sensors
  - IPMB Sensor Event Generation
  - ATCA Electronic Keying
  - Hot Swap Sensor
  - Hot Swap Event Generation
  - FRU Control
  - LED Controls
  - AMC Version 2.0

٠

- IPMB-L Interface
- IPMB-L AMC Isolation
- ✤ AMC Activation Sequence
- AMC Power Management
- AMC electronic Keying
- Payload / FRU Control
- Supports up to 8 AMCs
- Supports 32 sensors per AMC

# **ORDERING OPTIONS**

#### VT027 - 000 - 000 - 000

Use the above part number if ordering generic, pre-programmed LPC2138 parts from VadaTech. If VadaTech has customized your firmware, please contact Sales for the part number. The VT027 consists of dual LPC2138s working in conjunction. For each VT027 ordered a Master and a Slave pre-programmed part is shipped.

Note: The LPC2138 could be purchased from the NXP distributors.



Document No\_

\_ Date:. July 20 2007