

ATC136

8 channel ADC 10-bit @ 2.6 GSPS,
Virtex-7



ATC136

Key Features

- Xilinx Virtex-7 FPGA
- Four core QorIQ P2040 Power PC
- Eight channel ADC 10-bit @ 2.6 GSPS (EV10AS150B)
- Single AD9129 DAC 14-bit @ 2.8 GSPS
- Dual sets of ports each for RJ-45, Clock In, and MicroUSB
- 4 GB DDR3 memory to the PPC
- 4 Gb DDR3 memory to the FPGA
- 16 GB MicroSD card (removable)
- CLK sync output via SMA

Benefits

- 8 channel high-speed digitizer with powerful V-7 FPGA
- Vast ecosystem of ATCA chassis platforms, switches, processors, RTMs, and specialty boards
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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ATC136

The ATC136 is an ATCA A/D converter based on the EV10AS150B ADC, with eight channels at 10-bit resolution up to 2 GSPS. There is also single channel DAC 14-bit @ 2.8 GSPS (AD9129), two Reference Clock inputs and dual GbE via RJ-45. The carrier has a Xilinx V-7 FPGA with an onboard QorIQ P2040 PowerPC for efficient performance and ease of configuration.

There is 64-bit DDR3 memory on the FPGA (4 GB) and the PPC (4 GB). The analog inputs are routed directly to the ADCs from the front panel.

The ATC136 provides a JTAG header on the front panel and dual MicroUSB.



Figure 1: ATC136

Block Diagram

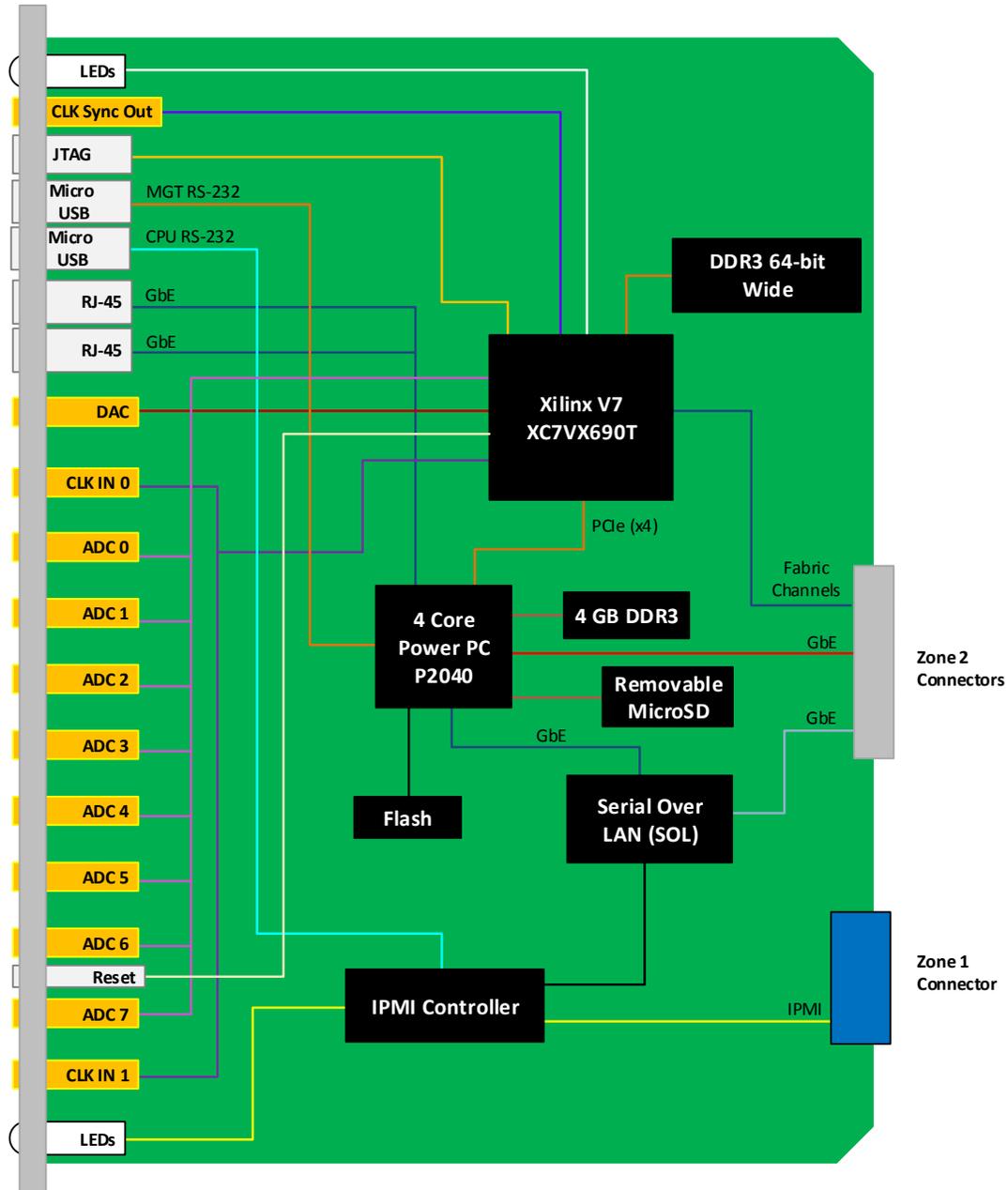


Figure 2: ATC136 Functional Block Diagram



Figure 3: ATC136 Front Panel

Specifications

Architecture		
Physical	Dimensions	Width: 12.68" (322.25 mm) Depth 11.02" (280 mm)
Type	ATCA Carrier FPGA	8 ADCs, 10-bit @ 2 GSPS and 1 DAC 14-bit @ 2.8 GSPS Xilinx FPGA XC7VX690T
Standards		
PICMG	ATCA	PICMG 3.0 R3.0
Module Management	IPMI	IPMI v2.0
Configuration		
Power	ATC136	TBD
Environmental	Temperature	See Ordering Options Storage Temperature: -40° to +90°C
	Vibration	0.5Gs RMS, 20 to 20000 Hz random (operating), 6Gs RMS (non-operating)
	Shock	30Gs on each axis
	Relative Humidity	5 to 95% non-condensing
	LEDs	IPMI Management Control Activity/Link user LEDs
Software Support	Operating System	Linux
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, 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.

ATC136 – 000-DE0-0HJ

	D = FPGA 0 = XC7VX690T 1 = Reserved	
	E = FPGA Speed 0 = Reserved 1 = High 2 = Highest (MOQ required)	H = Temperature Range 0 = Commercial 1 = Industrial
		J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

For operational reasons VadaTech reserves the right to supply a higher speed FPGA device than specified on any particular order/delivery at no additional cost, unless the customer has entered into a Revision Lock agreement with respect to this product.

Related Products

ART132



- Quad GbE via SFP
- Dual InfiniBand 40Gb via QSFP+
- PCIe x8 via I-Pass

ATC806



- 40G or 10G ATCA switch, compliant to PICMG 3.1 specifications
- Scalable throughput based on desired performance level
- Managed Layer 3 software

VT830



- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3

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