

ATC806 – ATCA 40GbE or 10GbE Scalable Switch with Dual AMC Slots

ATCA 40G/10G Switch, 2 AMC



KEY FEATURES

- 40G or 10G ATCA switch, compliant to PICMG 3.1 specifications
- Scalable throughput based on desired performance level
- Managed Layer 3 software
- Dual mid-size AMC slots
- Octal 10/100/1000 Ethernet, 1 GbE, and 1 RS-232 port via RJ-45
- Utilizes VadaTech's proven IPMI Management Controller

Advanced TCA[®] 40G

Benefits of Choosing VadaTech

- 40G or 10G Managed Layer 3 switch performance with the versatility of 2 AMC slots
- Choose your performance level needed – 320G or 640G throughput.
- Dual 10G ports routed to RTM (Zone 3)
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The ATC806 is ideal for broadband media servers or other applications requiring the versatility of a powerful 40G or 10G ATCA switch with dual integrated AMC slots. The switch provides two ports of 40GbE/10GbE to Zone 3 RTM, 13 ports to the Fabric Channel and one port to the Update Channel.

Each slot can run 10G or 40G speeds for up to 640G of aggregate bandwidth. A mux selection allows the 40GE or 10GbE to interface together with the GbE signals. Two ports also have a mux selection for routing to the RTM. An RTM can be ordered separately, contact VadaTech for details.

Linux OS is standard on the ATC806, consult VadaTech for other options.

BLOCK DIAGRAM

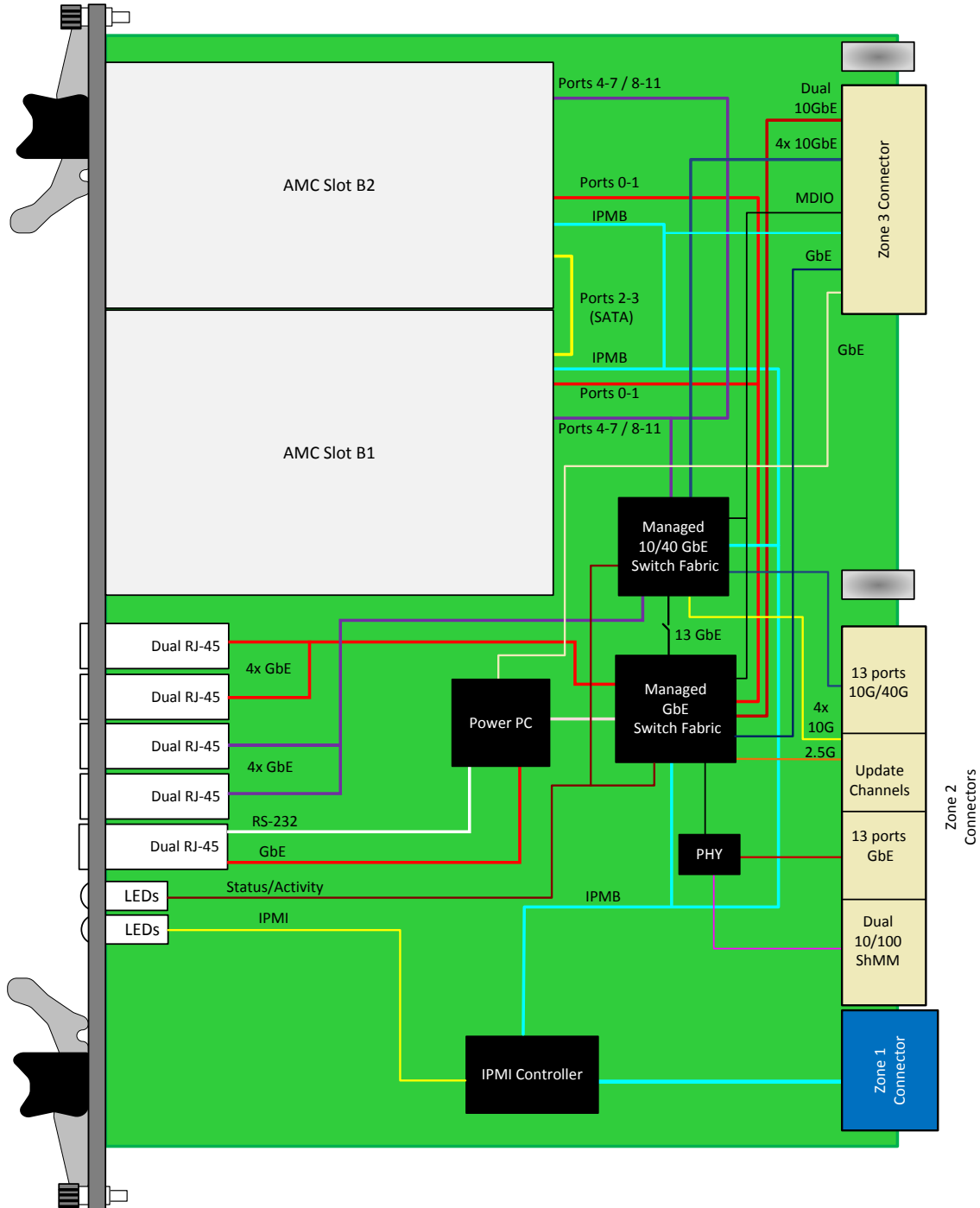


Figure 1: Functional Block Diagram for Option B=0

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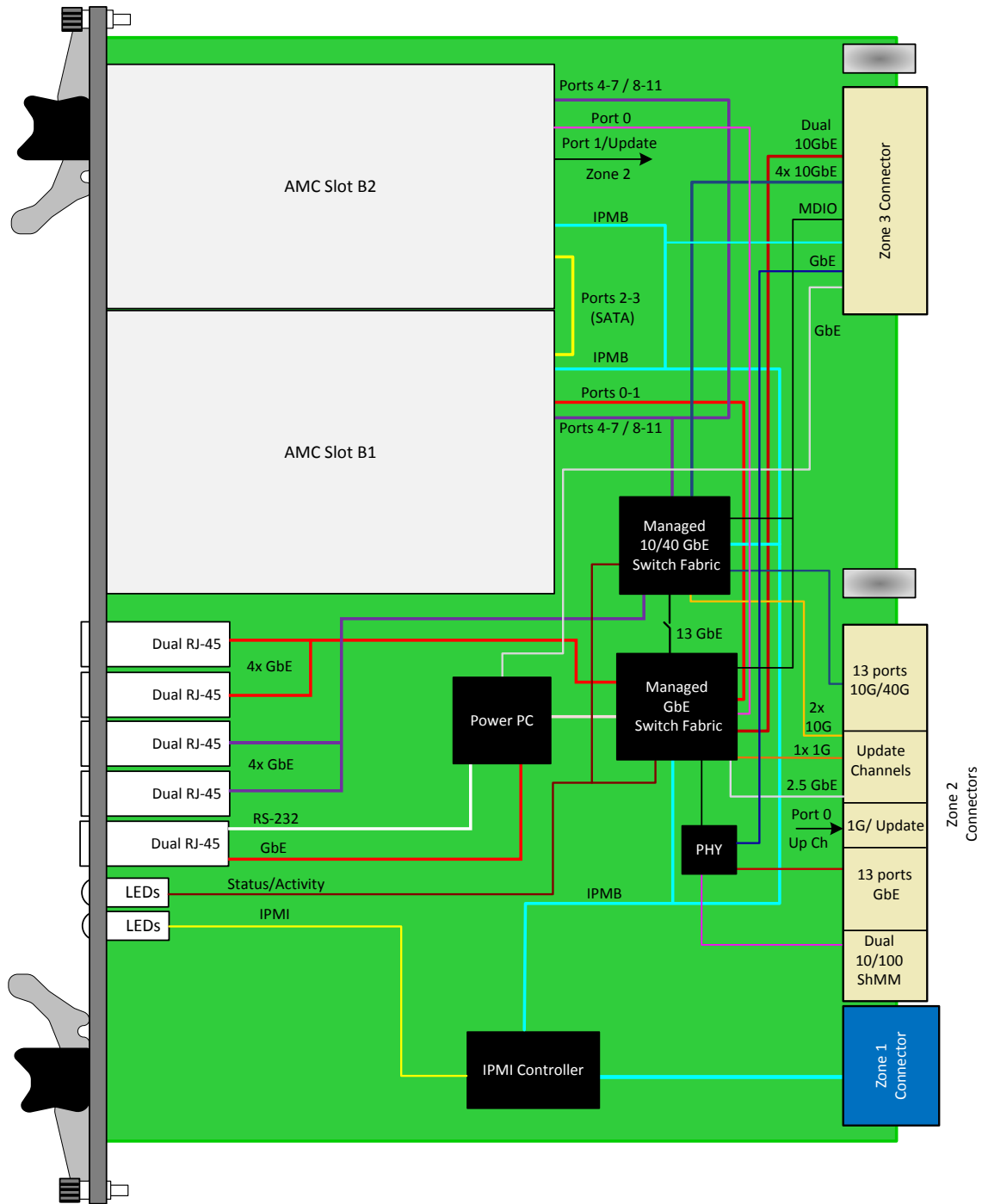


Figure 2: Functional Block Diagram for Option B=1

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40GBE OR 10GBE LAYER 3 MANAGED SWITCH

The Layer 3 managed 40GbE or 10GbE switch routes 13 ports to the Fabric Channel and one port to the Update Channel. Two ports are also routed to the RTM. There are four uplink ports from the 40GbE/10GbE switch and four from the GbE switch routed to the front panel RJ-45 connectors for expansion. The features include Spanning Tree (+ Rapid), VLANs, GMRP, GVRP, Port Authentication, IGMP/Snooping Proxy, and Multi-cast Listener Discovery.

GBE LAYER 3 MANAGED SWITCH

The Layer 3 managed GbE switch routes 13 ports to the base channels, Update, and 2x 10/100 for shelf management. The features include Switching, Multi-cast, Source Port Filtering, Storm Control Per-Port, Spanning Tree, Double Tagging, and Mirroring.

GBE REDUNDANCY

ATC806 provides an option for GbE Switch redundancy, when used with a second ATC806. Select ordering option B=1 for GbE redundancy routing. In this configuration, when the GbE switch on primary ATC806 fails a redundant GbE link is established to the GbE switch of the secondary ATC806. Please note that the redundancy is only available for Slot B2 AMC.

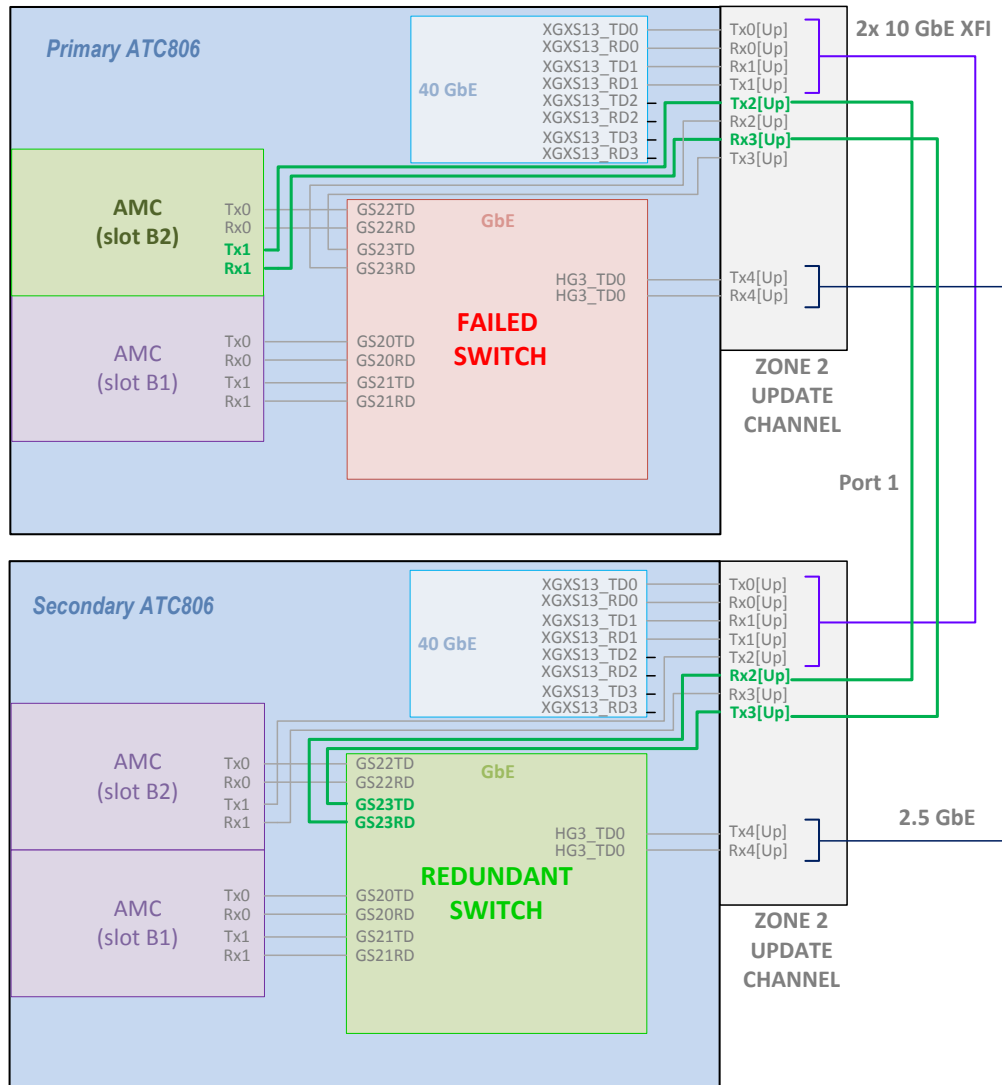


Figure 3: GbE Redundancy Use Example

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SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 12.69" (322.25 mm)
		Depth 11.02" (280 mm)
Type	ATCA Switch/Carrier	Two AMC slots (single width, mid-size)
Standards		
Module Management	IPMI	IPMI version 2.0 and PICMG 3.0
Processor Type	MIPS	For management
PICMG	ATCA	PICMG 3.0 R2.0
Configuration		
Power	Power consumption	~100W (SKU dependent)
Environmental	Temperature	Operating Temperature: -5° to 55°C (Air flow requirements is to be greater than 200 LFM) Available in industrial temperature range
		Storage Temperature: -40° to +85°C
	Vibration	1 G, 5 to 500 Hz on each axis
	Shock	30 Gs on each axis
	Relative Humidity	5 to 95 per cent, non-condensing
Front Panel	Interface Connectors	4 RJ-45 to base switch
		4 RJ-45 to fabric switch
		RJ-45 for GbE out-of-band management CPU
		RJ-45 for RS-232 management CPU
	LEDs	Activity / Link
Software Support	Operating System	IPMI Linux
Conformal Coating		Humiseal 1A33 Polyurethane (Optional)
		Humiseal 1B31 Acrylic (Optional)
Other		
MTBF	MIL Handbook 217-F@TBD Hrs	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Compliance	PICMG 3.0 Rev 3.0, RoHS 2.	
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 ATCA and μ TCA 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.

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ORDERING OPTIONS

ATC806 – AB0 – 000 – GHJ

A = Total Switch Aggregate Throughput

0 = 320G

1 = Reserved

2 = 640G

B = GbE Routing

0 = Standard Routing*

1 = GbE Redundancy Routing**

G = Ethernet Switch Management

0 = IPInfusion stack*** (Routing and Switching protocols)

1 = VadaTech stack (Routing and Switching protocols)

H = Temperature Range

0 = Commercial

1 = Industrial

J = Conformal Coating

0 = None

1 = Humiseal 1A33 Polyurethane

2 = Humiseal 1B31 Acrylic

* See Figure 1

** See Figures 2 and 3

*** MOQ required, contact VadaTech sales for details

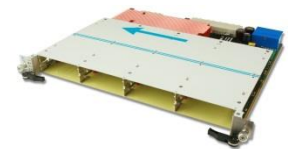
RELATED PRODUCTS



VT830 – 6U ATCA Shelf



AMC735 – 10GbE Network Interface card



ATC133 – 10G Switch/Carrier + FPGA

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