ATC804

ATCA 40GbE Switch with 100GbE Uplink

ATC804

Key Features

- 40GbE ATCA switch compliant to PICMG 3.1 specifications

- Single switch for Base and Fabric Interfaces with VLAN separation

- Dual zQSFP+ (QSFP28) Ports for 100GbE/40GbE

- 16 of SFP+ Ports on the front panel

- 8 of 10/100/1000Base-T Ports via RJ-45

- Octal 10GbE/1GbE Ports to Zone-3

- Layer 3 Managed Switch software

- VadaTech's proven IPMI Management Controller

Benefits

- 40/10GbE Managed Layer 3

- Dual 100GbE uplink to front panel

- 1.2 TBit Switch Fabric

- Full system supply from industry leader

- AS9100 and ISO9001 certified company

AdvancedTCA®
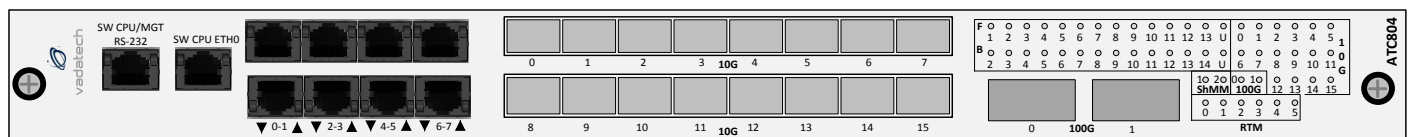
40G

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ATC804

The ATC804 is ideal for broadband media servers or other applications requiring the versatility of a powerful 40GbE switch and provides 1.2 TBit throughput. The ATC804 has a single 1.2Tb switch which handles both the Base and the Fabric Channels. The Base and Fabric are separated by VLAN.
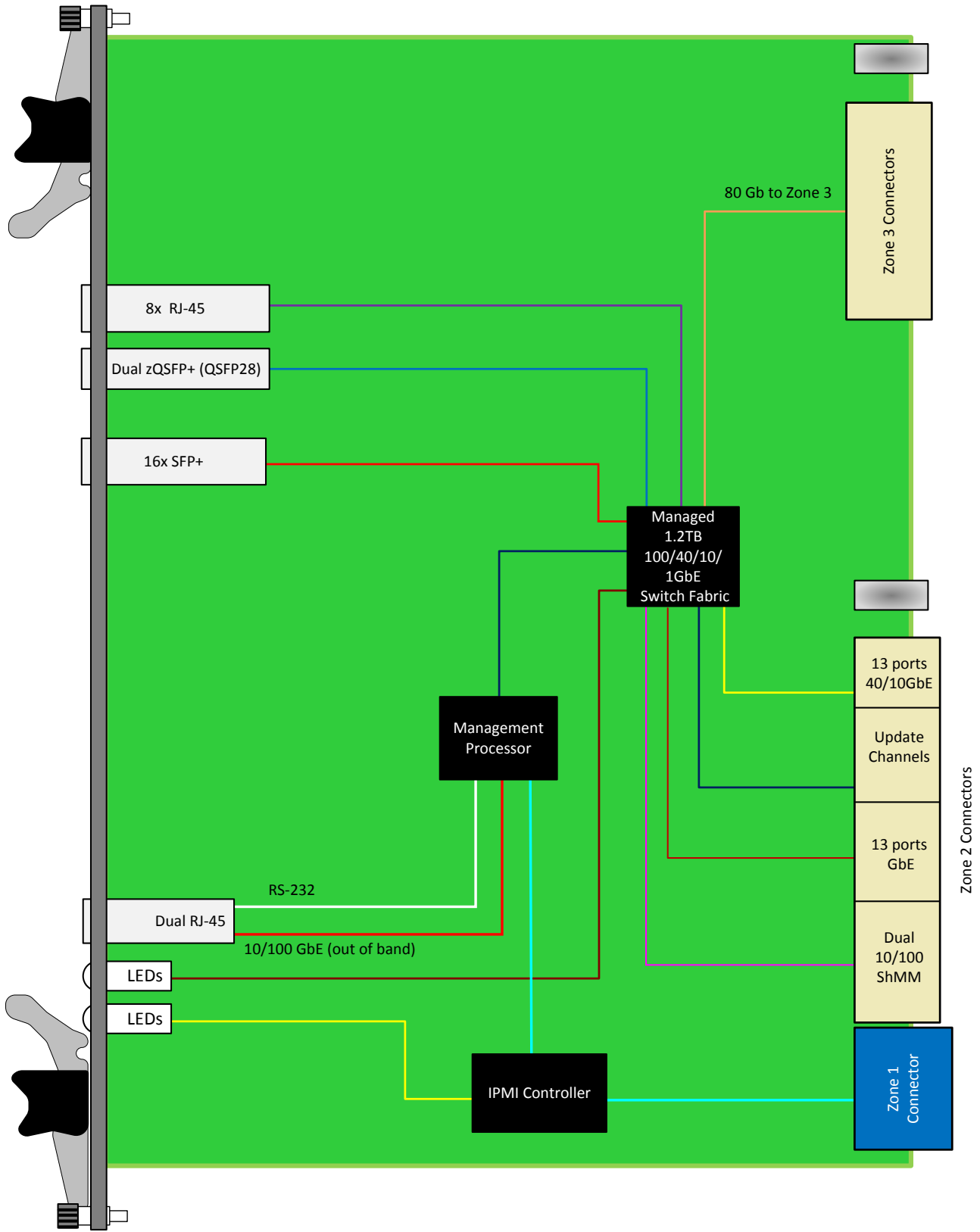
The Layer 3 managed 40GbE switch fabric routes 13 ports to each of the Fabric and Base Channels, two ports to the Update Channel, dual 100GbE ports to the front panel via zQSFP+ (QSFP28), 8 ports to the RTM, 16 ports to front-panel SFP+ and 8 ports to front panel RJ-45 (10/100/1000Base-T). Switch management software features include Spanning Tree (+ Rapid), VLANs, GMRP, GVRP, Port Authentication, IGMP/Snooping Proxy, and Multi-cast Listener Discovery, etc. Each Fabric port could be configured as a single 40GbE/10GbE or as four 10GbE.

The ATC804 routes 80 Gb to Zone 3 which could divided between the combination of 10/1GbE ports. An RTM can be ordered separately to access the rear ports, contact VadaTech for details.

Front Panel

Block Diagram

80 Gb to Zone 3

Zone 3 Connectors

8x RJ-45

Dual zQSFP+ (QSFP28)

16x SFP+

Managed 1.2TB 100/40/10/1GbE Switch Fabric

Management Processor

13 ports 40/10GbE

Update Channels

13 ports GbE

Dual 10/100 ShMM

Zone 2 Connectors

RS-232

Dual RJ-45

10/100 GbE (out of band)

LEDs

LEDs

IPMI Controller

Zone 1 Connector

ATC804 – ATCA 40GbE Switch with 100GbE Uplink

Specifications

Architecture		
Physical	Dimensions	Width: 12.69" (322.25 mm)
		Depth: 11.02" (280 mm)
Type	ATCA Switch	Layer 3 Managed

Standards		
ATCA	Type	PICMG 3.0 Revision 2.0
Module Management	IPMI	Version 2.0
Processor	ARM	For switch management

Configuration		
Power	ATC804	~95 W
Environmental	Temperature	Operating temperature: -5° to 45° C (55°C for limited time, performance restrictions may apply), industrial and extended versions also available (See environmental spec sheet)
		Storage Temperature: –40° to +85°C
	Vibration	1G, 5 to 500 Hz on each axis
	Shock	30Gs on each axis
	Relative Humidity	5 to 95 per cent, non-condensing
Front Panel	Interface Connectors	8x RJ-45 for 10/100/1000Base-T
		16x SFP+ for 10/100/1000Base-T
		Dual zQSFP+ (QSFP28) for 100 GbE
		Dual RJ-45 for CPU RS-232 and Out of band
	LEDs	IPMI, Activity , Status and User defined
Software Support	Operating System	Linux
Conformal Coating		Humiseal 1A33 Polyurethane (Optional)
		Humiseal 1B31 Acrylic (Optional)

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 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.

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Ordering Options

ATC804 – ABC-000-0HJ

A = Switch Software Stack		
0 = VadaTech		

B = Dual zQSFP+ (QSFP28) Transceiver *		H = Temperature Range
0 = None		0 = Commercial
1 = 40GbE SR		1 = Industrial
2 = 40GbE LR		
3 = 40GbE WDM (single LC fibre)		
4 = 100GbE SR		
5 = 100GbE LR		

C = 16 SFP+ Transceiver**		J = Conformal Coating
0 = None		0 = None
1 = SR		1 = Humiseal 1A33 Polyurethane
2 = LR		2 = Humiseal 1B31 Acrylic
3 = 10GbE Copper		

* Two are included (for other combinations please contact VadaTech Sales)

** 16 are included (for other combinations please contact VadaTech Sales)
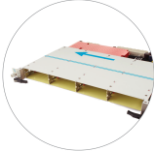
Related Products

VT830

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

AMC735

- Per AMC.1 and AMC.2 specification
- Single module, mid-size (full size option)
- Cavium OCTEON CN67xx Multi-Core

ATC133

- 10G ATCA Carrier
- Managed Layer 2 software
- Four full-size AMC slots

Contact

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