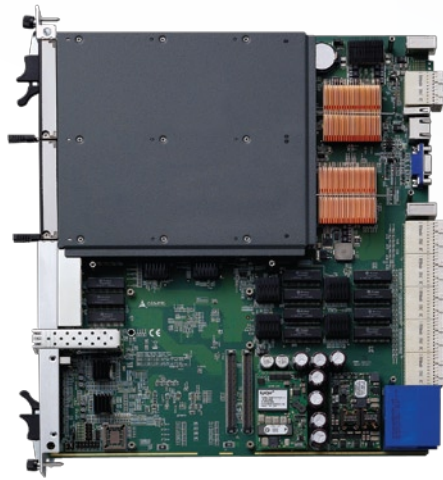


aTCA-3420

20-Port 10GbE AdvancedTCA® Fabric Switch Blade with 10GbE Uplink



Features

- 20-port 10GbE Fabric Interface switch
- 24-port Gigabit Ethernet Base Interface switch
- Freescale MPC8313E PowerQUICC® II Pro 333MHz control plane processor
- COM Express® subsystem expansion site
- Broadcom BCM56312 and BCM56800 multilayer switch
- 10-Gigabit Ethernet SFP+ uplink port
- Dual AMC bays

Specifications

Control Plane

CPU	Freescale MPC8313E PowerQUICC® II Pro 333MHz
Memory	DDR2 512 MB SDRAM 64+64MB on-board dual bootable flash memory
Bus	32-bit/33MHz PCI Bus
Management	Serial console port, front panel RJ-45 10/100/1000BASE-T, zone3 RJ-45 USB 2.0, zone3 Type-A

Data Plane

Switch Fabric	Broadcom BCM56312 24-port Gigabit Ethernet switch Broadcom BCM56800 20-Port 10GbE Ethernet switch
PHY	Broadcom BCM5466 Quad-port 10/100/1000BASE-T PHY

COM Express® Expansion Site

Form Factor	COM Express® Type 2, 95 mm x 125 mm
I/O Interface	One GbE port to BCM56312 2x USB ports (1x front panel, 1x RTM) PCIe x4 (AMC#1: AMC.1 Type4) 4x SATA Ports (2x AMC.3, 2x RTM) Serial console port, front panel RJ-45 Analog display port, zone3 DB-15

Base Interface

Channels	12x 10/100/1000BASE-T Base Interface channels, for 14-slot systems
Egress	6x 10/100/1000BASE-T RJ-45 egress ports
ShMC Port	2x 10/100BASE-TX ShMC ports compliant to PICMG® 3.0 R2.0 ECN002
Inter-Switch	10/100/1000BASE-T inter-switch link

Fabric Interface

Channels	12x 10GbE Interface channels, for 14-slot systems
Inter-Switch	10GbE inter-switch link

I/O Interfaces

AdvancedMC	Two AMC.0 Mid-size bays AMC#1: AMC.1 Type 4 (from COM-E) AMC.3 S1 SATA (from COM-E) AMC#2: AMC.2 E1 (to BCM56312) AMC.3 S1 SATA (from COM-E) XAUI x4 (for 56800 to AMC-3420)
Ethernet	Six Egress 10/100/1000BASE-T RJ-45 (from 56312) Two 10Gigabit Ethernet SFP+ cage (from 56312)
Serial Port	One RJ-45 to COM Express, one RJ-45 to MPC8313
USB	Type-A to COM Express sub-system

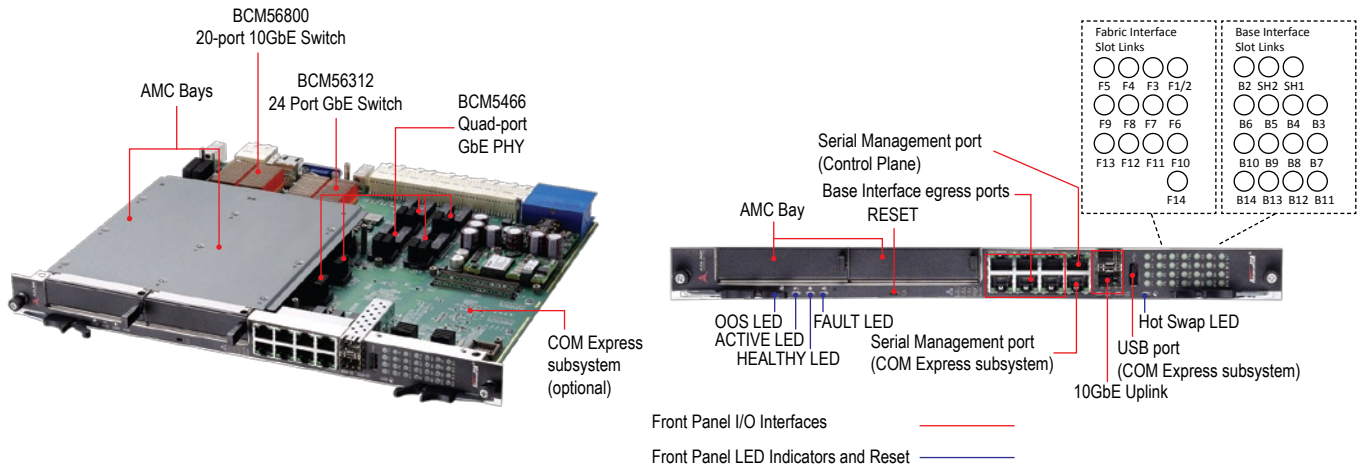
Mechanical and Environmental

Form Factor	PICMG® 3.0 R2.0 ECN002 AdvancedTCA®
Dimensions	322.25mm x 280mm x 6HP (L x W x H)
Weight	2.4 kg / 4.4 lbs
Operating Temp.	-5°C to 55°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensing
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation: 1.88Grms, 5-500Hz each axis Operation: 0.5Grms, 5-500Hz each axis
Power Consumption	100 W (COM Express not included)
Certifications	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

Model Number	Description/Configuration
aTCA-3420	PICMG® 3.0 20-Port 10GbE AdvancedTCA Fabric Interface Switch

Mechanical Layout



Functional Diagram

