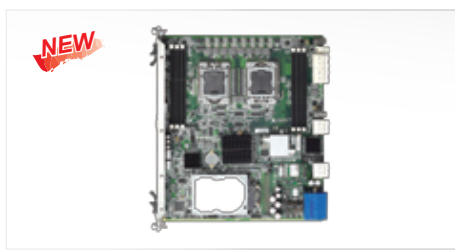


Selection Guide

AdvancedTCA® Processor Blades



Model Name		aTCA-6100
CPU and Core Logic	CPU Support	Quad-Core Intel® Xeon® L5518
	CPU Speed	2.13 GHz
	CPU FSB	5.86 GT/s (Intel® QPI)
	Chipset	Intel® 5520 ICH10R
Form Factor	PICMG® Spec.	3.0 R2.0 ECN002 AdvancedTCA 3.1 Ethernet Over PICMG 3.0 R1.0 , Option1/9 AMC.0: Advanced Mezzanine Card Specification R2.0 AMC.1: PCI Express and Advanced Switching R1.0 AMC.2: Gigabit Ethernet R1.0 AMC.3: Storage Interfaces R1.0
Memory	DIMM Slots	Four DDR3-1333 240-pin
	Max. Memory	48 GB
	REG/ECC	REG/ECC
Display	Graphics Controller	ATI ES1000
Data Transport		Dual 10/100/1000BASE-T Base Interface channels
		Dual 10GBASE-KX4/1000BASE-BX Fabric Interface channels
		Dual 10/1001000BASE-T Egress ports
		Dual GbE ports to RTM
Storage	AMC.3 SAS / SATA-II ports	
	2.5" SATA onboard mounting	
	On-board bootable 4 GB USB flash memory	
Front Panel I/O		AMC1, VGA, USB1/2/3, LAN1/2, COM1
Page Number		1-3

aTCA-6900	
Quad-Core Intel® Xeon® L5408	Dual-Core Intel® Xeon® Processor LV 5138
2.13 GHz	
1066 MHz	
Intel® 5100 ICH9R	
3.0 R2.0 ECN001 AdvancedTCA® 3.1 Ethernet Over PICMG® 3.0 R1.0 , Option1/9 AMC.0: Advanced Mezzanine Card Specification R2.0 AMC.1: PCI Express and Advanced Switching R1.0 AMC.2: Gigabit Ethernet R1.0 AMC.3: Storage Interfaces R1.0	
Four DDR2-667 240-pin	
32 GB	
REG/ECC	
ATI ES1000	
Dual 10/100/1000BASE-T Base interface channels	
Dual 10GBASE-KX4/1000BASE-BX Fabric Interface channels	
Dual 10/1001000BASE-T Egress ports	
On-board 24-port Gigabit Ethernet Switch-on-Chip (optional)	
Dual AMC.3 SATA-II ports	
Dual AMC.3 SAS ports	
On-board bootable 4 GB USB flash memory	
AMC1/2, VGA, USB1/2/3, LAN1/2, COM1	
1-5	

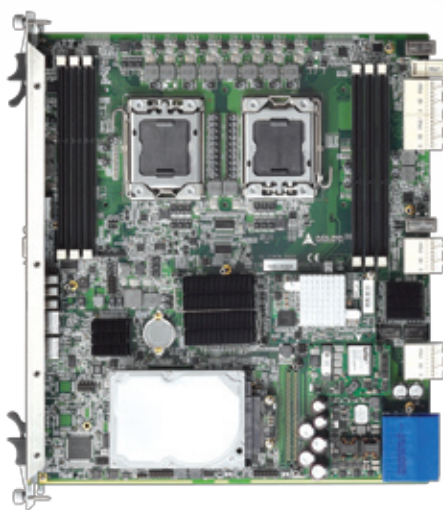
AdvancedTCA® Switch Blades



Model Name		aTCA-3150	aTCA-3400
Control Plane	CPU & FSB	Freescall MPC8313E PowerQUICC® II Pro 333MHz control plane processor	COM Express™ Module, Intel® Pentium® M 1.4 GHz
	RAM	DDR2-333 512 MB SDRAM	DDR2-533 SODIMM up to 1 GByte
	Storage	64+64MB on-board dual bootable flash memory	4GB soldered USB flash disk
	Bus	32-bit/33MHz PCI Bus	32-bit/66 MHz PCI Bus
	Management	Serial console port, front panel RJ-45	10/100/1000BASE-T (RJ45)
Data Plane	Switch Fabric	Broadcom BCM56312 24-port Gigabit Ethernet switch	Broadcom® BCM56800 20-port 10GbE multilayer switch
	PHY	Broadcom® BCM5466 Quad 1000/10BASE-T and 100BASE-TX Gigabit Ethernet Transceiver	Broadcom® BCM8706 10-GbE serial-to-XAUI 10GBASE-RM Transceiver
			Broadcom® BCM5466 Quad 1000/10BASE-T and 100BASE-TX Gigabit Ethernet Transceiver
Base Interface	Channels	Twelve 10/100/1000BASE T base interface channels, for 14-slot systems	Twelve 10/100/1000BASE T base interface channels, for 14-slot systems
	Egress	Six 10/100/1000BASE-T front panel egress ports	Two 10/100/1000BASE T and one 10 GbE SFP+ egress ports
	ShMC Port	Two 10/100BASE-TX ShMC ports compliant to PICMG® 3.0 R2.0 ECN002	Two 10/100BASE TX ShMC ports compliant to PICMG® 3.0 R2.0 ECN001
	Inter Switch	One 10/100/1000BASE-T	One 10/100/1000BASE
PICMG 3.1 Interface	Channels	N/A	Thirteen 10GBASE-KX4 channels, for 14-slot systems
	Egress	N/A	Eight 10GbE front panel egress SFP+ ports
	RTM	N/A	N/A
10 Gigabit Ethernet Uplink	10 GbE Uplink	1x 10 GbE SFP+ ports	1x 10 GbE SFP+ ports
Mechanical and Environmental	Form Factor	PICMG® 3.0 R2.0 ECN002 AdvancedTCA®	PICMG® 3.0 R 2.0 ECN001 AdvancedTCA®
	Dimensions	322.25mm x 280mm x 6HP (L x W x H)	322.25mm x 280mm x 6HP (L x W x H)
	Weight	2 kg / 4.4 lbs	2.4kg / 5.3lbs
	Power Consumption	75W (w/o AMC and COM Express module)	110W
Expansion		Two AMC bays COM Express™ module site	N/A
Page Number		1-7	1-9

aTCA-6100

Dual Quad-Core Intel® Xeon® L5518 Processor
AdvancedTCA® Processor Blade with 10GbE Fabric Interface



Features

- Two Quad-Core Intel® Xeon® L5518 processors
- Six memory sockets support DDR3-1333 REG/ECC up to 48 GB maximum capacity
- Intel® 82599 10GbE controller provides two 10GBASE-KX4 ports on Fabric Interface
- Intel® Hyper-Threading Technology support for multi-threaded software applications
- Single AMC.0 Mid-size bay (optional)

Intel® Ethernet

Specifications

CPU / Chipset / Memory

CPU	Two Intel® Xeon® L5518 (4C/8T) 2.13GHz, QPI 5.86 GT/s, 8 MB L2 Cache (LGA1366)
Chipset	Intel® 5520/ICH10R chipset
Memory	Six DDR3-1333 240-pin RDIMM sockets, up to 48 GB

BIOS

Chip	AMIBIOS®8 on SPI flash memory
Features	Intel® PXE pre-boot Remote Console

I/O Interfaces

Graphics	ATI ES1000 with 64 MB VRAM, up to UXGA 1600 x 1200 resolution
AdvancedMC (optional)	One AMC.0 Mid-size bay: AMC.1 Type 4, AMC.2 E2 / Type 4 to Fabric, AMC.3 S2
Ethernet	Dual 10/100/1000BASE-T Base Interface channels Dual 10GBASE-KX4 Fabric Interface channels Dual 10/100/1000BASE-T Egress ports
Storage	On-board 2.5" SATA II HDD On-board bootable 4 GB USB NAND flash Dual AMC.3 SATA-II ports (Port2) (optional) Dual AMC.3 SAS ports (Port3) (optional)
USB	Three USB 2.0 ports on front panel
Front Panel I/O	AMC (optional), VGA, USB1/2/3, LAN1/2, COM1

PICMG Standards

AdvancedTCA	PICMG® 3.0 R2.0 ECN002
AdvancedMC	PICMG® 3.1 Ethernet Over PICMG® 3.0 R1.0 , Option 1/9 PICMG® AMC.0: AdvancedMC™ Card Specification R2.0 PICMG® AMC.1: PCI Express and Advanced Switching R1.0 PICMG® AMC.2: Gigabit Ethernet R1.0 PICMG® AMC.3: Storage Interfaces R1.0

Other Features

Operating System	Windows® Server 2008, Windows® Server 2003, Red Hat Enterprise Linux 5.3
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Mechanical and Environmental

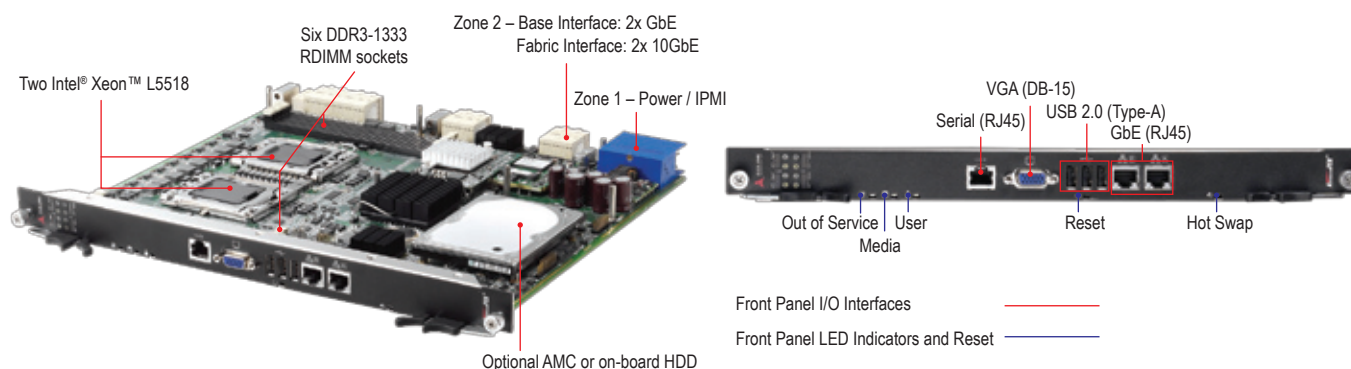
Form Factor	PICMG® 3.0 R2.0 ECN002 AdvancedTCA®
Dimensions	322.25mm x 280mm x 6HP (L x W x H)
Weight	4.1 kg / 9 lbs
Operating Temp.	0°C to 50°C
Storage Temp.	-40°C to 70°C
Humidity	5% to 95%, non-condensed
Shock	20G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation: 1.88Grms, 5-500Hz each axis Operation: 0.5Grms, 5-500Hz each axis
Power Consumption	200W
Certification	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

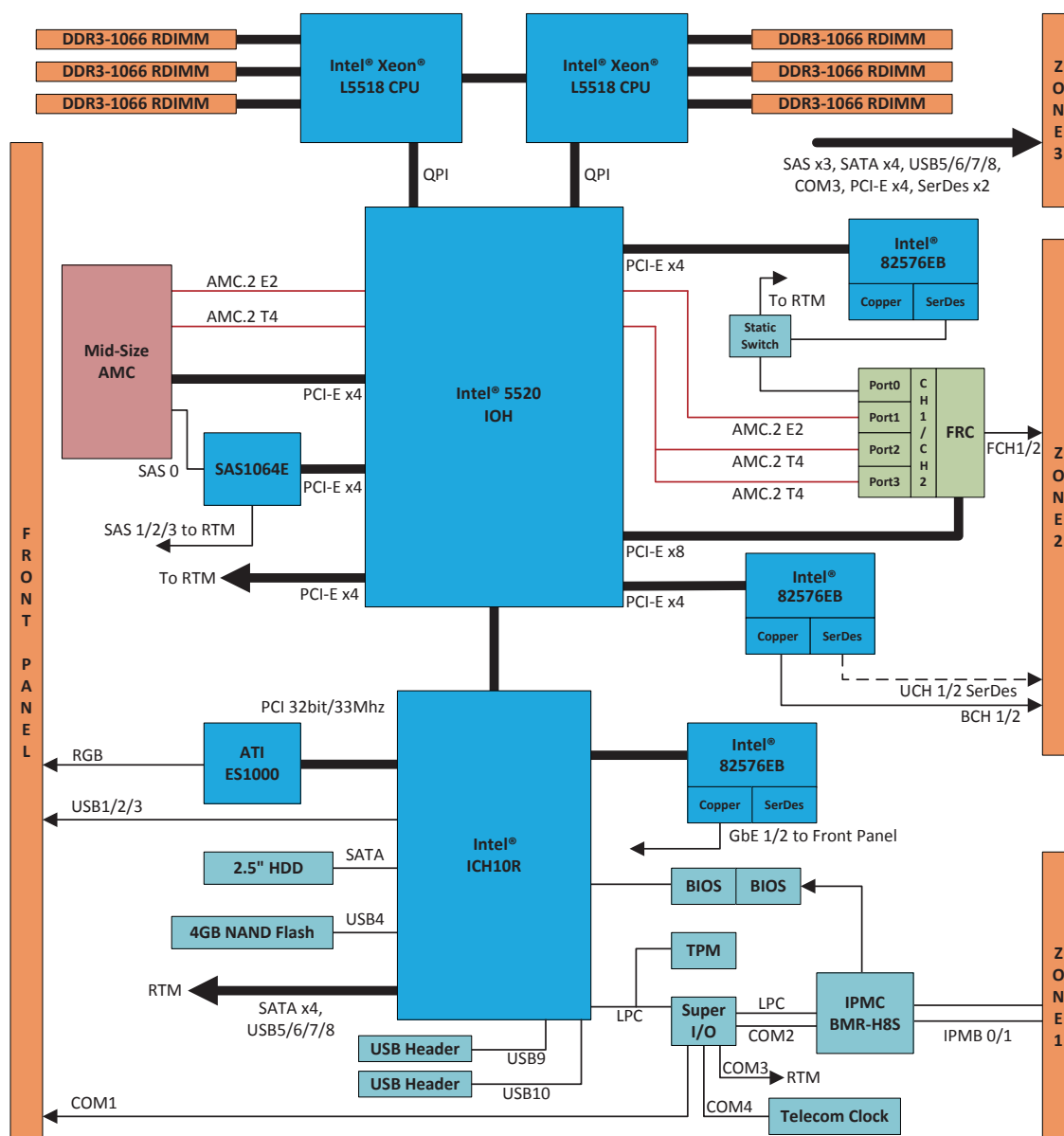
Modules

Model Number	Description/Configuration
aTCA-6100/D5518/M4G/250	Two L5518 Quad-Core 2.13GHz Xeon 10GbE processor blade, DDR3 RDIMM 2GB x2, 250GB SATA HDD
aTCA-6100/D5518/M8G/250	Two L5518 Quad-Core 2.13GHz Xeon 10GbE processor blade, DDR3 RDIMM 2GB x4, 250GB SATA HDD
aTCA-6100/D5518/M12G/250	Two L5518 Quad-Core 2.13GHz Xeon 10GbE processor blade, DDR3 RDIMM 2GB x6, 250GB SATA HDD
aTCA-R6900	Rear Transition Module for aTCA-6100 with SFP GbE x2, USB x2, SAS/SATA HDD bay x2, COM x1

Mechanical Layout



Functional Diagram



aTCA-6900

Dual Quad-Core LV Xeon® 10 Gigabit Ethernet AdvancedTCA® Processor Blade



Features

- Two Quad-Core or Dual-Core Intel® LV Xeon® processors
- Intel® EM64T 64-bit Extended Memory Technology
- Dual Channel DDR2-667 REG/ECC with 32 GB maximum capacity
- Intel® 5100/ICH9R chipset
- Dual AMC.0 Mid-size bays
- Dual 10GBASE-KX4/1000BASE-BX Fabric interface channels
- RAID 0/1/10 SATA/SAS ports
- Optional on-board 24-port Gigabit Ethernet Switch-on-Chip

Specifications

CPU / Chipset / Memory

CPU	Two Quad-Core Intel® Xeon® L5408 2.13 GHz, FSB 1066 MHz, 12 MB L2 Cache (FC-LGA6) Two Dual-Core Intel® Xeon® 5138 2.13 GHz, FSB 1066 MHz, 4MB L2 Cache (FC-LGA6)
Chipset	Intel® 5100/ICH9R Chipset
Memory	Four DDR2-667 240-pin RDIMM sockets, up to 32 GB

BIOS

Chip	AMIBIOS®8 on SPI flash memory
Features	Intel® PXE pre-boot Remote Console

I/O Interfaces

Graphics	ATI ES1000 with 64 MB VRAM, up to UXGA 1600 x 1200 resolution
AdvancedMC	AMC1: AMC.0 Mid-size, AMC.1 Type4, AMC.2 E2/Type3, AMC.3 S2 AMC2: AMC.0 Mid-size, AMC.1 Type1, AMC.2 E2/Type3, AMC.3 S2
Ethernet	Dual 10/100/1000BASE-T Base Interface channels Dual 10GBASE-KX4/1000BASE-BX Fabric Interface channels Dual 10/1001000BASE-T Egress ports Optional on-board 24-port Gigabit Ethernet Switch-on-Chip
Storage	Dual AMC.3 SATA-II ports (Port2) Dual AMC.3 SAS ports (Port3) On-board bootable 4 GB USB flash memory
USB	Three USB 2.0 ports
Front Panel I/O	AMC1/2, VGA, USB1/2/3, LAN1/2, COM1

PICMG Standard

AdvancedTCA	PICMG® 3.0 R2.0 ECN001
AdvancedMC	PICMG® 3.1 Ethernet Over PICMG 3.0 R1.0 , Option1/9 PICMG® AMC.0: Advanced Mezzanine Card Specification R2.0 PICMG® AMC.1: PCI Express and Advanced Switching R1.0 PICMG® AMC.2: Gigabit Ethernet R1.0 PICMG® AMC.3: Storage Interfaces R1.0

Other Features

Operating System	Windows® XP Professional, Windows® Server 2003, Fedora™ 8 and 9, Red Hat Enterprise Linux® 5.2
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Mechanical and Environmental

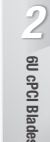
Form Factor	PICMG® 3.0 R2.0 ECN001 AdvancedTCA®
Dimensions	322.25mm x 280mm x 6HP (L x W x H)
Weight	2.8 kg / 6 lbs
Operating Temp.	0°C to 50°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensed
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation: 1.88Grms, 5-500Hz each axis Operation: 0.5Grms, 5-500Hz each axis
Power Consumption	168W (Dual Quad-Core Intel® Xeon® L5408 with 100% CPU Usage)
Certifications	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

Modules

Model Number	Description/Configuration
aTCA-6900/D5138	Two LV-5138 Dual-Core 2.13GHz Xeon® 10GbE processor blade
aTCA-6900/D5408	Two L5408 Quad-Core 2.13GHz Xeon® 10GbE processor blade
aTCA-6900S/D5138	Two LV-5138 Dual-Core 2.13GHz Xeon® 10GbE processor blade w/ switch
aTCA-6900S/D5408	Two L5408 Quad-Core 2.13GHz Xeon® 10GbE processor blade w/ switch
AMC-7000/SATA250G	Mid-size SATA-150 250GB AMC HDD module
AMC-7100/146G	Mid-size SAS 146GB AMC HDD module

1 Advanced TCA Products



Front Panel LED Indicators and Reset

4 3U cPCI Blade





Features

- 24-port Gigabit Ethernet Base Interface switch
- Freescale MPC8313E PowerQUICC® II Pro 333MHZ control plane processor
- COM Express™ subsystem expansion site
- Broadcom BCM56312 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 v2.0, zone3 Type-A

Data Plane

Switch Fabric	Broadcom BCM56312 24-port Gigabit 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	1x 10/100/1000BASE-T inter-switch link

I/O Interfaces

AdvancedMC	Two AMC.0 Mid-size bays AMC#1: AMC.1 Type 4 (from COM-E) AMC.2 E1/Type 5 (to BCM56312) AMC.3 S1 SATA (from COM-E) AMC#2: AMC.2 E1 (to BCM56312) AMC.3 S1 SATA (from COM-E)
Ethernet	Six Egress 10/100/1000BASE-T RJ-45 10Gigabit Ethernet SFP+ cage
Serial Port	One RJ-45 to COM-E, one RJ-45 to MPC8313
USB	Type-A to COM-E

Mechanical and Environmental

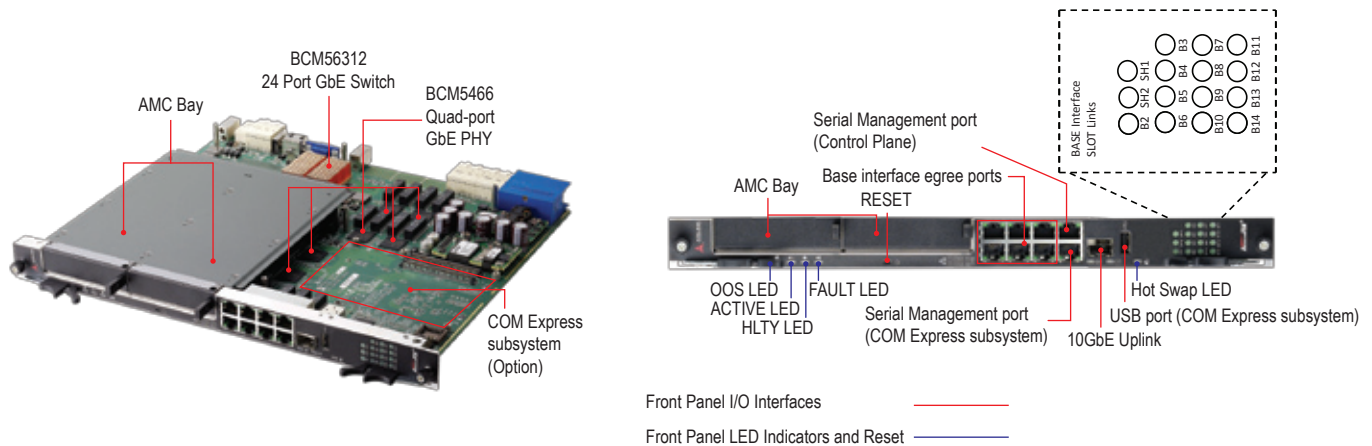
Form Factor	PICMG® 3.0 R2.0 ECN002 AdvancedTCA®
Dimensions	322.25mm x 280mm x 6HP (L x W x H)
Weight	2 kg / 4.4 lbs
Operating Temp.	0°C to 50°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensed
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation: 1.88Grms, 5-500Hz each axis Operation: 0.5Grms, 5-500Hz each axis
Power Consumption	50 W (COM-E not included)
Certifications	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

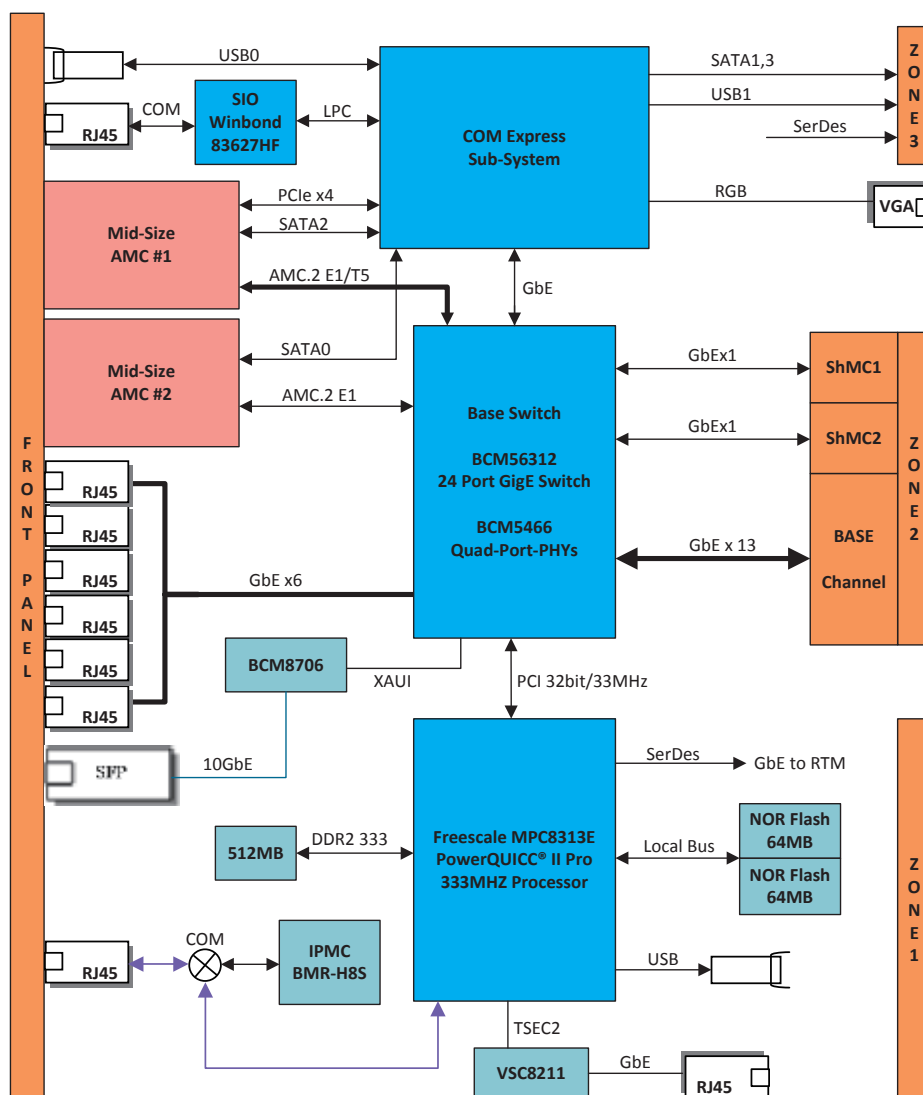
Modules

Model Number	Description/Configuration
aTCA-3150	PICMG® 3.0 24-port AdvancedTCA® Base Interface Switch

Mechanical Layout



Functional Diagram





Features

- 24-port Gigabit Ethernet Base Interface switch
- 20-port 10Gigabit Ethernet Fabric Interface switch
- Twelve Node ports, PICMG® 3.1 Option 9
- Broadcom BCM56800 + BCM56312 multilayer switch
- COM Express™ Intel® Pentium® M 1.4 GHz control plane processor

Specifications

Control Plane

CPU	COM Express™ Module, Intel® Pentium® M 1.4 GHz
Memory	DDR2-533 SODIMM up to 1 GByte
Storage	4GB soldered USB flash disk
Bus	32-bit/66 MHz PCI Bus
Management	10/100/1000BASE-T (RJ45) RS-232 serial console (RJ45) USB 2.0 Type A port

Data Plane

Switch Fabric	Broadcom® BCM56800 20-port 10GbE multilayer switch Broadcom® BCM56312 24-port GbE multilayer switch
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Base Interface

Channels	Twelve 10/100/1000BASE-T Base Interface channels, for 14-slot systems
Egress	Two 10/100/1000BASE-T and one 10 GbE SFP+ egress ports
ShMC Port	Two 10/100BASE TX ShMC ports compliant to PICMG® 3.0 R2.0 ECN001
Inter-Switch	One 10/100/1000BASE-T inter-switch link

Fabric Interface

Channels	Thirteen 10GBASE-KX4 Fabric Interface channels, for 14-slot systems
Egress	Eight 10GbE front panel egress SFP+ ports (1 port optionally switched from backplane)

Mechanical and Environmental

Form Factor	PICMG® 3.0 R 2.0 ECN001 AdvancedTCA®
Dimensions	322.25mm x 280mm x 6HP (L x W x H)
Weight	2 kg / 4.4 lbs
Operating Temp.	0°C to 55°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensed
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	86 W
Certifications	FCC, CE, UL/LVD, C-Tick, VCCI, NEBS Level 3 (design)

Ordering Information

Modules

Model Number	Description/Configuration
aTCA-3400	20-Port 10 GbE AdvancedTCA® Fabric Switch Blade

1

AdvancedTCA Products



3 6U cPCI Platforms



Features

- 19" Rackmount, 12U height, 383.1 mm depth
- 14-slot dual dual-star topology Fabric Interface
- 14-slot standard Rear Transition Module
- Dual-bussed IPMB
- Hot-swappable IPMC controlled fan trays
- Two shelf management controller slots
- Dual -48 V DC power entry modules



Specifications

Mechanical Specification	19" Rackmount, 12U height, 383.1 mm depth Fits inside a 600 mm deep cabinet (include cable bend area) Supports 14-slot standard AdvancedTCA® blades and RTMs
Shelf Manager	Dual-hot-swappable Pigeon Point Systems ShMM-500 based ShMCs (aCMM-2100) Active/Standby mode for high availability applications Supports multiple management interfaces: - Remote Management Control Protocol (RMCP) - Remote Procedure Call (RPC) - Simple Network Management Protocol (SNMP) - Command Line Interface (CLI) - Dual-10/100BASE-T Fast Ethernet ports and one serial console
Cooling System	Hot-swappable IPMC controlled fan trays Easily removable replaceable air filter
Backplane	Dual-star topology Base Interface Dual dual-star topology Fabric Interface Update channels for active/standby synchronization Dual-bussed IPMB
Power Input	-40 V DC to -72 V DC Nominal -48 V DC Dual redundant power entry modules Each carries up to 3000 W (A + B)
Weight	33 kg

Mechanical Layout



Operating Temp.	0°C to 55°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensed
Dimensions	449.5 x 531.9 x 383.1 mm (W x H x D)
Compliance	AdvancedTCA® Specification PICMG® 3.0 R2.0 ECN001
Target Certifications	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

Modules

Model Number	Description/Configuration
aTCA-8214	12U 14-slot Rackmount AdvancedTCA® Shelf, Dual Dual-Star Fabric Topology, Dual-bussed IPMI Bus
aTCA-8214A	12U 14-slot Rackmount AdvancedTCA® Shelf with single ShMC, Dual Dual-Star Fabric Topology, Dual-bussed IPMI Bus
aTCA-8214AA	12U 14-slot Rackmount AdvancedTCA® Shelf with dual ShMCs, Dual Dual-Star Fabric Topology, Dual-bussed IPMI Bus

Shelf Manager (ShMC) – (optional)

aCMM-2100	AdvancedTCA® Shelf Management Controller (ShMC) for aTCA-8214 (based on PPS ShMM-500)
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Power Supply (optional)

aPRS-1120	19" Rackmount Power Rack with one 1200 W Power Supply Unit
aPS-91120/48	1200 W 48V Single Output Power Supply Unit



Front View

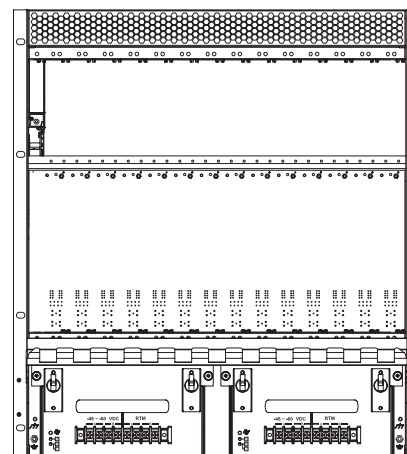
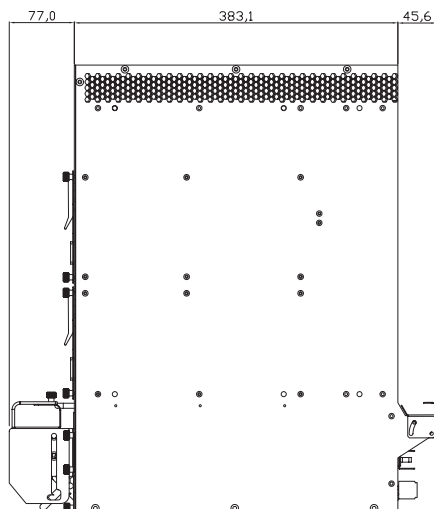
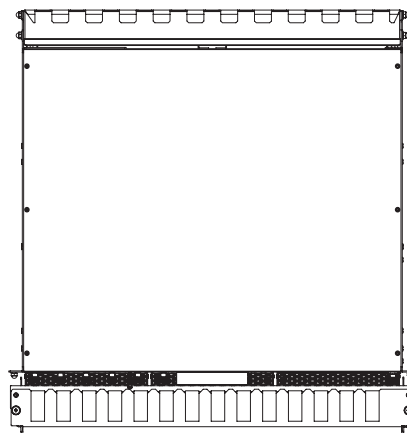
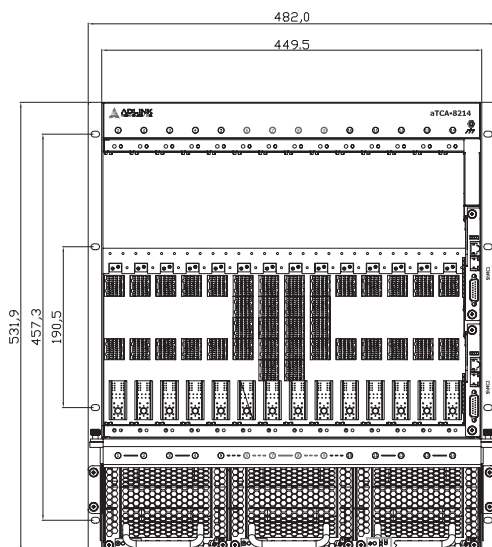


Rear View

Power Entry Module (PEM)

Dimensions

Units: mm





Features

- 19" Rackmount, 5U height, 15.3" depth
- 5-slot full mesh topology Fabric Interface
- 5 standard Rear Transition Module slots
- Dual-bussed IPMB
- Dual-hot-swappable I²C controlled fan trays
- Two shelf management controller slots
- Dual -48 V DC Power Entry Modules

Specifications

Mechanical Specification	19" Rackmount, 5U height, 15.3" depth Fits inside a 600 mm deep cabinet (include cable bend area) Supports 5-slots standard AdvancedTCA® blades and RTMs Dual-hot-swappable Pigeon Point Systems ShMM-500 based ShMCs (aCMM-2000) Active/Standby mode for high availability applications Supports multiple management interfaces: - Remote Management Control Protocol (RMCP) - Remote Procedure Call (RPC) - Simple Network Management Protocol (SNMP) - Command Line Interface (CLI) - Web-based interface - Dual-10/100BASE-T Fast Ethernet ports and one serial console for access
Shelf Manager	
Cooling System	Dual-hot-swappable I ² C controlled fan trays Right-to-left transverse air flow, push-pull design Easily removable replaceable air filter
Backplane	Dual-star topology Base Interface Full mesh topology Fabric Interface Update channels for active/standby synchronization, slot 1-2, slot 3-4 Dual-bussed IPMB
Power Input	-40 V DC to -72 V DC Nominal -48 V DC Dual redundant power entry modules Each carries up to 1200 W (A or B)
Weight	8 kg/17.6 lbs

Operating Temp.	0°C to 55°C (dependent on system configuration)
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensed
Dimensions	440 x 221.8 x 387.4 mm (W x H x D)
Compliance	AdvancedTCA® Specification PICMG® 3.0 R2.0 ECN001
Target Certifications	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

Modules

Model Number	Description/Configuration
aTCA-8505	5U 5-slot Rackmount AdvancedTCA® shelf
aTCA-8505A	5U 5-slot Rackmount AdvancedTCA® shelf with single ShMC
aTCA-8505AA	5U 5-slot Rackmount AdvancedTCA® system with dual ShMCs

Shelf Manager (ShMC) – (optional)

aCMM-2000	AdvancedTCA® Shelf Management Controller (ShMC) for aTCA-8505
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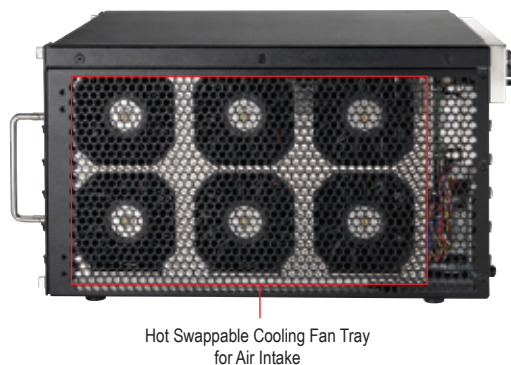
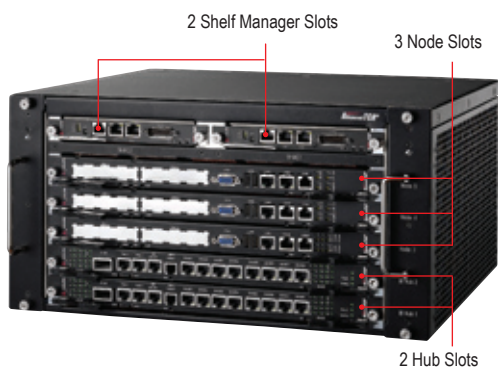
Power Supply (optional)

aPRS-1120	19" Rackmount Power Rack with one 1200 W Power Supply Unit
aPS-91120/48	1200 W 48V Single Output Power Supply Unit

Mechanical Layout

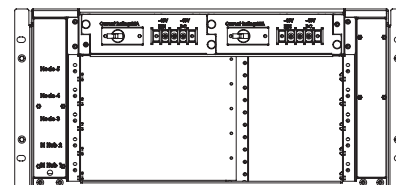
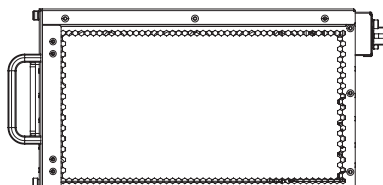
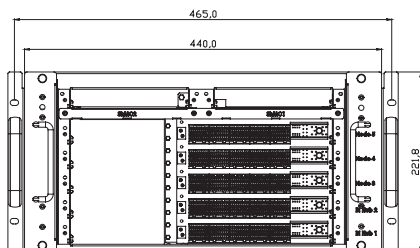
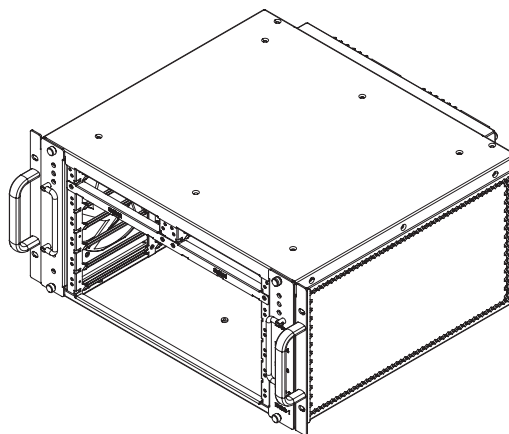
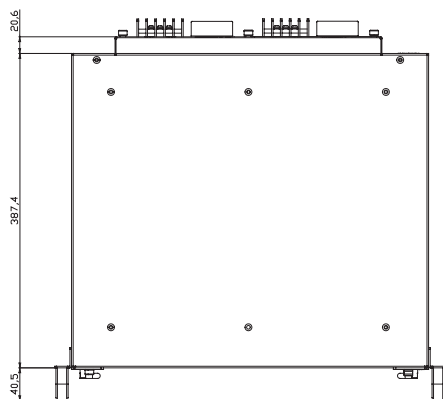


Rear View



Dimensions

Units: mm





Features

- 19" rackmount with 2U height and 15.3" depth
- Built-in Layer 2 Base Interface switch
- Dedicated Shelf Management Hub slot
- Dual-bussed IPMB
- No rear transition module (RTM) support
- AC & DC versions

Specifications

Mechanical Specification	19" rackmount, 2U height, 15.3" depth Up to two standard AdvancedTCA® blades Dedicated shelf management hub
Shelf Management	aCMM-2200 Shelf Management Hub Supports multiple management interfaces: - Command Line Interface (CLI) - Two 10/100/1000BASE-T Gigabit Ethernet ports and one serial console for management access - Built-in Layer 2 GbE switch for Base Interface connectivity
Cooling System	Single hot-swappable IPMC controlled fan tray module Right-to-left transverse airflow (push cooling)
Backplane	Dual-star topology Base Interface Dual-star topology Fabric Interface Dual-bussed IPMB
Power Input	DC version: -40 V DC to -72 V DC Nominal -48 V DC Single power entry module Carries up to 650 W (A or B) AC version: Built-in 650 W AC to -48 V DC power supply unit AC input: 85 - 264 V AC, 47 - 63 Hz

Weight	11.5kg (including power supply)
Temperature	Operating: 0°C to 50°C Storage: -20°C to 80°C
Humidity	5% to 95%, non-condensing
Dimensions	432 x 87 x 386.4 mm (W x H x D)
Compliance	AdvancedTCA® Specification PICMG® 3.0 R2.0
Certifications	CE, FCC, designed for NEBS Level 3

Ordering Information

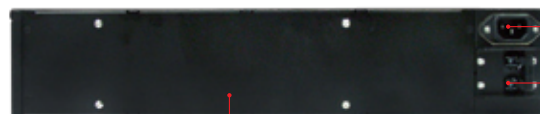
Model Number	Description/Configuration
aTCA-8202/AC	2U 2-slot Rackmount AdvancedTCA® shelf with single aCMM-2200 Shelf Management Hub, built-in 650 W AC to -48 V DC power supply unit
aTCA-8202/DC/NRTM	2U 2-slot Rackmount AdvancedTCA® shelf with single aCMM-2200 Shelf Management Hub (DC power)

Mechanical Layout



Front View

AC version:



AC inlet with filter

Circuit breaker

Built-in 650W AC-to-DC48V PSU

DC version:



Rear View



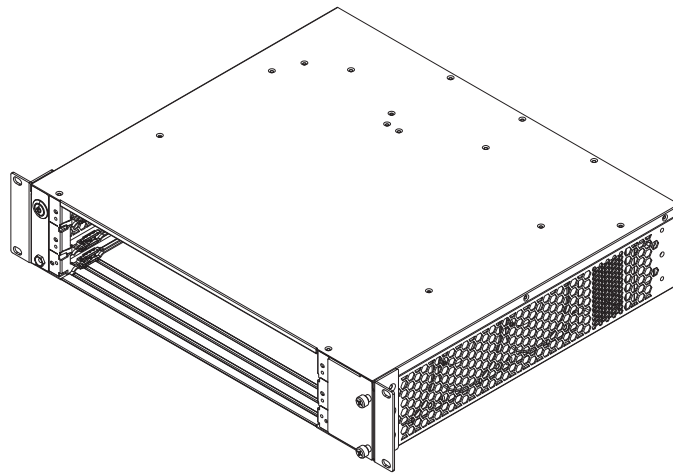
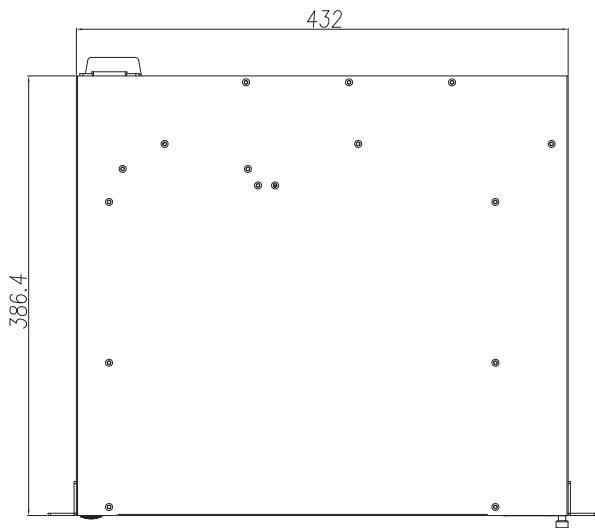
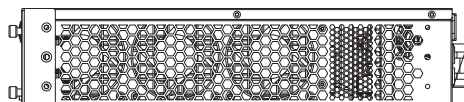
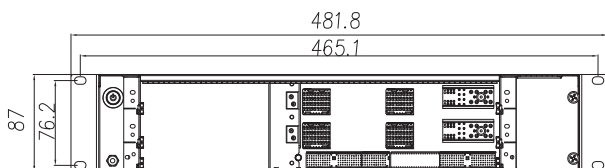
Shelf Management Hub with Layer 2 GbE switch
for Base Interface connectivity



Front access, hot-swappable fan tray

Dimensions

Units: mm





Features

- Intel® Core™2 Duo processor
- Server class Intel® 3100 chipset
- AMC.0 Single-width, Mid-size
- AMC.1 Type 1/4, AMC.2 E2 and AMC.3 S2 (SATA)
- Single DDR2-400 SO-RDIMM socket up to 4 GB capacity
- Onboard 4 GB flash and graphics controller

Specifications

CPU / Chipset / RAM

CPU & FSB	Intel® Core™2 Duo L7400 1.5 GHz, FSB 667 MHz, 4MB L2 Cache (uFBGA)
	Intel® Celeron® M ULV 423 1.06 GHz, FSB 533 MHz, 1MB L2 Cache (uFC-BGA)
Chipset	Intel® 3100 single integrated chipset containing MCH and ICH
RAM	Single DDR2-400 200-pin SO-RDIMM Socket, up to 4 GB

BIOS

Chip	Award® BIOS with 4 Mb flash memory
Features	Intel® PXE pre-boot Remote Console

I/O Interfaces

Graphics	ATI ES1000 with 64 MB DDR, up to UXGA 1600 x 1200 Resolution
USB	USB 2.0, Type mini-B
AMC.x	AMC.0 Single-width, Mid-size AMC.1 PCI Express® Type 1/4 (Type 4: Default, Type 1: Optional) AMC.2 Gigabit Ethernet Type E2 AMC.3 SATA Storage Type S2
Storage	Onboard 4 GB USB NAND Flash
RTM	2x USB 2.0 ports 4x SATA ports
Front Panel I/O	VGA, USB, COM

PICMG Standard

AdvancedMC	AMC.0 Advanced Mezzanine Card R2.0 AMC.1 PCI Express® R1.0 AMC.2 Gigabit Ethernet R1.0 AMC.3 Storage R1.0
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Other features

Operating System	Windows® XP Professional, Windows® Server 2003, Windows® XP Embedded, Red Hat Enterprise Linux release 5.1, Monta Vista Linux Carrier Grade Edition 4.0
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Mechanical and Environmental

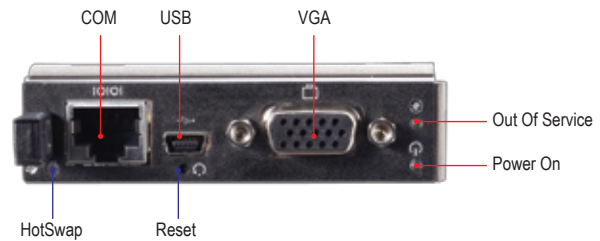
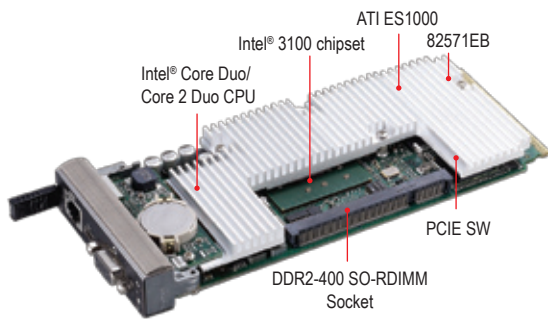
Form Factor	AMC.0 Advanced Mezzanine Card R2.0
Dimensions	181.5 mm x 73.5 mm x 18.96 mm (Mid-size) 181.5 mm x 73.5 mm x 28.95 mm (Full-size)
Weight	450g/1lb
Operating Temp.	-5°C to 55°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensed
Shock	15 G peak-to-peak, 11 ms duration, non-operation
Vibration	Non-operation: 1.88 Grms, 5-500 Hz each axis Operation: 0.5 Grms, 5-500 Hz each axis
Power Consumption	AMC-1000/L7400/M2G, 36 W
Certificate or Test	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

Modules

Model Number	Description/Configuration
AMC-1000/CM423/M1G	Mid-Size AdvancedMC™ Processor Module with Intel® Celeron® M ULV 423 1.06 GHz, 1 GB SORDIMM
AMC-1000/L7400/M1G	Mid-Size AdvancedMC™ Processor Module with Intel® Core™2 Duo L7400 1.5 GHz, 1 GB SORDIMM

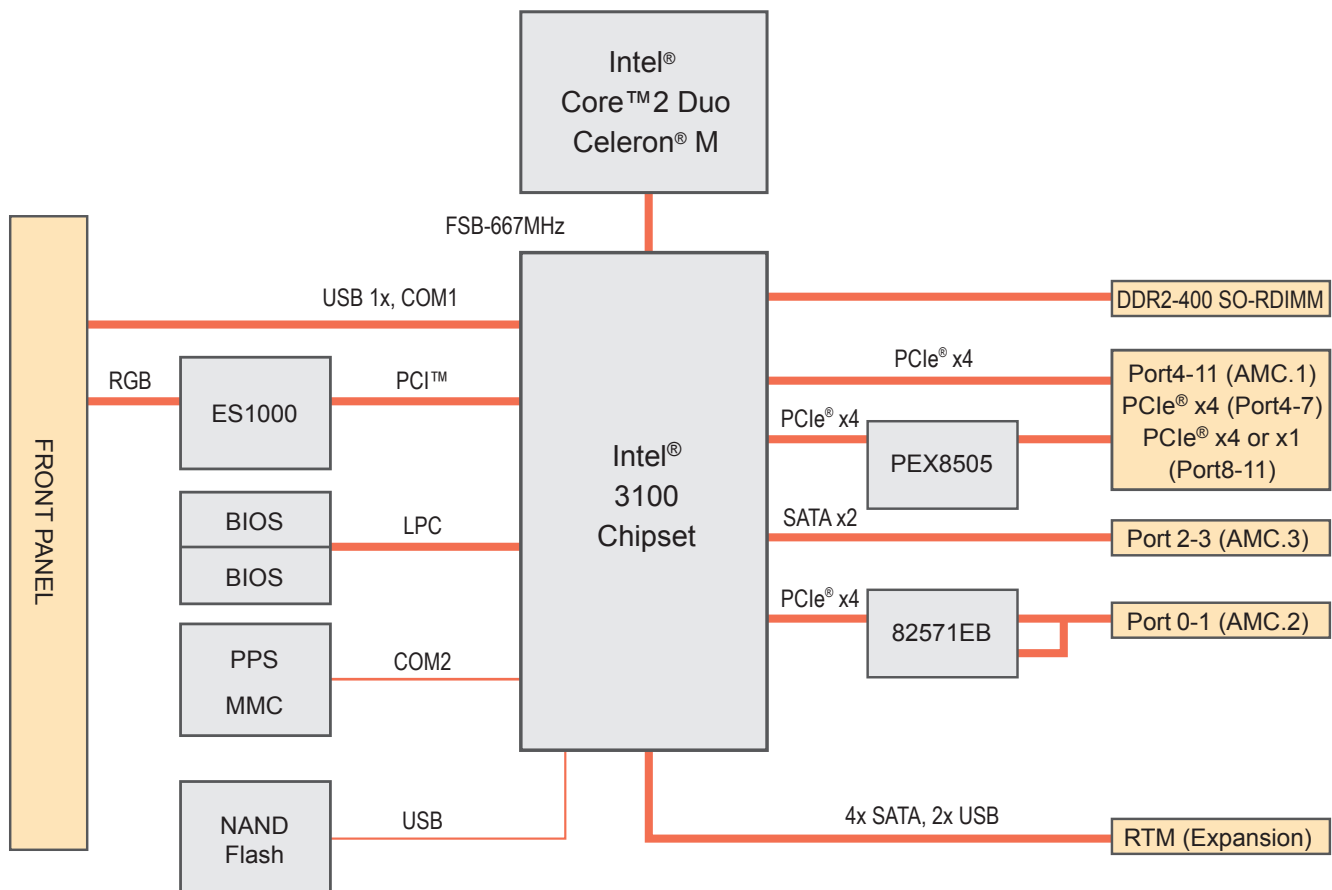
Mechanical Layout



Front Panel I/O Interfaces

Front Panel LED Indicators and Reset

Functional Diagram



AMC-7000

AMC SATA Disk Drive Module



Features

- AMC.0 Rev.2 front panel compliant
- AMC.3 Rev.1, storage signaling option
- One integrated 2.5" 250GB SATA disk
- S.M.A.R.T. support
- Integrated IPMI
- AMC.0 Single-width, Mid-size

Specifications

Technical Specification

Capacity	250GB
Seek Time (track to track)	<2.0 msec (read), <2.5 msec (write)
Average	12.0 / 14.0 ms (read/write)
Maximum	<20ms (typical)
Rotational speed	5400 RPM
Buffer size	8MB
Front panel LEDs	Power, Hot Swap

Environmental Conditions

Operating Temp.	5°C to +55°C
Storage Temp.	-40°C to +70°C
Relative Humidity	5%-90% (operating)
Power	<2.0W (typical)

Ordering Information

Modules

Model Number	Description/Configuration
AMC-7000/SATA250G	Mid-size, Single-width AMC.3 S2 with 250GB SATA HDD

AMC-7100

AMC SAS Disk Drive Module



Features

- AMC.0 Rev.2 front panel compliant
- AMC.3 Rev.1, storage signaling option
- One integrated 2.5" SAS 146GB disk
- S.M.A.R.T. support
- Integrated IPMI
- AMC.0 Single-width, Mid-size

Specifications

Technical Specification

Capacity	146GB
Seek Time (track to track)	0.2/0.4 ms (read/write)
Average	4.0 / 4.5 ms (read/write)
Maximum	8.0/9.0 ms (read/write)
Rotational speed	10,025 RPM
Buffer size	8MB
Front panel LEDs	Hot Swap, OOS (Out of service), Activity

Environmental Conditions

Operating Temp.	5°C to +55°C
Storage Temp.	-40°C to +70°C
Relative Humidity	5%-90% (operating)
Power	<7.8W (typical)

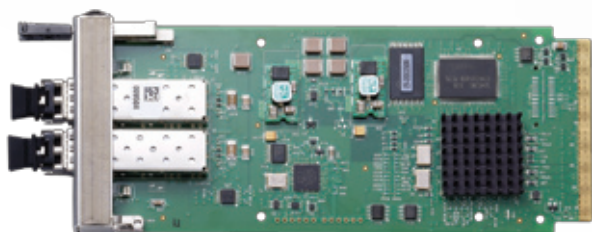
Ordering Information

Modules

Model Number	Description/Configuration
AMC-7100	Mid-size, Single-width AMC.3 module with 146GB SAS HDD

AMC-8100

AMC 4G Fibre Channel Module



Features

- Two independent 4Gbit Fibre Channels
- SFP, supports multi-mode optics and copper options
- 8 Lane PCI Express Backplane Connection
- Auto-negotiation for legacy connect (1 or 2 Gbit)
- AMC.0 Single-width, Mid-size

Specifications

Technical Specification

FC Processor	LSI 949E
FC Transfer	1, 2 or 4 Gb/s per port
Bus	64-bit/66 MHz host PCI bus, 133 MHz PCI-X bus, and PCI Express x4/x8
AMC Power	< 8.7W watts
MTBF	> 200,000 Hours
Front panel LEDs	Hot Swap, OOS, Heartbeat, Fibre Port Activity

Environmental Conditions

Operating Temp.	0°C to +60°C
Storage Temp.	-40°C to +85°C
Relative Humidity	5%-90% (non-condensing)
Power	<8.7W (typical)

Ordering Information

Modules

Model Number	Description/Configuration
AMC-8100	4G Fibre Channel AMC Module

1
Advanced
Products

2
6U cPCI Blades

3
6U cPCI
Platforms

4
3U cPCI Blades

5
3U cPCI
Platforms

6
Industrial SBCs
& MBs

7
Industrial
Chassis

8
IPC
Accessories

9
Computer-
On-Modules

10
Approved by ADLINK
Extreme Rugged