

### KEY FEATURES

- Supports Intel Core i-7, or other Intel® family processor
- DDR3 memory
- Optional CompactFlash
- Two AMC slots per AMC.1 and AMC.3 specification
- One USB fiber port
- Five GbE ports: Two front panel fiber or copper, front copper port and two GbE ports to Zone 2
- Front panel RS-232 ports
- VGA connector (COM Express dependent)
- Two front panel accessible USB ports
- IPMI Version 2.0 compliant
- RoHS compliant

The ATC120 is an AdvancedTCA COM Express™ (Computer On Module) carrier. VadaTech provides ATCA COM Express carriers designed around the customer's I/O requirements. Since CPU technology is a dynamic and rapidly changing area, this design allows customers to easily upgrade the CPU while keeping their I/O structure intact. This helps to safeguard the customer's investment. The COM Express module is built around the Intel® family of processors and is available from multiple vendors.

There are two AMC sites available for I/O expandability. The AMC slots support the AMC.1 and AMC.3 specifications.

The ATC120 can be configured as a Shelf Manager or a Node board. As a Shelf Manager, the ATC120 eliminates the need for other shelf managers which reduces the total system cost. The shelf manager implements IPMI management, FRU management, and shelf environment management for power, thermal, E-keying, etc.

VadaTech can modify this product to meet special customer requirements without NRE (minimum order placement is required).

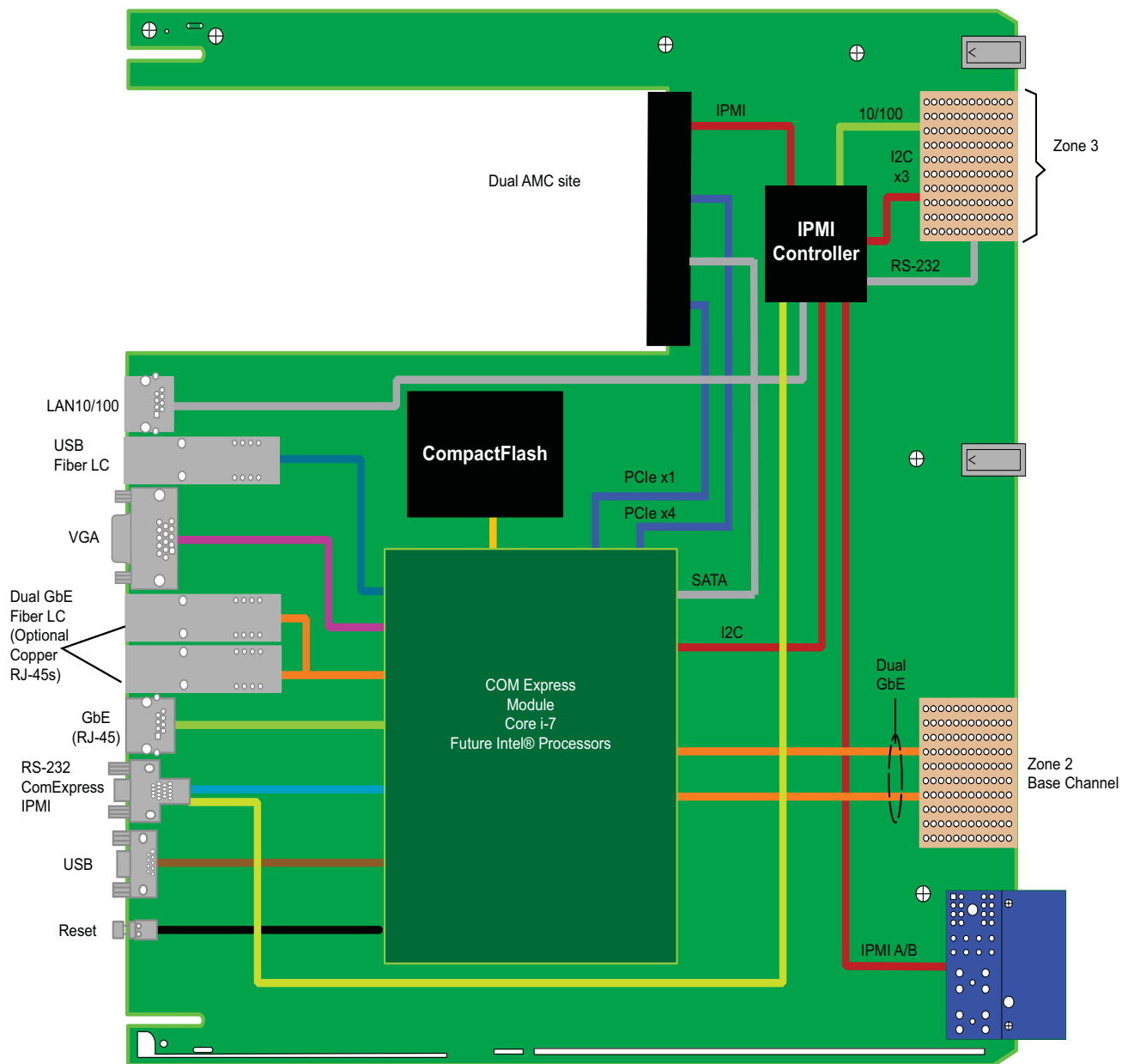
**AdvancedTCA®**

# ATCA COM Express™ Carrier

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 12.687in. (322.25 mm)
		Depth: 11.024 in. (280 mm)
Type	ATCA Processor	Intel® family of processors
Standard		
COM Express™	Type	COM Express type one to five
AMC	Type	Two slot supporting AMC.1 and AMC.3
Memory	Type	DDR2 supporting ECC***
Compact Flash	Type	Type I or type II CompactFlash
PCIe	Lanes	PCIe x1 and x4 to AMC slots
PICMG	ATCA	PICMG 3.0 R2.0
Module Management	IPMI	IPMI Version 2.0
Configuration		
Power	ATC120	50W with the Core 2 Duo Processor and 2Gbytes of memory
		Up to 75 watts is available for the AMCs
Rear I/O	Zone Three**	IPMI management 10/100 Ethernet (utilizing VadaTech VT001), three I <sup>2</sup> C and debug port
	Zone Two	Two 10/100/1000 GbE to Base channel
Front Panel	Interface Connectors	Two RS-232
		Dual GbE Fiber LC or Copper
		One GbE RJ-45
		One 15-pin Dsub video connector
		Two USB 2.0
	Button	Reset Switch
LEDs	IPMI Management Control, Link/Activity	
Mechanical	Hot Swap Ejector Handle	
Environmental	Temperature	Operating Temperature: 0° to 60° C (Air flow requirement is to be greater than 200 LFM)
		Storage Temperature: -40° to +90° C
	Vibration	1G, 5-500Hz each axis
	Shock	30Gs each axis
Relative Humidity	5 to 95 percent, non-condensing	
Software Support	Operating Systems	Linux, Windows, Solaris and VxWorks
Other		
MTBF	MIL Hand book 217-F >155,000 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	
Compliance	RoHS and NEBS	
Warranty	Two (2) years	
Trademarks and Logos	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™, AdvancedMC™ logo and the COM Express™ are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

# ATCA COM Express™ Carrier



**FIGURE 1.** ATC120 Functional Block Diagram

## ORDERING OPTIONS

### ATC120 - ABC - DE0 - 00J

#### A = COM Express™ Modules

- 0 = None
- 1 = Reserved
- 2 = Reserved
- 3 = Reserved
- 4 = Reserved
- 5 = Reserved
- 6 = Core i-7 2Ghz
- 7 = Reserve (future Intel® processor)
- 8 = Reserve (future Intel® processor)
- 9 = Reserve (future Intel® processor)
- 10 = Customer Specified‡

#### B = System DDR3 SDRAM Memory\*\*\*

- 0 = No system memory
- 1 = Reserved
- 2 = Reserved
- 3 = Reserved
- 4 = 2GByte
- 5 = 4GByte

#### C = CompactFlash

- 0 = No CompactFlash
- 1 = 1 Gbyte CompactFlash
- 2 = 2 Gbyte CompactFlash
- 3 = 4 Gbyte CompactFlash
- 4 = 8 Gbyte CompactFlash

#### D = Configuration\*

- 1 = Node board
- 2 = Shelf Manager

#### E = Front Panel GbE Interface

- 1 = Fiber LC/SX transceivers (850 nm)
- 2 = Fiber LC/LX transceivers (1310 nm)
- 3 = Copper interface
- 4 = Reserved

#### J = Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic

### NOTES

\*The ATC120 can be purchased as either a Shelf Manager or a Node board (contact your Sales representative for information)

\*\*Vadatech can design custom Rear Transition Modules (RTMs) for this product or any ATCA carrier board with a minimum order and no NRE

\*\*\*ECC memory available (contact Sales for information)

‡ Customers can specify VIA/Celeron or other CPU (contact Sales for information)

