

# CT-31 Series

## Rugged Conduction Cooled 3U CompactPCI® Intel® Atom™ Processor Blade



### Features

- Supports Intel® Atom™ N450, D510
- Up to 2GB DDR2-800 soldered memory
- -40°C to +85°C operating, conduction cooled with conformal coating
- Onboard CompactFlash socket
- 2x GbE, VGA, USB, 2x COM, 2x SATA to rear

**CompactPCI®**



### Specifications

#### Processor & System

CPU	<p>µFC-BGA Intel® Atom™ Processor N450 1.66GHz, 512KB L2 cache, TDP 5.5W</p> <p>µFC-BGA dual-core Intel® Atom™ Processor D510 1.66GHz, 1MB L2 cache, TDP 13W</p>
Chipset	Intel® ICH8M I/O Controller Hub
Memory	Single channel DDR2-667/800 SDRAM soldered onboard, up to 2GB capacity
BIOS	AMIBIOS®8, 16Mbit SPI flash memory
CompactPCI Bus	PCI 32-bit/33 MHz, 3.3V or 5V universal V (I/O) Host only
PICMG Standards	<p>PICMG® 2.0 CompactPCI® R3.0</p> <p>PICMG® 2.1 Hot Swap R2.0</p>

#### Connectivity

Ethernet	<p>Two PCI-Express Intel® 82574L Gigabit Ethernet controllers</p> <p>Two 10/100/1000BASE-T ports to J2</p>
Graphics	<p>Integrated in Intel® Atom™ processor</p> <p>Analog monitor support to rear up to QXGA 2048x1536 pixels @60Hz, 32-bit</p>
USB	One to J2
Serial Port	Two full duplex serial ports to J2
PCI-Express	One PCI-Express lane to J2
GPIO	Four GPIO pins to J2

#### Storage

SBC	CompactFlash socket
RTM	Two 7-pin SATA signal connectors

#### Operating System

OS	<p>Microsoft Windows® XP Professional, x64 Edition</p> <p>Microsoft Windows® 7</p> <p>Fedora™ 12</p> <p>Red Hat Enterprise Linux 5.3</p> <p>Wind River VxWorks 6.8, 6.7, 5.5.1</p> <p>(Please contact ADLINK for other OS support)</p>
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#### Miscellaneous

LED	Power (green), WDT (red)
Battery	Rechargeable Gold Cap for RTC CMOS RAM
Watchdog Timer	System Reset and NMI, with programmable interval, 1-65535 seconds or minutes
Hardware Monitor	Monitors CPU temperature, system temperature and DC voltages

#### Mechanical & Environmental

Form Factor	3U 4HP CompactPCI®	
	100mm x 160mm (LxW)	
Operating Temperature	-40°C to +85°C	
Storage Temperature	-40°C to +85°C	
Rel. Humidity	95% non-condensing	
Shock	40G half sine, 11ms duration in operating	
Vibration	22~2000Hz, 5g (sine), operating	
Power Consumption	Atom™ N450 1.60GHz, 512MB soldered DDR2-667 under Windows® XP with 100% CPU loading	
	Current (A)	Power (W)
	5V	3.04 15.2
	Total	15.2
	Atom™ D510 1.66GHz, 512MB soldered DDR2-667 under Windows® XP with 100% CPU loading	
	Current (A)	Power (W)
	5V	3.87 19.35
	Total	19.35
Weight	Net weight 466g with heatsink	

#### Safety & EMI

Certifications	CE/ FCC
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### Ordering Information

Model Number	Description/Configuration
Processor Blades	
CT-31/D51/M1G	Conduction Cooled 3U CompactPCI® blade with Intel® Atom™ processor D510 and 1GB DDR2-667/800 soldered memory
Rear Transition Modules	
cPCI-R3610	8 HP Rear I/O module for cPCI-3610 with GbE x2, COM x2, USB x1, SATA x2, VGA, 50mm depth
cPCI-R3610T	8HP Rear I/O module for cPCI-3610 with GbE x2, COM x2, USB x1, SATA x2, VGA, 80mm depth

Contact your ADLINK representative for different CPU, memory combinations.