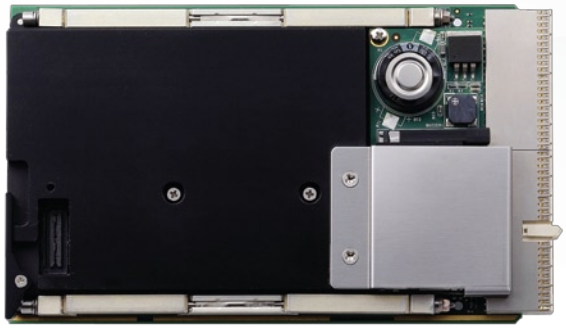
CT-31 Series

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® CONDUCTION COOLED

Specifications

Processor & System

CPU	µFC-BGA Intel® Atom™ Processor N450 1.66GHz, 512KB L2 cache, TDP 5.5W
	µFC-BGA dual-core Intel® Atom™ Processor D510 1.66GHz, 1MB L2 cache, TDP 13W
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	PICMG® 2.0 CompactPCI® R3.0
	PICMG® 2.1 Hot Swap R2.0

Connectivity

Ethernet	Two PCI-Express Intel® 82574L Gigabit Ethernet controllers
	Two 10/100/1000BASE-T ports to J2
Graphics	Integrated in Intel® Atom™ processor
	Analog monitor support to rear up to QXGA 2048x1536 pixels @60Hz, 32-bit
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	Microsoft Windows® XP Professional, x64 Edition
	Microsoft Windows® 7
	Fedora™ 12
	Red Hat Enterprise Linux 5.3
	Wind River VxWorks 6.8, 6.7, 5.5.1
	(Please contact ADLINK for other OS support)

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

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.