cPCI-3610 Series

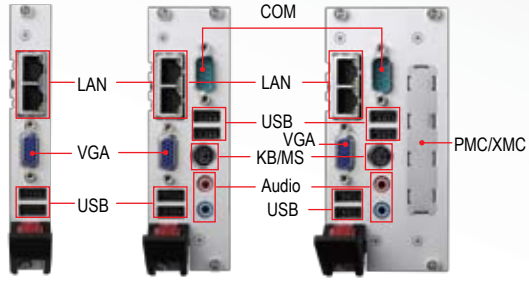
3U CompactPCI® Dual-Core Intel® Atom™ Entry Level Processor Blade



EXTENDED TEMPERATURE

Features

- Supports dual-core Intel® Atom™ D510
- Up to 2GB DDR2-800 soldered memory
- Fanless operation with Atom™ N450
- Optional PMC/XMC site
- Up to QXGA 2048x1536 CRT display



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
	µFC-BGA Intel® Atom™ Processor D410 1.66GHz, 512K L2 cache, TDP 11W
Chipset	Intel® ICH8M I/O Controller Hub
RAM	Single channel DDR2-667/800 SDRAM soldered onboard, up to 2GB capacity
BIOS	AMIBIOS®8, 16Mbit SPI flash memory
CompactPCI Bus	PCI 32bit/ 33MHz, 3.3V or 5V universal V (I/O)
	Host only
Standard	PICMG® 2.0 CompactPCI® R3.0
	PICMG® 2.1 Hot Swap R2.0

Connectivity

PMC/XMC	One PCI 32bit/66MHz PMC site or PCI-Express x1 XMC site
Ethernet	Two PCI-Express Intel® 82574L Gigabit Ethernet controllers
	Two 10/100/1000BASE-T front panel ports, switchable to rear
Graphics	Integrated in Intel® Atom™ processor
	DB-15 VGA port on front panel, switchable to rear
	Analog monitor support up to QXGA 2048x1536 pixels @60Hz, 32-bit
USB	Up to four USB 2.0 front panel ports
	One USB port on RTM
PS/2	Front panel PS/2 KB/MS port*
Serial Port	Three RS-232/422/485/485+ selectable serial ports
	One DB-9 port on front panel*, two on rear
Audio	Line-in and line-out ports on front panel*

Storage

SBC	One Serial ATA direct connector for 2.5" onboard HDD*
	CompactFlash socket
RTM	Two 7-pin SATA signal connectors

*Note: 8HP & 12HP versions only.

Operating System

OS	Microsoft Windows® XP Professional, x64 Edition
	Microsoft Windows® 7
	Fedora™ 12
	RedHat Enterprise Linux 5.3
	Wind River VxWorks 6.7, 5.5.1
	(Please contact ADLINK for other OS support)

Miscellaneous

LED	Power (green), WDT (red)
Battery	Coin cell lithium battery onboard 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/8HP/12HP CompactPCI®
	100mm x 160mm (LxW)
Operating Temperature	0°C to +60°C
	-20°C to +70°C extended temperature (optional)
	-40°C to +85°C extreme extended temperature (optional)
Storage Temperature	-40°C to +85°C
RH Humidity	95% non-condensing
Shock	15G peak-to-peak, 11ms duration, non-operating
Vibration	1.88 Grms random vibration, 5-500Hz, each axis, 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

Safety & EMI

Certification	CE/ FCC

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I/O Table

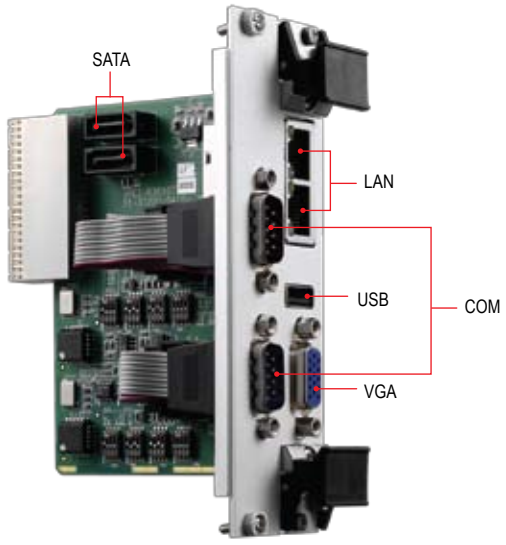
		GbE	USB 2.0	COM	VGA	PS/2 KB/MS	SATA	CF	Line-in	Line-out	PMC/XMC
SBC											
cPCI-3610	**Face-plate**	2	2		1						
	On-board							1			
cPCI-3610D	**Face-plate**	2	4	1	1	1			1	1	
	On-board						1	1			
cPCI-3610P	**Face-plate**	2	4	1	1	1			1	1	
	On-board						1	1			1
RTM											
cPCI-R3610(T)	**Face-plate**	2(1)	1	2	1(1)						
	On-board						2				

(1) Switchable to front or rear by software selection.

Ordering Information

Model Number	Description/Configuration
Processor Blade	
cPCI-3610D/N45/M1G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ processor N450 and 1GB DDR2-667 soldered memory
cPCI-3610D/D51/M1G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ processor D510 and 1GB DDR2-667/800 soldered memory
cPCI-3610D/D41/M1G	2-slot (8HP) 3U CompactPCI® blade with Intel® Atom™ processor D410 and 1GB DDR2-667/800 soldered memory
cPCI-3610/N45/M1G	1-slot (4HP) 3U CompactPCI® blade with Intel® Atom™ processor N450 and 1GB DDR2-667 soldered memory
cPCI-3610P/N45/M1G	3-slot (12HP) 3U CompactPCI® blade with Intel® Atom™ processor N450 and 1GB DDR2-667 soldered memory
Rear Transition Module	
cPCI-R3610	8 HP Rear I/O module for cPCI-3610 with GbEx2,COMx2, USBx1, SATAx2, VGA, 50mm depth
cPCI-R3610T	8HP Rear I/O module for cPCI-3610 with GbEx2,COMx2, USBx1, SATAx2, VGA, 80mm depth

Contact your ADLINK representative for different CPU, memory combinations.



cPCI-R3610T

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