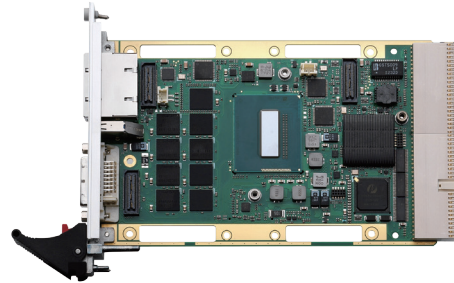


# cPCI-3510(BL) Series

## 3U CompactPCI 4th/5th Generation Intel® Core™ i7 Processor Blade with ECC

### Features

- Quad-core 4th/5th Generation Intel® Core™ i7 processor
- Up to 8GB DDR3L ECC soldered memory onboard (up to 16GB for cPCI-3510BL)
- Up to three independent displays
- System/Peripheral slot operation
- Intel® AMT 9.0 support



**CompactPCI®**



cPCI-3510(BL) cPCI-3510(BL)D cPCI-3510(BL)G cPCI-3510L cPCI-3510M cPCI-3510T

### Specifications

#### Processor & System

##### CPU

New

Quad-core Intel® Core™ i7-5700EQ Processor 2.6GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP (cPCI-3510BL only)

Quad-core Intel® Core™ i7-4700EQ Processor 2.4GHz (Turbo boost up to 3.4GHz), 6M Cache, 47/37W by cTDP

Dual-core Intel® Core™ i5-4402E Processor 1.6GHz (Turbo boost up to 2.7GHz), 3M Cache, 25W

Supports Intel® Hyper-Threading and Turbo Boost Technology, VT-x, VT-D, vPro Technology

##### Chipset

Intel® QM87 Chipset

##### Memory

DDR3L-1333 SDRAM ECC soldered, up to 16GB (cPCI-3510BL)

DDR3L-1600 SDRAM ECC soldered, up to 8GB (cPCI-3510)

##### BIOS

AMI EFI BIOS, 64Mbit SPI Flash memory

##### CompactPCI Bus

PCI 32-bit, 33/66 MHz, 3.3V or 5V universal V (I/O)

Supports operation in system slot as master or in peripheral slot as stand-alone blade without connectivity to CompactPCI® bus (Satellite mode)

##### PICMG Standards

PICMG 2.0 CompactPCI R3.0

PICMG 2.1 Hot Swap R2.0

PICMG 2.9 System Management (R1.0)

#### Connectivity

##### PMC/XMC

Optional PCI 64-bit/66MHz PMC site or PCIe x1 XMC site

##### Ethernet

One Intel® I217LM controller for one Gigabit Ethernet front panel port with Intel® AMT 9.0 support

Three Intel® I210 controllers for one Gigabit Ethernet front panel port and two rear ports

Additional two Intel® 82574L controllers for two Gigabit Ethernet front panel ports on riser card (cPCI-3510L/cPCI-3510T)

##### Graphics

Integrated in Intel® processor, 3D engine

One DVI-I (digital+analog) port on front panel, analog switchable to rear, supports up to QXGA 2048x1536 pixels@75Hz, 32-bits

Two DisplayPorts on riser card, support up to 2560x1440 pixels @ 60Hz, DVI, VGA and HDMI interfaces are available by adapter cables (cPCI-3510(BL)G only)

Three independent displays with different /contents

##### USB

Single USB 3.0 port on front panel, and up to three USB ports on front panel on selected SKUs

Three USB ports to rear, two on RTM panel

##### Audio

Line-in and Line-out ports on front panel (cPCI-3510(BL)D only)

##### PS/2

Keyboard/Mouse on cPCI-3510(BL)D and cPCI-3510(BL)G

##### Serial Port

Up to four serial ports

One RS-232/422/485 selectable port on front panel (cPCI-3510(BL)D/cPCI-3510L/cPCI-3510T)

One RS-232/422/485 10-pin header on riser card (cPCI-3510(BL) G only)

Two serial ports on rear panel: one with Tx/Rx signal only, one converted from USB signal

## Specifications

### ● Storage

#### Blade

One SATA direct connector for 2.5" onboard HDD (8HP & 12HP version only)

CFast socket or mSATA socket

Optional onboard 32GB SSD (by replacing CFast adapter board)

#### RTM

Three 7-pin SATA signal connectors

Supports SATA RAID 0/1/5/10

### ● Operating System

#### OS

Microsoft Windows 7/8/10, 32/64-bit

Microsoft Windows Embedded Standard 2009 (for cPCI-3510 Haswell)

Red Hat Enterprise Linux 6.4

Fedora 18

Wind River VxWorks 6.9, 32/64-bit

QNX Software Development Platform (SDP 7.0)

(Please contact ADLINK for other OS support)

### ● Miscellaneous

#### LEDs

Power, WDT, Storage Drive, Overheat, General Purpose

#### Battery

Coin cell lithium battery onboard for RTC

CMOS RAM for BIOS configuration

#### Watchdog Timer

System Reset and NMI, with Programmable Interval, 1-65535 sec or 1-65535 minutes

#### Hardware Monitor

Monitors CPU temperature, system temperature and DC voltages by IPMI

#### TPM

Atmel TPM AT97SC3204 (optional support upon request)

### ● Mechanical & Environmental

#### Form Factor

3U 4HP/8HP/12HP CompactPCI

100mm x 160mm (L x W)

#### Operating Temperature

-20°C to +70°C (Core™ i7-4700EQ and i7-5700EQ 47W)

-40°C to +85°C (screened, Core™ i5-4402E, Core™ i7-4700EQ and i7-5700EQ 47W adjusted to 37W by Intel® cTDP)

Storage Temperature: -50°C to +100°C

#### RH Humidity

95% non-condensing

#### Shock

20G peak-to-peak, 11ms duration, operating

#### Vibration

2Grms random vibration, 5 to 500Hz in 3 axes, operating

#### Weight

Net weight 713.55g (cPCI-3510(BL)D with heatsink)

Net weight 718.20g (cPCI-3510(BL)G with heatsink)

#### Certifications

CE/FCC

## I/O Table

		GbE	USB	COM	Display	PS/2 KB/MS	Storage	Onboard SSD	Audio	PMC/XMC
<b>SBC</b>										
cPCI-3510(BL) (4HP)	Faceplate	2 (RJ-45)	1 (3.0)		1 (DVI-I)					
	Onboard						1 (CFast)	optional <sup>(2)</sup>		
cPCI-3510(BL)D (8HP)	Faceplate	2 (RJ-45)	1 (3.0) 2 (2.0)	1 (DB9)	1 (DVI-I)	1				
	Onboard						1 (SATA) 1 (CFast)	optional <sup>(2)</sup>	1 (Line-in) 1 (Line-out)	
cPCI-3510(BL)G (8HP)	Faceplate	2 (RJ-45)	1 (3.0) 1 (2.0)	1 (RJ-45)	1 (DVI-I) 2 (DP)	1				
	Onboard			1 (10-pin)			1 (SATA) 1 (CFast)	optional <sup>(2)</sup>		
cPCI-3510L (8HP)	Faceplate	4 (RJ-45)	1 (3.0) 1 (2.0)	1(DB9)	1 (DVI-I)					
	Onboard						1 (SATA) 1 (CFast)	optional <sup>(2)</sup>		
cPCI-3510M (8HP)	Faceplate	2 (RJ-45)	1 (3.0) 2 (2.0)	2 (DB9)	1 (DVI-I) 2 (DVI-D)	1			1 (Line-in) 1 (Line-out)	
	Onboard						1 (SATA) 1 (CFast)	optional <sup>(2)</sup>		
cPCI-3510P (12HP)	Faceplate	2 (RJ-45)	1 (3.0) 2 (2.0)	1 (DB9)	1 (DVI-I)	1			1 (Line-in) 1 (Line-out)	
	Onboard						1 (SATA) 1 (CFast)	optional <sup>(2)</sup>		1
cPCI-3510S (8HP)	Faceplate	2 (RJ-45)	1 (3.0)		1 (DVI-I)					
	Onboard						1 (CFast)			1
cPCI-3510T (8HP)	Faceplate	2 (RJ-45) 2 (M12)	1 (3.0)	1 (DB9)	1 (DVI-I)					
	Onboard						1 (SATA) 1 (CFast)	optional <sup>(2)</sup>		
<b>RTM</b>										
cPCI-R3P00(T)	Faceplate	2 (RJ-45)	2 (2.0)	2 (DB9)	1 (VGA) <sup>(1)</sup>					
	Onboard						3 (SATA)			

(1) Switched from front port

(2) Available by replacing CFast or mSATA board with onboard SSD adapter board

## Ordering Information

- **cPCI-3510BL/5700E/M16/S32**

1-slot (4HP) 3U CompactPCI blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0 and onboard 32GB SSD

- **cPCI-3510/4700E/M8/S32**

1-slot (4HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0 and onboard 32GB SSD

- **cPCI-3510BLD/5700E/M16**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, COM, 2x USB 2.0, PS/2 KB/MS, Line-in, Line-out, CFast socket and SATA connector

- **cPCI-3510D/4700E/M4**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, COM, 2x USB 2.0, PS/2 KB/MS, Line-in, Line-out, CFast socket and SATA connector

- **cPCI-3510BLG/5700E/M16**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-5700EQ processor and 16GB DDR3L-1333 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, RJ-45 COM, 2x DisplayPort, PS/2 KB/MS, 1x USB 2.0, CFast socket and SATA connector

- **cPCI-3510G/4700E/M4**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, RJ-45 COM, 2x DisplayPort, PS/2 KB/MS, 1x USB 2.0, CFast socket and SATA connector

- **cPCI-3510L/4700E/M4**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 4x GbE, 1x USB 3.0, 1x USB 2.0, COM, CFast socket and SATA space

- **cPCI-3510M/4700E/M4 (available by request)**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, 3x DVI, 2x GbE, 1x USB 3.0, 2x USB 2.0, 2x COM, PS/2 KB/MS, Line-in, Line-out, CFast socket and SATA connector

- **cPCI-3510P/4700E/M4 (available by request)**

3-slot (12HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, COM, 2x USB 2.0, PS/2 KB/MS, Line-in, Line-out, CFast socket, SATA connector and PMC/XMC connector

- **cPCI-3510S/4700E/M4**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 8GB DDR3L-1600 ECC soldered memory, DVI, 2x GbE, 1x USB 3.0, CFast socket and PMC/XMC connector

- **cPCI-3510T/4700E/M4 (available by request)**

2-slot (8HP) 3U CompactPCI blade with Intel® Core™ i7-4700EQ processor and 4GB DDR3L-1600 ECC soldered memory, DVI, 1x USB 3.0, 2x GbE in RJ-45 and 2x GbE in MIL-STD M12 connectors, COM (RS-232/422/485), CFast socket and SATA space

### Rear Transition Module

- **cPCI-R3P00**

8 HP Rear I/O module with 2x GbE, 2x COM, 2x USB 2.0, 3x SATA connectors, VGA, 50mm depth

- **cPCI-R3P00T**

8 HP Rear I/O module with 2x GbE, 2x COM, 2x USB 2.0, 3x SATA connectors, VGA, 80mm depth

## Accessories

- **SATA drive installation kit**

2.5" SATA drive installation package including bracket, screws

- **Y-cable for keyboard & mouse**

Y-cable for keyboard & mouse and 200mm in cable length

- **DisplayPort to DVI cable**

DisplayPort to DVI adapter cable with 150mm cable (one is included in cPCI-3510(BL)G package by default)

- **DisplayPort to VGA cable**

DisplayPort to VGA adapter cable with 150mm cable

- **DisplayPort to HDMI cable**

DisplayPort to HDMI adapter cable with 150mm cable

- **RJ-45 to DB9 cable (cPCI-3510(BL)G only)**

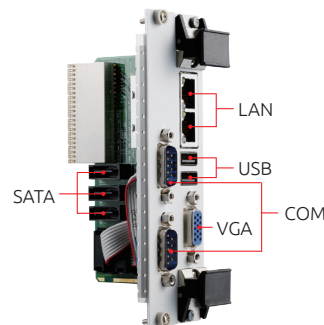
RJ-45 to DB9 COM adapter and 200mm in cable length

- **SCSI 100p to IO cable**

(cPCI-3510M only and available by request)

SCSI 100-pin male to 2 x DVI-D female, 2 x DB9 male, 2 x USB female, 2 x PS/2 female, 2 x audio jack, 150 mm cable

Contact us for different CPU, memory, SSD/HDD, CFast and mSATA combinations.



cPCI-R3P00(T)