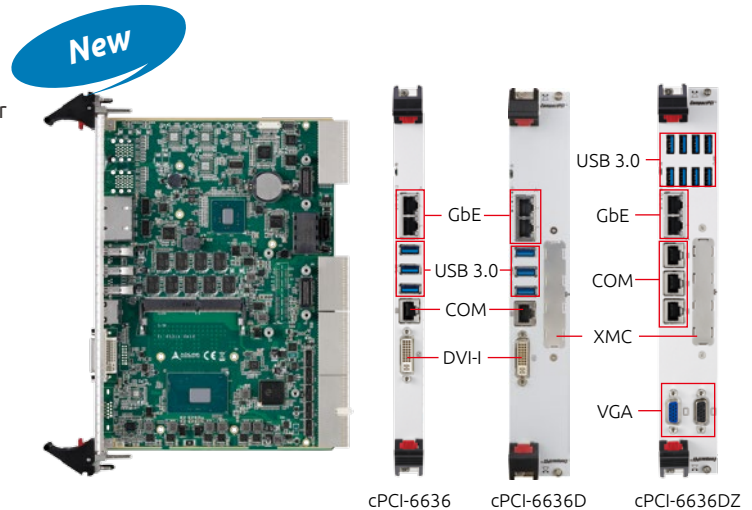


cPCI-6636

6U CompactPCI Intel® Xeon® E3 and 6th Gen Core™ i7 Processor Blade

Features

- Supports Intel® Xeon® E3 and 6th Gen Intel® Core™ i7 processor
- Up to 32GB DDR4-2133 memory, soldered and SO-DIMM, optional ECC
- XMC connector support (8HP models)
- Up to 8x USB 3.0
- Up to 4x GbE to rear I/O
- SEMA 3.5 support



Specifications

Processor & System

CPU

Intel® Xeon® E3-1505M v5, 2.8/3.7GHz, 4C/8T, GT2, 8M, 45W (35W by cTDP)
 Intel® Core™ i7-6820EQ 2.8/3.5GHz, 4C/8T, GT2, 8M, 45W
 Intel® Core™ i3-6100E 2.7GHz, 2C/4T, GT2, 3M, 35W

Chipset

Intel® HM170 Chipset (w/o ECC)
 Intel® CM236 Chipset (w/ ECC)

*cPCI-6636(D) default with CM236
 *cPCI-6636DZ default with HM170

RAM

Dual channel DDR4-2133 SDRAM, up to 32GB
 One channel soldered onboard up to 16GB; one channel in SO-DIMM socket up to 16GB
 ECC supported with CM236 Chipset

BIOS

AMI UEFI BIOS, 64Mbit SPI serial flash memory

CompactPCI Bus

PCI 64-bit/66MHz, 3.3V or 5V universal V (I/O)
 cPCI-6636(D) supports operation in system and peripheral slots without CompactPCI bus communication (Satellite mode)
 cPCI-6636DZ supports operation in host slot only

PICMG standards

PICMG 2.0 CompactPCI Rev. 3.0
 PICMG 2.1 Hot Swap Specification Rev. 2.0
 PICMG 2.16 Packet Switching Backplane not supported by cPCI-6636DZ

Connectivity

XMC

One XMC slot on cPCI-6636D/DZ

Ethernet

Up to one Intel® PHY I219LM and three Intel® LAN controller I210IT
 Two 10/100/1000BASE-T ports on front panel, switchable to rear
 Two 10/100/1000BASE-T ports to J3 for PICMG 2.16

Graphics

Integrated in Intel processor
 Intel® HD Graphics 530 on Core™ i7/i3; Intel® HD Graphics P530 on Xeon® E3
 Supports DirectX 12 and OpenGL 4.4 for Xeon® E3 and Open GL4.5 for Core™ i7/i3
 cPCI-6636DZ: Two VGA ports on front panel
 cPCI-6636(D): one DVI-I port, 2x DVI to rear

USB

cPCI-6636DZ: eight USB 3.0 ports
 cPCI-6636(D): three USB 3.0 ports

Serial Port

cPCI-6636DZ: 3x RJ-45 on faceplate (converts to 6x RS-232 TX/RX)
 cPCI-6636(D): 1x RJ-45 RS-232/422/485

Audio

High Definition Audio signals to J3

Specifications

● Storage

- 1x SATA 6Gb/s direct connector for 2.5" onboard drive
- 1x SATA 6Gb/s 7-pin connector
- 1x CFast slot on 1-slot version by default
- 3x SATA to rear J3, J5

● Operating System

OS

- Windows 10, 7 Pro (64-bit)
- RHEL 7.3 and above (64-bit)
- Ubuntu 16.10 (64-bit)
- Fedora 22 (64-bit)
- VxWorks 7 upon request
- (Please contact ADLINK for other OS support)

● Miscellaneous

LEDs

- 1x WDT on faceplate
- 1x Power on faceplate
- 1x HDD on faceplate

Battery

Coin cell lithium battery onboard for RTC CMOS

Watchdog Timer

System Reset and NMI, with programmable interval, 1-65535 seconds or minutes

Hardware Monitor

Monitors CPU temperature, system temperature, Vcore and DC voltage
Supported by onboard SEMA 3.5 BMC

TPM

TPM 2.0 support on cPCI-6636 and cPCI-6636D

● Mechanical & Environmental

Form Factor

- 6U 4/8HP CompactPCI
- 233.33mm x 160mm (LxW)
- cPCI-6636(D) equipped with J1, J2, J3 and J5
- cPCI-6636DZ equipped with J1, J2

Operating Temperature

- 0°C to 60°C
- Extended Temperature: -20°C to 70°C (SKU dependent, by screening)

Storage Temperature

- 50°C to 100°C

Relative Humidity

- 95% non-condensing

Shock

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

Vibration

- 2Grms random vibration, 5-500Hz, each axis, operating

Power Consumption

- Intel® Core™ i7-6820EQ with BIOS EIST Enabled, cTDP Normal in Win 7: TBD

Weight

- Net weight with heatsink for cPCI-6636 (TBD)

● Safety & EMI

Certifications

- CE/FCC

I/O Table

		GbE	USB 2.0	USB 3.0	COM	DVI	VGA	XMC	SATA	CFast	CF	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
SBC																
cPCI-6636 (4HP)	Faceplate	2		3	1	1 (DVI-I)			2	1						
	Onboard								(2.5", 7-pin) 3			1	1	1		
cPCI-6636D (8HP)	Faceplate	2	6	3	1	1 (DVI-I)			2							
	Onboard							1	(2.5", 7-pin) 3			1	1	1		
cPCI-6636DZ (8HP)	Faceplate	2		8	6		2		1							
	Onboard				(RS-232)				2							
	Rear							1	(2.5", 7-pin)							
RTM																
cPCI-R6002	Faceplate	2	2		1	1										
	Onboard				1 ⁽¹⁾				3							
cPCI-R6002D	Faceplate	2	4		1	1						1	1	1		
	Onboard				1 ⁽¹⁾				3							
cPCI-R6100	Faceplate	4 ⁽²⁾	4		1	DVI-D	1							1		
	Onboard								3		1 ⁽³⁾				1	
cPCI-R6110	Faceplate	2	4				1							1		
	Onboard								3		1 ⁽³⁾				1	
cPCI-R66S0	Faceplate	4	3		1 (DB-9)	2						1	1	1		4 (SFF-8088)
	Onboard				1 (10-pin)	(DVI-D)			3							4 (SFF-8087)

(1) Tx, Rx signals only.

(2) Two from the front processor blade, two from the RTM onboard Ethernet controller I350-AM2.

(3) Converted from USB, Window OS installation not supported.

Ordering Information

Processor Blades

- cPCI-6636SL/6820E/M16-16**
 6U 4HP cPCI-6636SL with quad-core Intel® Core™ i7-6820EQ processor, 16GB DDR4-2133 soldered and 16GB DDR4-2133 SODIMM, with 2x GbE, COM, DVI-I, 3x USB 3.0, 2.5" SATA and CFast; with J1, J2, J3, J5
- cPCI-6636SLD/6820E/M16-16**
 6U 8HP cPCI-6636SLD with quad-core Intel® Core™ i7-6820EQ processor, 16GB DDR4-2133 soldered and 16GB DDR4-2133 SODIMM, with 2x GbE, COM, DVI-I, 3x USB 3.0, 2.5" SATA and XMC; with J1, J2, J3, J5
- cPCI-6636SLDZ/6820E/M4-0**
 6U 8HP cPCI-6636SLDZ with quad-core Intel® Core™ i7-6820EQ processor, 4GB DDR4-2133 soldered, with 2x GbE, 6x COM, 2x VGA, 8x USB 3.0, 2.5" SATA and XMC; with J1, J2 only

Rear Transition Modules

(Only compatible with cPCI-6636(D) with J3, J5)

- cPCI-R6002**
 4HP Rear I/O module with 2x GbE, 2x COM, 3x USB, SATA, DVI-I
- cPCI-R6002D**
 8HP Rear I/O module with 2x GbE, 1x COM, 4x USB2.0, DVI-I, PS/2 and Mic-in, Line-out interfaces
- cPCI-R6100**
 4HP Rear I/O module with 4x GbE, RJ-45 COM, 4x USB, DVI, VGA, PS/2
- cPCI-R6110**
 4HP Rear I/O module with 2x GbE, 4x USB, VGA, PS/2
- cPCI-R66S0**
 6U 8HP Rear I/O module with 4x GbE, COM, 8x SAS, 2x DVI-D, 3x USB 2.0, PS/2, Audio

See 6U RTM selection guide for more options.

