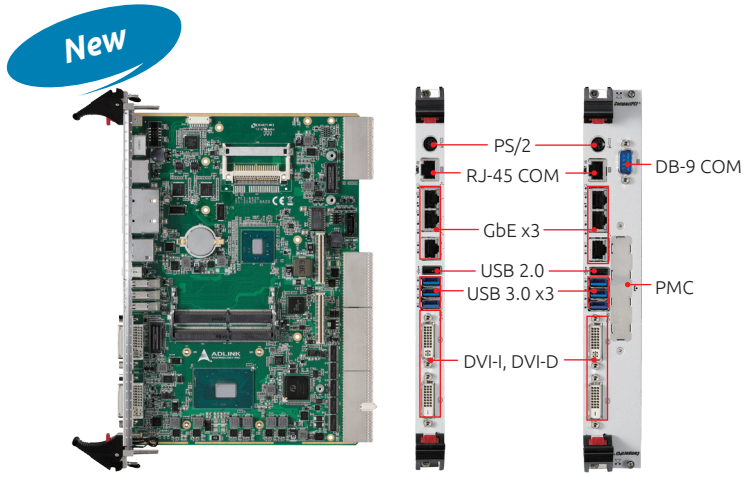
cPCI-6630(KL) Series

6U CompactPCI 6th/7th Gen Intel® Core™ i7/Celeron® Processor Blade

Features

- Quad-core 6th/7th Gen Intel® Core™ i7/Celeron® processor
- Up to 32GB DDR4-2133/2600 memory via two SO-DIMMs
- 5V power input only
- Up to 3 independent displays
- Legacy IO supported: PS/2, PMC, CompactFlash
- Optional SEMA 3.0 support



Specifications

Processor & System

CPU

New Intel® Core™ i7-7820EQ 3GHz, 4C/8T, GT2, 8M cache, 45W (35W by cTDP)
New Intel® Core™ i3-7102E 2.1GHz, 2C/4T, 3M cache smart, 25W
Intel® Core™ i7-6820EQ 2.8GHz, 4C/8T, GT2, 8M cache, 45W (35W by cTDP)
Intel® Celeron® G3900E 2.4GHz, 2C/2T, GT1, 2M cache, 35W

Chipset

Intel® HM170 PCH for 6th gen CPU
Intel® HM175 PCH for 7th gen CPU

RAM

Dual channel DDR4-2133/2600 via 2 SO-DIMMs up to 32GB

BIOS

AMI UEFI BIOS, 64Mbit SPI serial flash memory

CompactPCI Bus

PCI 64-bit/66MHz to J1, universal V (I/O)
Supports Host/Satellite mode

PICMG standards

PICMG 2.0 CompactPCI Rev. 3.0
PICMG 2.1 Hot Swap Specification Rev. 2.0
PICMG 2.16 Packet Switching Backplane Rev. 1.0

Connectivity

PMC

One 32-bit/33MHz PMC site by adapter board (cPCI-6630D)

Ethernet

Three GbE ports on faceplate by Intel® I219 and I210
Two GbE switchable to rear for PICMG 2.16

Graphics

Integrated in Intel processor
Intel® HD Graphics 530/510
Supports DirectX 12 and OpenGL 4.4
DVI-I and DVI-D on front panel with VGA signal switchable to J3
Additional 1x DP to J5

USB

3x USB 3.0 and 1x USB 2.0 on faceplate
6x USB 2.0 routed to rear

PS/2

PS/2 keyboard/mouse port on faceplate, switchable to rear

Serial Port

1x RS-232/422/485 on faceplate (4HP)
Additional 1x RS-232/422/485 on 2nd layer of faceplate (8HP)
2 COM(TX/RX) to J3

Audio

High Definition Audio signals to J3

Rear I/O Signals

Audio, 6x USB 2.0, 3x SATA, VGA to J3
KB/MS, 2x COM (TX/RX), PCIe x4, DP to J5

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Specifications

Storage

Processor Blade

1x SATA 6Gb/s direct connector for 2.5" onboard drive
1x SATA 7-pin header
1x CFast socket (optional CompactFlash supported by USB-to-IDE)
2x SATA 3Gb/s ports routed to J3
1x SATA 3Gb/s port routed to J5

RTM

Available interfaces dependent on RTM model selected

Operating System

OS

Windows 10, 8.1, 7 Pro (64-bit)
RHEL 6 and above (64-bit)
VxWorks 6.8, 6.9, 7, older version by request
QNX 6.5, QNX 6.6
(Please contact ADLINK for other OS support)

Miscellaneous

LEDs

8x indication LEDs for port 80h on faceplate
1x WDT on faceplate and signal to rear
1x Power on faceplate and signal to rear
1x HDD on faceplate and signal to rear
1x Hot Swap on faceplate and signal to rear

Battery

Coin cell lithium battery onboard for RTC CMOS RAM

TPM

N/A

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 optional onboard SEMA 3.0 BMC

Mechanical & Environmental

Form Factor

6U 4/8HP CompactPCI
233.33mm x 160mm (LxW)
Equipped with J1, J2, J3, J5 HM connectors

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

15G 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: 14.58A@5V, 72.9W max.
Intel® Celeron® G3900E with BIOS EIST Enabled / CTDP Normal in Win 7: 5.83A@5V, 29.15W max.

Weight

Net weight 642g with heatsink for cPCI-6630D

Safety & EMI

Certifications

CE/FCC

I/O Table

		GbE	USB 2.0	USB 3.0	COM	DVI	VGA	DP	PMC/ XMC	SATA	CFast	Compact-Flash	Mic-in	Line-out	PS/2 KB/MS	SD	SAS
SBC																	
cPCI-6630(KL) (4HP)	Faceplate	3	1	3	1 (RJ-45)	DVI-I DVI-D									1		
	Onboard				1 (10-pin header)					2(1)	1(2)						
cPCI-6630D (8HP)	Faceplate	3	1	3	1 (RJ-45) 1 (DB-9)	DVI-I DVI-D									1		
	Onboard								PMC	2(1)	1(2)						
RTM																	
cPCI-R6002	Faceplate	2	2		1 (DB-9)	DVI-I											
	Onboard		1 (5-pin)		1 (10-pin header)					2 (7-pin)							
cPCI-R6002D	Faceplate	2	4		1 (DB-9)	DVI-I							1	1	1		
	Onboard		1 (5-pin)		1 (10-pin header)					1x 2.5" SATA + 2x 7-pin							
cPCI-R6100	Faceplate	4	4		1 (RJ-45)	DVI-D	1								1		
	Onboard									2x 7-pin		1(3)				1	
cPCI-R6110	Faceplate	2	4				1								1		
	Onboard									1x 2.5" SATA + 2x 7-pin		1(3)				1	
cPCI-R6120	Faceplate	2	4				1								1		
	Onboard									2x 2.5" SATA + 1x 7-pin		1(3)				1	

(1) One 2.5" SATA drive by adapter board, one 7-pin SATA port.
(2) One CFast and CompactFlash slot (default CFast, CompactFlash is converted from USB signal).
(3) CompactFlash converted from USB signal.

cPCI-6630(KL) Series

Ordering Information

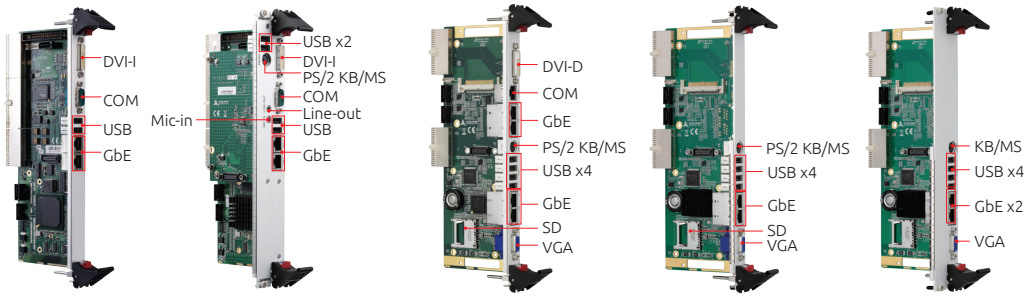
Processor Blades

- **cPCI-6630/6820/M4G**
  6U 4HP cPCI-6630 with Intel® Core™ i7-6820EQ and 4GB DDR4-2133, DVI-I, DVI-D, 3x GbE, 3x USB 3.0, USB 2.0, RJ-45 COM, PS/2
- **cPCI-6630D/6820/M4G**
  6U 8HP cPCI-6630 with Intel® Core™-6820EQ , 4GB DDR4-2133, DVI-I, DVI-D, 3x GbE, 3x USB 3.0, USB 2.0, RJ-45 COM x1, PS/2, DB-9 COM, SATA, CFast and PMC site
- **cPCI-6630/G3900/M4G**
  6U 4HP cPCI-6630 with Intel® Celeron® G3900E and 4GB DDR4-2133, DVI-I, DVI-D, 3x GbE, 3x USB 3.0, USB 2.0, RJ-45 COM, PS/2
- **cPCI-6630D/G3900/M4G**
  6U 8HP cPCI-6630 with Intel® Celeron® G3900E, 4GB DDR4-2133, DVI-I, DVI-D, 3x GbE, 3x USB 3.0, USB 2.0, RJ-45 COM, PS/2, DB-9 COM and PMC site
- **cPCI-6630KL/7820/M4G/CFA**
  6U 4HP cPCI-6630 with Intel® Core™ i7-7820EQ, 4GB DDR4-2133/2600, DVI-I, DVI-D, 3x GbE, 3x USB 3.0, USB 2.0, RJ-45 COM, PS/2, SATA, and CFast
- **cPCI-6630KL/7102/M4G/CFA**
  6U 4HP cPCI-6630 with Intel® Core™ i3-7102E and 4GB DDR4-2133/2600, DVI-I, DVI-D,3x GbE, 3x USB 3.0, USB 2.0, RJ-45 COM, PS/2, SATA, and CFast

Rear Transition Modules

- **cPCI-R6002**
  4HP Rear I/O module with 2x GbE, 2x COM, 3x USB, 2x 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-R6120**
  8HP Rear I/O module with 2x GbE, 4x USB, VGA, PS/2, w/ space for dual SATA drive

Contact us for different CPU, memory combinations.
See 6U RTM selection guide for more options.



cPCI-R6002 cPCI-R6002D cPCI-R6100 cPCI-R6110 cPCI-R6120

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