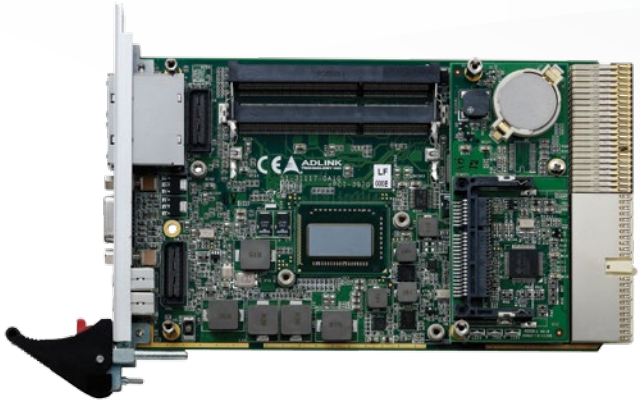
cPCI-3971 Series

3U CompactPCI® PlusIO Intel® Core™ i7 Processor with ECC

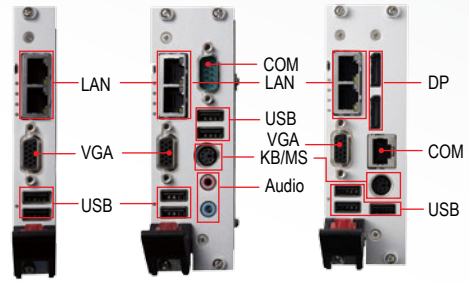


CompactPCI®

EXTENDED TEMPERATURE

Features

- Quad/dual-core 2nd generation Intel® Core™ i7 processor
- Supports DDR3-1333 SDRAM with ECC via SODIMM, up to 16GB
- Supports IPMI for system health monitoring
- Onboard CF or CFast slot
- 1PCI33/4PCIE2.5/3SATA3/3USB2/2ETH1G



cPCI-3971 cPCI-3971D cPCI-3971G

Specifications

Processor & System

CPU	µFC-BGA Intel® Core™ i7-2715QE Processor 2.1GHz (Turbo boost to 3.0GHz), 6MB LLC cache, 45W TDP
	µFC-BGA Intel® Core™ i7-2655LE Processor 2.2GHz (Turbo boost to 2.9GHz), 4MB LLC cache, 25W TDP
	µFC-BGA Intel® Core™ i7-2610UE Processor 1.5GHz (Turbo boost to 2.4GHz), 4MB LLC cache, 17W TDP
	Supports Intel® Hyper-Threading and Turbo Boost Technology
Chipset	Intel® QM67 PCH
Memory	Dual channel DDR3-1067/1333 SDRAM with ECC via two SODIMM sockets, up to 16GB capacity (dependent on availability of memory modules)
BIOS	AMI® EFI BIOS, 64Mbit SPI flash memory
CompactPCI Bus	PCI 32-bit/33 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
	PICMG 2.30 PlusIO

Connectivity

PMC/XMC	One optional PCI 32-bit/66 MHz PMC site or PCI-Express x1 XMC site on 2nd or 3rd layer
Ethernet	Two PCIe Intel® 82574L Gigabit Ethernet controllers on SBC for two 10/100/1000BASE-T ports on front panel, switchable to J2
Graphics	Integrated in Intel® processor, 3D engine
	DB-15 VGA port on front panel, switchable to rear, supports up to QXGA 2048x1536 pixels @75Hz, 32-bits
	Two DisplayPorts on front panel, support up to 2560×1600 pixels @60Hz; DVI, VGA and HDMI interfaces available by adapter cable (cPCI-3971G only)
	Dual independent display
Serial Port	One RS-232/422/485 port on front panel
	One RS-232/422/485 10-pin header on DB-3970L2
PS/2	Front panel PS/2 Keyboard Mouse port (8/12 HP version only)
USB	Up to four USB 2.0 front panel ports
	Three USB 2.0 ports to J2
Audio	Line-in and Line-out ports on front panel (cPCI-3971D/P only)
PCI-Express	PCI Express x4 to J2

Storage

SBC	One SATA 6 Gb/s direct connector for 2.5" onboard HDD (8HP & 12HP version only)
	CompactFlash socket
	Optional CFast socket (site shared with CF adapter board)
RTM	Three SATA 3Gb/s ports to J2
	Supports SATA RAID 0/1/5/10

Operating System

OS	Microsoft Windows® XP Professional
	Microsoft Windows® 7, 64bit version
	Red Hat Enterprise Linux 6
	Fedora™ 14
	Wind River VxWorks 6.8, 6.9
	(Please contact ADLINK for other OS support)

Miscellaneous

LED	Power (green/red), WDT (amber), HDD (blue), Overheat (red)
Battery	Coin cell lithium battery onboard for RTC CMOS RAM
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	Infineon SLB 9635 TT1.2 (optional, support upon request)

Mechanical & Environmental

Form Factor	3U 4HP/8HP/12HP CompactPCI
	100mm x 160mm (LxW)
	Equipped with UHM J2 connector for full PICMG 2.30 compatibility
Operating Temperature	0°C to +60°C
	-20°C to +70°C extended temperature (cPCI-ET3971, CPUs with TDP 25W or lower)
Storage Temperature	-40°C to +85°C
Rel. Humidity	95% non-condensing
Shock	20G peak-to-peak, 11ms duration, non-operating
Vibration	2 Grms random vibration, 5-500Hz, each axis, operating
Power Consumption	Core i7-2655LE, 4GB DDR3-1333 SODIMM under Windows XP with 100% CPU loading

	Current (A)	Power (W)
3.3V	0.71	2.3
5V	6.97	34.9
Total		37.2

Weight	Net weight 389g with heatsink
Certifications	CE/ FCC

I/O Table

		GbE	USB 2.0	COM	VGA	DP	PS/2 KB/MS	SATA	CF	CFast	Line-in	Line-out	PMC/ XMC
cPCI-3971 (4HP)	Faceplate	2	2		1								
	Onboard								1	optional(1)			
cPCI-3971D (8HP)	Faceplate	2	4	1	1		1				1	1	
	Onboard							1 (for 2.5" HDD)	1	optional(1)			
cPCI-3971G (8HP)	Faceplate	2	3	1 (RJ-45)	1	2	1						
	Onboard			1 (10-pin)				1 (for 2.5" HDD)	1	optional(1)			
cPCI-3971P (12HP)	Faceplate	2	4	1	1		1				1	1	
	Onboard							1 (for 2.5" HDD)	1	optional(1)			1
cPCI-3971U (12HP)	Faceplate	2	3	1 (RJ-45)	1	2	1						
	Onboard			1 (10-pin)				1 (for 2.5" HDD)		optional(1)			1

(1) Available by replacing CF socket adapter board with CFast socket adapter board (DB-3CFAST)

Ordering Information

Model Number	Description/Configuration
Processor Blades	
cPCI-3971/655L/M4G	1-slot (4HP) 3U CompactPCI® PlusIO Blade with Intel® i7-2655LE processor and 2x 2GB DDR3-1333, 2x GbE, VGA, 2x USB, CF
cPCI-3971G/655L/M8G	2-slot (8HP) 3U CompactPCI® PlusIO Blade with Intel® i7-2655LE processor and 2x 4GB DDR3-1333, 2x GbE, VGA, 4x USB, KB/MS, COM, 2x DP, SATA, CF (one DP to DVI cable is included)
cPCI-3971Q/715Q/M8G	2-slot (8HP) 3U CompactPCI® PlusIO Blade with Intel® i7-2715QE processor and 4x4GB DDR3-1333, 2xGbE, VGA, 2xUSB, CF

Accessories

DB-3CFAST	CFast socket adapter board
DP-DVI cable*	DisplayPort to DVI adapter cable
DP-VGA cable	DisplayPort to VGA adapter cable
DP-HDMI cable	DisplayPort to HDMI adapter cable

Contact us for different CPU, memory, HDD combinations.
*One DP-DVI cable is included with the cPCI-3970G.

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Note: All specifications are subject to change without further notice.