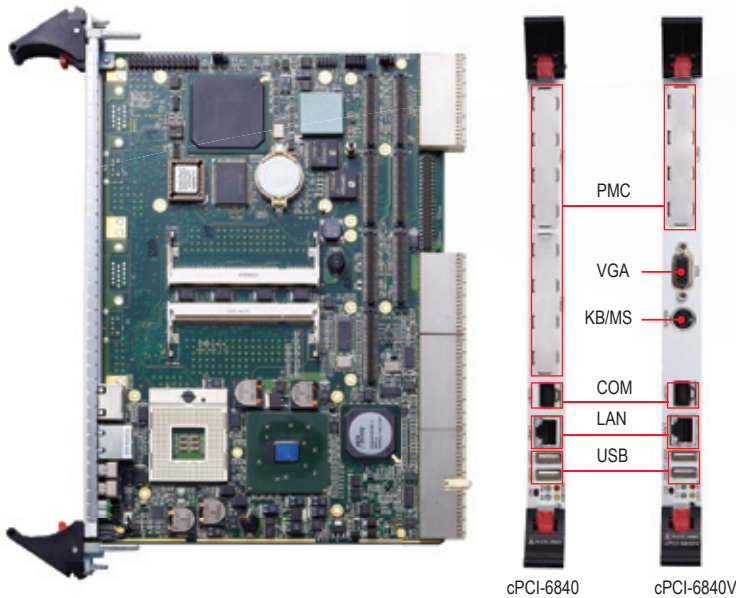


cPCI-6840 Series

6U CompactPCI® Highly Integrated Intel® Pentium® M Processor PCI™ 64-bit/66 MHz Universal Blade



Features

- Low power Intel® Pentium® M/Celeron® M processors
- Universal operation on either system or peripheral slots
- 64-bit/66 MHz CompactPCI® bus, compliant PICMG® 2.1, 2.9 and 2.16
- Up to 2 GB DDR-333 SDRAM
- Three Gigabit Ethernet ports
- Multiple storage options: IDE, Serial ATA, CompactFlash® and SCSI
- Display Interfaces: CRT, DVI, and LVDS

Specifications

Processor System

CPU	µFC-PGA Intel® Pentium® M / Celeron® M processors: Pentium® M 1.6 GHz, 400 MHz FSB, 1 MB L2 cache Pentium® M 1.8 GHz, 400 MHz FSB, 2 MB L2 cache Celeron® M 1.3 GHz, 400 MHz FSB, 512 KB L2 cache
Chipset	Intel® 855GME with 6300ESB I/O Controller Hub
RAM	Two 200-pin SODIMM sockets, up to 2 GB DDR-333 SDRAM
BIOS	Award® 4 Mb flash memory
CompactPCI Bus	64-bit/66 MHz CompactPCI® bus Operation in system slot and peripheral slot with CompactPCI bus communication
PICMG standard	PICMG® 2.0 CompactPCI R3.0 PICMG® 2.1 Hot Swap R2.0 PICMG® 2.3 PMC R1.0 PICMG® 2.9 System Management R1.0 (v1.5) PICMG® 2.16 R1.0

Connectivity

PMC/XMC	Maximum up to two PCI™ 64-bit/66 MHz slots Upper PMC2 slot provides J24 rear I/O connection
Ethernet	Intel® 82546GB Dual-Port Gigabit Ethernet Controller for two PICMG® 2.16/RTM GbE ports Intel® 82541PI Single-Port Gigabit Ethernet Controller for front panel GbE port
Graphics	Intel® 855GME Integrated Graphics with 32 MB UMA
USB	Two ports on front panel, two ports on RTM
PS/2	One PS/2 Keyboard Mouse port on panel of cPCI-6840V and cPCI-R6841
Serial Port	Two RJ-45 16C550 compatible RS-232 ports on front and rear panel

Storage

SBC	44-pin IDE connector on Ultra ATA100 primary IDE channel for 2.5" HDD direct mounting
RTM	Ultra ATA100 secondary IDE channel is routed to RTM for 40-pin IDE connector and CompactFlash slot

Operating System

OS	Microsoft® Windows® 2000/XP Windows® Server® 2003 Windows® XP Embedded VxWorks® 5.5.1
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Miscellaneous

LED	Four LEDs on the front panel including Storage Access LED (red), Power LED (green), Hot-Swap status (blue), and Watchdog timer LED (yellow)
Battery	Coin cell lithium battery onboard for RTC CMOS RAM for BIOS configuration
Hardware Monitor	Monitoring of CPU temperature, fan speed, system temperature, Vcore and DC voltages
Watchdog Timer	Two stage, SMI/SCI before RESET

Mechanical & Environmental

Form Factor	6U 4HP CompactPCI® 233.33 mm x 160 mm (L x W)
Operating Temp.	0°C to 55°C (external air-flow required)
Storage Temp.	-20°C to 80°C
Rel. Humidity	90% non-condensing
Shock	15 G peak-to-peak, 11 ms duration, non-operation
Vibration	Non-operation: 1.88 Grms, 5-500 Hz, each axis Operation: 0.5 Grms, 5-500 Hz, each axis
Power Consumption	8.8 A at +5 V, 4.0 A at +3.3 V, 0.2 A at +12 V (1.6 GHz CPU, 512 MB DDR- 333, HDD, USB, K/B, Mouse attached)

Safety & EMI

Certifications	CE, FCC Class A
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I/O Table

Function	cPCI-6840		cPCI-6840V		cPCI	cPCI-R6840		cPCI-R6841(P)	
	Onboard	Face-plate	Onboard	Face-plate	J3/J5	Onboard	Face-plate	Onboard	Face-plate
COM1		RJ-45		RJ-45					
COM2					J3	RJ-45		RJ-45	
USB (port 0, port 1)		Y		Y					
USB (port 2, port 3)					J5	Y		Y	
GbE port1	2.16		2.16		J3	RJ-45		RJ-45	
GbE port2	2.16		2.16		J3	RJ-45		RJ-45	
GbE port3		RJ-45		RJ-45					
Primary IDE	44-pin		44-pin						
Secondary IDE					J5		40-pin, CF		40-pin, CF
General Purpose LED		Y		Y					
Reset button		Y		Y					
PMC1 (lower)	Y								
PMC2 (upper)	Y		Y		J5			PIM (cPCI-R6841P only)	
SATA					J5		Y		Y
PS/2 KB / MS				Y	J3			Y	
VGA				DB-15	J3	DB-15		DB-15	
DVI					J3	DVI			
LVDS					J3		Y		Y
2.5" HDD	Mountable on PMC2		Mountable on PMC2						Mountable

Ordering Information

Model Number	Description/Configuration
CPU Board	
cPCI-6840/P18/M1G	6U cPCI Pentium® M 1.8 GHz universal blade, with 1 GB DDR and two PMC
cPCI-6840V/P18/M1G	6U cPCI Pentium® M 1.8 GHz universal blade, with VGA, KB/MS, 1 GB DDR, and one PMC
Rear Transition Module	
cPCI-R6840	6U cPCI RTM with DVI, SCSI, LVDS, Dual-GbE, VGA, USB, SATA, CF, COM, and IDE connectors for cPCI-6840(V)
cPCI-R6841	6U cPCI RTM with LVDS, Dual GbE, VGA, USB, SATA, CF, COM, and IDE for cPCI-6840(V) (without PIM)
cPCI-R6841P	6U cPCI RTM with PIM, LVDS, Dual GbE, VGA, USB, SATA, CF, COM and IDE for cPCI-6840(V)
Mezzanine	
DB-6840CF	CompactFlash® Daughter Board for cPCI-6840 series

Contact your ADLINK representative for different CPU, memory combinations.

