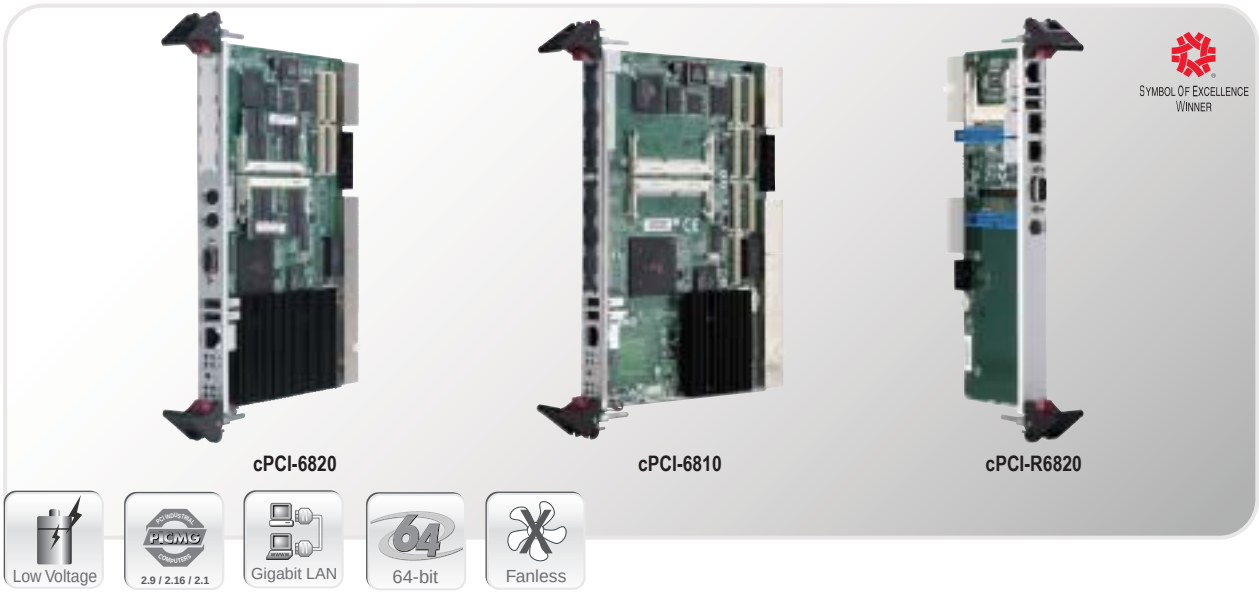
cPCI-6820/6810 Series

6U CompactPCI Pentium® III Low Voltage Processors, 64-bit/66MHz Universal SBC



Features

- ***Single slot 6U CompactPCI***
  - *Universal 64-bit/66MHz CompactPCI bus, hot-swappable*
- ***Highest Performance, Fan-less***
  - *Dual Intel LV Tualatin (cPCI-6820)*
  - *Single Intel LV Tualatin (cPCI-6810)*
- ***Server-Grade System Memory***
  - *ECC & Reg system memory, up to 2GB*
- ***High Flexibility for Field Applications***
  - *Provide two PMC sockets*
  - *On-board HDD drive bay*
- ***Advanced PICMG Standard***
  - *Support PICMG 2.16 cPSB, Dual GbE ports provide scalable network throughput*
  - *Support PICMG 2.9 IPMI interface*

Ordering Information

cPCI-6810AA/P9/M1G	6U cPCI Single Slot Universal SBC, Pentium III-933, Dual GbE, 2 PMC with 512MB SO-DIMM x 2
cPCI-6810AA/P10/M1G	6U cPCI Single Slot Universal SBC, Pentium III-1GHz , Dual GbE, 2 PMC with 512MB SO-DIMM x 2
cPCI-6820AA/P9/M1G	6U cPCI Single Slot Universal SBC, Dual Pentium III-933, Dual GbE w/o PMC with 512MB SO-DIMM x 2
cPCI-6820AA/P10/M1G	6U cPCI Single Slot Universal SBC, Dual Pentium III-1GHz, Dual GbE, w/o PMC with 512MB SO-DIMM x 2
cPCI-6820AB/P9/M1G	6U cPCI Single Slot Universal SBC, Dual Pentium III-933, Dual GbE, 1 PMC with 512MB SO-DIMM x 2
cPCI-6820AB/P10/M1G	6U cPCI Single Slot Universal SBC, Dual Pentium III-1GHz, Dual GbE, 1 PMC with 512MB SO-DIMM x 2
cPCI-R6820	Rear I/O Module for cPCI-6810 or 6820 Series

Note 1: Front CPU modules and rear I/O transition modules are sold separately.
Note 2: CPU is soldered, HDD is not included.
Note 3: Contact us for more configurations with larger RAM or storage options.

Specifications

CPU / Chipset / RAM

CPU	cPCI-6820: Dual Intel uFCBGA LV Pentium-III (Tualatin) up to 1GHz with 512K on-die L2 cache
	cPCI-6810: Single Intel uFCBGA LV Pentium-III (Tualatin) up to 1GHz with 512K on-die L2 cache
FSB	133MHz
Chipset	ServerWorks LE-III
RAM	PC-133 Registered ECC SDRAM up to four 144-pin SO-DIMM sockets, up to 2GB Reg.

Bus

CompactPCI Standards	PICMG 2.0 R3.0, PICMG 2.1 R2.0, PICMG 2.9 R1.0, PICMG 2.16 R1.0
	Optional PICMG 2.9 System Management with IPMI V1.0
CompactPCI Bus	HiNT HB6 Universal PCI to PCI bridge
	64-bit/66MHz, support 4 bus-mastering devices
	32-bit/33MHz, support 7 bus-mastering devices

BIOS

Chip	Award 4Mb flash memory
Features	Intel PXE pre-boot on Ethernet
	Serial Console

I/O Interfaces

Display	C&T 69000 VGA with 2MB VRAM (cPCI-6820 only)
Ethernet	10/100/1000Mbps Ethernet by Intel 82546EB: dual ports for rear I/O or PICMG 2.16
IDE	ATA-100, dual channels, built-in 2.5" ATA HDD housing on both front board and RTM
USB	USB 1.1, 4 ports (2 for front, 2 for rear faceplate)
Front Panel I/Os	cPCI-6820: COM1 (RS-232), PS2 KB, PS2 MS, USB, VGA, PMC
	cPCI-6810: COM1 (RS-232), USB, PMC x 2
Backplane I/O	J3: PMC rear I/O, LAN1 & 2 (PICMG 2.16)
(rear I/O)	J5: IDE1, IDE2, USB x 4, VGA, KB, MS, Buzzer

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cPCI-6820/6810 Series

6U CompactPCI Pentium® III Low Voltage Processors, 64-bit/66MHz Universal SBC

Mechanical and Environmental

Form Factor	6U CompactPCI
Dimensions	233mm x 160mm (L x W), 1 slot (4HP) wide
Operating Temp.	0 to 55˚C (inside-chassis temp, external air-flow required)
Storage Temp.	-20 to 80˚C
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation: 1.88Grms, 5-500Hz, each axis
	Operation: 0.5Grms, 5-500Hz, each axis
Measured Power Consumption	Single Mobile Tualatin Pentium III-933 & 1GB RAM: 1.8A @ +5V, 3.9A @ +3.3V, 46mA @ +12V (w/o HDD)
	Dual Mobile Tualatin Pentium III-933 & 2GB RAM: 3.2A @ +5V, 6A @ +3.3V, 29mA @ +12V (w/o HDD)
Certificate or Test	CE, FCC class B

Other Features

Hardware Monitoring	Monitoring CPU temperature, FAN speed, system temperature, Vcore and DC voltages
Watchdog Timer	1-255 sec or 1-255 min software programmable, can generate system reset.

Accessories

Flash Storage	Flash2000 2.5" flash drive
RTM	cPCI-R6820

Model Variant and Configuration

Model Number	Mobile Tualatin/ Pentium III CPU	SO-DIMM Socket	PMC Slot	HDD Space	VGA	KB/MS
cPCI-6810AA/P9	Single 933MHz	2	2	Yes, Occupy 1 PMC	N/A	Rear
cPCI-6810AA/P10	Single 1GMHz	2	2	Yes, Occupy 1 PMC	N/A	Rear
cPCI-6820AA/P9	Dual 933MHz	4	0	N/A	C&T 69000	Front & Rear
cPCI-6820AA/P10	Dual 1GHz	4	0	N/A	C&T 69000	Front & Rear
cPCI-6820AB/P9	Dual 933MHz	3	1	Yes, Occupy 1 PMC	C&T 69000	Front & Rear
cPCI-6820AB/P10	Dual 1GHz	3	1	Yes, Occupy 1 PMC	C&T 69000	Front & Rear

Peripheral Connectivity

I/O	cPCI-6820		cPCI-6810			RTM (cPCI-R6820)	
	Faceplate	Board	Faceplate	Board	J3/J5	Faceplate	Board
Serial Port (COM1)	RJ-45	--	RJ-45	--	J5		10-pin Header
Serial Port (COM2)	--	--	--	--	J5	RJ-45	
PS2 Keyboard	PS2	--	--	--	J5	PS2 Combo	--
PS2 Mouse	PS2	--	--	--	J5	PS2 Combo	--
VGA	DB-15	--	--	--	J5	DB-15	--
USB (port 0, port 1)	USB x 2	--	USB x 2	--	J5	--	--
USB (port 2, port 3)	--	--	--	--	J5	USB x 2	--
Gigabit Ethernet Port 1	--	2.16	--	2.16	J3	RJ-45	--
Gigabit Ethernet Port 2	--	2.16	--	2.16	J3	RJ-45	--
ATA-100 Primary IDE	--	44-pin	--	44-pin	J5		44-pin / 40-pin
ATA-100 Secondary IDE	--	--	--	--	J5	--	40-pin / CF-type 2
PC Beeper	--	Y	--	Y	J5	--	4-pin Header
General Purpose LED	Y	--	Y	--	--	--	--
Reset button	Y	--	Y	--	--	--	--
PMC #1	--	Y*	--	Y	J3	--	--
PMC #2	--	--	--	Y	--	--	--

Note: PMC #1 is available on cPCI-6820AB, but not available on cPCI-6820AA

All specifications are subject to change without further notice.

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