

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KONTRON / PEP

Kontron / PEP CP604-PM CompactPCI Single Board Computer

Kontron / PEP Embedded Test Systems. Channels: COM1/2 (RS232/422/485 front panel).



MODEL

**Kontron / PEP
CP604-PM**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

CP604-PM

LISTING

<https://aumictechlabs.com/products/cp604-pm-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Kontron/PEP CP604-PM is a CompactPCI single board computer engineered for demanding industrial and embedded applications requiring hot-swappable capability. This Peripheral Master (PM) variant enables board removal and replacement within a running system without operational disruption. Built around the Intel Mobile Pentium III processor (BGA 400/500/700/850 MHz), it delivers reliable computing power across harsh operating environments with extended temperature support. Technical Specifications Processor & Memory Intel Mobile Pentium III: 400/500/700/850 MHz Up to 1 GB SDRAM/ECC PC100 directly soldered Optional 1 GB memory expansion via PMC slot sacrifice Maximum 2 GB SDRAM with optional ECC 256 kB FLASH (BIOS), 4 MB onboard Flash Graphics & Display AGP VGA with CRT and LVDS output Onboard graphics unit with 2D/3D accelerator Optional external AGP 4x graphics card (SMI Cougar 3DR) with up to 32 MB DDR SDRAM, MPEG2/MPEG4 optimized Dual independent display support: DVI, CRT, dual LVDS Storage 2.5" EIDE device support with onboard mounting kit Optional flash-disk module or

2.5" IDE-compatible hard disk within 4 HP form factor I/O & Connectivity Two Fast Ethernet ports (10BaseT/100BaseTX) Four serial channels: COM1/2 (RS232/422/485 front panel), COM3/4 (rear I/O module) Two USB interfaces Parallel port (ECP/EPP) PS/2 keyboard and mouse Floppy disk controller PMC slot IPMI system management interface Optional rear panel modules (4 HP/8 HP): configurable COM, USB, Ethernet, VGA/LVDS, IDE, Fan sense monitoring Hot-Swap Architecture (CP604-PM) Signal precharge and power ramping control Non-transparent PCI-PCI bridge isolating PM resources Automatic interrupt generation on board removal/insertion Safe removal LED indicator Hot-swap control and status registers Environmental Operating temperature: -40°C to +85°C (extended range versions) Maximum case temperature: 100°C Low power consumption via 3.3 V and 1.5 V I/O technology Key Features Hot-swappable Peripheral Master design enables live board replacement without system shutdown. Non-transparent bridge architecture isolates board resources, preventing cascading failures. Dual-display capability supports mixed analog/digital outputs. Optional multimedia expansion delivers hardware MPEG acceleration. Typical Applications embedded systems, industrial automation controllers, network appliances, real-time computing platforms, field-deployed instrumentation requiring hot-swap availability. Compatibility & Integration CompactPCI form factor. IPMI-compliant system management. AGP graphics expansion. PMC slot for additional I/O cards. Optional rear I/O modules customize connectivity without board redesign.

CP604PM Characteristics / Specifications

PARAMETER	VALUE
Model	CP604-PM
Manufacturer	Kontron
Instrument Type	6U CompactPCI CPU board
Series	CP604 / CP604-PM
Alias	CP604; CP 604 PM
Form Factor	6U CompactPCI
CPU	Intel Mobile Pentium III BGA 400/500/700/850 MHz
Title Clock	low power Pentium III 700 MHz class
DRAM	up to 1 GB SDRAM ECC PC100
DRAM Expansion	up to 2 GB with memory expansion module
Graphics	AGP VGA CRT and LVDS
Ethernet	two Fast Ethernet
Serial	four channels
IPMI	system management support
Hot Swap	full
Width 4HP	onboard HDD and PMC
Rear IO	optional, also PMC rear
Role	system master or peripheral master
Memory Construction	soldered for rugged use
Heatsink	passive
Operating Temperature Rugged	minus 40 C to +85 C
Status	legacy
Not Pentium M	CP6000/CP306 are PentiumM Not CP303: CP303 is 3U Pentium III-M
Confirm Clock	400 versus 500 versus 700 versus 850 MHz
Confirm RAM	soldered size plus expander

PARAMETER	VALUE
PMC	4HP version includes PMC
Form	6U cPCI CPU Notes Specs from Kontron CP604/CP604-PM product page. Confirm CPU MHz, 4HP versus wider I/O, and rear-I/O/PMC options on the installed board.
Operating temperature	Rugged: minus 40 C to +85 C

General Specifications & Supplementary Characteristics

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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

Specs from Kontron CP604/CP604-PM product page. Confirm CPU MHz, 4HP versus wider I/O, and rear-I/O/PMC options on the installed board.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.