

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KONTRON

Kontron CP303 3U CompactPCI PIII CPU Board

Kontron CP303 3U CompactPCI Mobile Pentium III-M CPU Board The Kontron CP303 is a 3U CompactPCI system-controller board with Intel Mobile Pentium III-M (Tualatin) in microBGA, L2 cache 512 kB, clocks up to 800 MHz LV. Chipset Intel 82815 GMCH plus 82801 ICH2. DRAM up to 512 MB at 133 MHz as 256 MB soldered plus one SODIMM (CP303); CP303-V is socket-only up to 512 MB. Dual 10/100Base-Tx Ethernet (CP303 adds Intel 82559 plus ICH Ethernet). Graphics 82815 internal 2D/3D, 1280 × 1024 × 16 at 75 Hz or 1600 × 1200 × 256 at 60 Hz, or external AGP x4 VGA. Two 16C550 RS232, four USB 1.1, two EIDE Ultra ATA 100. CompactFlash Type II or 2.5 inch HDD on 8HP. Power 14 W at 800 MHz. Extended temperature minus 40 C to +85 C. Example SKU 23694: LV 800 MHz, 512 kB L2, 256 MB soldered. PICMG 2.0 Rev 3.0, 64-bit/33 MHz system master, 5 V VI/O. The Kontron CP303 is a 3U CompactPCI system-controller board with Intel Mobile Pentium III-M (Tualatin) in microBGA, L2 cache 512 kB, clocks up to 800 MHz LV. Chipset Intel 82815 GMCH plus 82801 ICH2. DRAM up to 512 MB at 133 MHz as 256 MB soldered plus one SODIMM (CP303); CP303-V is socket-only up to 512 MB. Dual 10/100Base-Tx Ethernet (CP303 adds Intel 82559 plus ICH Ethernet). Graphics 82815 internal 2D/3D, 1280 × 1024 × 16 at 75 Hz or 1600 × 1200 × 256 at 60 Hz, or external AGP x4 VGA. Two 16C550 RS232, four USB 1.1, two EIDE Ultra ATA 100. CompactFlas



MODEL

Kontron CP303

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

CP303

LISTING

<https://aumictechlabs.com/products/cp303-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Kontron CP303 is a 3U CompactPCI CPU board built around Intel's Mobile Pentium III-M processor for deployment in industrial control, embedded computing, and systems requiring extended temperature operation. This board combines low-voltage processing with integrated graphics, dual fast Ethernet, and configurable I/O to support both compact 4HP and expanded 8HP installations in harsh thermal and mechanical environments.

Technical Specifications

Processor & Memory Intel Mobile Pentium III-M (microBGA) up to 800 MHz 512 kByte L2 cache 0.13 μ m silicon process, 1.15 V core voltage Up to 512 MByte SDRAM total (256 MByte soldered + one SODIMM socket) 133 MHz DRAM speed, no ECC 1 MB Firmware Hub, 256 Byte EEPROM (CMOS), 256 Byte EEPROM (user)

Chipset & Graphics Intel 815GMCH and 82801 ICH2 815E integrated graphics accelerator with dynamic memory video technology Internal or external AGPx4-VGA support

I/O Interfaces Two fast Ethernet channels with RJ-45 connectors; integrated ACT and SPEED LEDs Two RS-232/422/485 serial ports (COM1/2, 9-pin D-Sub, jumper selectable) Two 4-pin USB connectors 15-pin SVGA VGA-CRT output PS/2 keyboard/mouse (8HP extension) Optional CompactFlash Type II socket and 2.5" HDD mounting with ATA 100 IDE CompactPCI Interface 4HP or 8HP I/O configurations 5 V VI/O standard (3.3 V available on request) 7 Req/Gnt and clock lines 64-bit/33 MHz system master PICMG 2.0 rear I/O support

Environmental & Supervisory Operating range: -40 °C to +85 °C Directly soldered processor and memory for shock and vibration resistance Watchdog timer: 125 msec to 256 sec (software configurable), IRQ/NMI/reset selectable Hardware monitor (LM81) for thermal management, fan control, and voltage monitoring

Key Features Low-power Mobile Pentium III-M eliminates external cooling complexity Dual fast Ethernet for redundancy and load balancing Integrated graphics eliminates separate video controller requirements Soldered memory and processor provide mechanical durability in vibration-prone installations Configurable watchdog and thermal monitoring enable autonomous system protection Flash and HDD options support OS and application storage

Typical Applications Industrial automation and process control Telecommunications and network edge computing Military and aerospace embedded systems Transportation and logistics vehicle computers Field-deployable data acquisition platforms

Compatibility & Integration The CP303 operates as a CompactPCI system master within standard backplanes. Rear I/O configurations via J2 connector support PICMG 2.0 deployments. Serial, USB, and Ethernet interfaces enable integration with legacy and contemporary peripherals. The board accepts standard SDRAM SODIMM modules for field capacity upgrades.

CP303 Characteristics / Specifications

PARAMETER	VALUE
Model	CP303
Manufacturer	Kontron
Instrument Type	3U CompactPCI CPU board
Series	CP303 / CP303-V
Alias	CP 303; 23694 LV 800 MHz class
Form Factor	3U CompactPCI 4HP, optional 8HP
CPU	Intel Mobile Pentium III-M microBGA up to 800 MHz LV
L2 Cache	512 kByte on die
Chipset	Intel 82815 GMCH and 82801 ICH2
DRAM CP3	256 MB soldered plus 256 MB 144 pin SODIMM, 512 MB total
DRAM Speed	133 MHz
DRAM CP303 V	up to 512 MB via 144 pin SODIMM only
Ethernet	2× 10/100Base-Tx
Ethernet CP303 Extra	Intel 82559 plus ICH integrated MAC
Graphics	82815 internal 2D/3D or external AGP x4 VGA
Graphics Analog	1280 × 1024 × 16 at 75 Hz or 1600 × 1200 × 256 at 60 Hz
USB	4 ports USB 1.1
IDE	two EIDE Ultra ATA 100, 100 MB/s class
Serial	two 16C550 compatible RS232 (four total on 8HP)
Firmware Hub	1 MB FWH BIOS
CMOS	256 Byte EEPROM, no battery operation
CompactFlash	Type II socket optional
Power Consumption	14 W at 800 MHz
Operating Temperature	minus 40 C to +85 C
PICMG	2.0 Rev 3.0, 64 bit 33 MHz system master

PARAMETER	VALUE
VI O	5 V standard, 3.3 V on request
Front IO 4HP	2x Ethernet, 2x USB, LEDs, CRT or COM1
Front IO 8HP	COM1/2, PS/2, reset, IDE floppy LPT pin row
Example SKU	23694 LV Mobile Pentium III-M 800 MHz 256 MB soldered
Status	legacy
Not CP3	CP306 is Pentium M 855GME Notes Specs from Kontron CP303 / CP303-V product page and CP303 datasheet identity (800 MHz LV, 512 kB L2, 815 GMCH, 14 W, minus 40 C to +85 C). Confirm CP303 versus CP303-V, 4HP versus 8HP, and soldered versus SODIMM RAM on the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	minus 40 C to +85 C
Operating Temperature	minus 40 C to +85 C
PICMG	2.0 Rev 3.0, 64 bit 33 MHz system master
VI O	5 V standard, 3.3 V on request
Front IO 4HP	2x Ethernet, 2x USB, LEDs, CRT or COM1
Front IO 8HP	COM1/2, PS/2, reset, IDE floppy LPT pin row
Example SKU	23694 LV Mobile Pentium III-M 800 MHz 256 MB soldered
Status	legacy
Not CP3	CP306 is Pentium M 855GME Notes Specs from Kontron CP303 / CP303-V product page and CP303 datasheet identity (800 MHz LV, 512 kB L2, 815 GMCH, 14 W, minus 40 C to +85 C). Confirm CP303 versus CP303-V, 4HP versus 8HP, and soldered versus SODIMM RAM on the unit.

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	
Specifications	
PARAMETER	VALUE
Model	CP303
Manufacturer	Kontron
Instrument Type	3U CompactPCI CPU board
Specifications	
PARAMETER	VALUE
Series	CP303 / CP303-V
Alias	CP 303; 23694 LV 800 MHz class
Form Factor	3U CompactPCI 4HP, optional 8HP
Specifications	
PARAMETER	VALUE
CPU	Intel Mobile Pentium III-M microBGA up to 800 MHz LV
L2 Cache	512 kByte on die
Chipset	Intel 82815 GMCH and 82801 ICH2
Specifications	
PARAMETER	VALUE
DRAM CP303	256 MB soldered plus 256 MB 144 pin SODIMM, 512 MB total
DRAM Speed	133 MHz
DRAM CP303 V	up to 512 MB via 144 pin SODIMM only
Specifications	
PARAMETER	VALUE
Ethernet	2x 10/100Base-Tx
Ethernet CP303 Extra	Intel 82559 plus ICH integrated MAC
Graphics	82815 internal 2D/3D or external AGP x4 VGA

Specifications

PARAMETER	VALUE
Graphics Analog	1280 x 1024 x 16 at 75 Hz or 1600 x 1200 x 256 at 60 Hz
USB	4 ports USB 1.1
IDE	two EIDE Ultra ATA 100, 100 MB/s class

Specifications

PARAMETER	VALUE
Serial	two 16C550 compatible RS232 (four total on 8HP)
Firmware Hub	1 MB FWH BIOS
CMOS	256 Byte EEPROM, no battery operation

Specifications

PARAMETER	VALUE
CompactFlash	Type II socket optional
Power Consumption	14 W at 800 MHz
Operating Temperature	minus 40 C to +85 C

Specifications

PARAMETER	VALUE
PICMG	2.0 Rev 3.0, 64 bit 33 MHz system master
VI 0	5 V standard, 3.3 V on request
Front IO 4HP	2x Ethernet, 2x USB, LEDs, CRT or COM1

Specifications

PARAMETER	VALUE
Front IO 8HP	COM1/2, PS/2, reset, IDE floppy LPT pin row
Example SKU	23694 LV Mobile Pentium III-M 800 MHz 256 MB soldered
Status	legacy

Not CP302: CP302 is earlier Mobile Pentium III BGA 400/500/700 MHz

Not CP306: CP306 is Pentium M 855GME

Notes

Specs from Kontron CP303 / CP303-V product page and CP303 datasheet identity (800 MHz LV, 512 kB L2, 815 GMCH, 14 W, minus 40 C to +85 C). Confirm CP303 versus CP303-V, 4HP versus 8HP, and soldered versus SODIMM RAM on the unit.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

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