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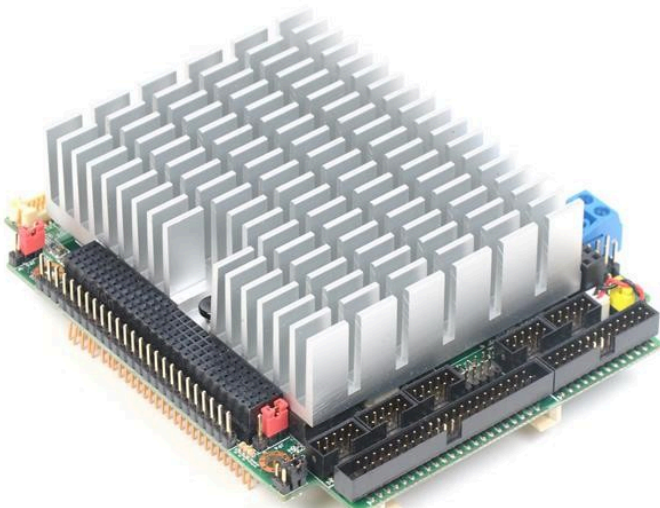
Data Sheet

August 15, 2026

ASUS / AAEON

Asus / Aaeon PFM-550S PC/104 CPU Module with VIA Mark Processor

The Asus/Aaeon PFM-550S is a PC/104 CPU Module, integrating a VIA Mark processor. It supports a wide range of features suitable for embedded applications, including multiple I/O interfaces, onboard memory, and compact design for space-constrained environments.

**MODEL****ASUS / AAEON
PFM-550S****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****PFM-550S****LISTING**<https://aumictechlabs.com/products/pfm-550s-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Asus/Aaeon PFM-550S is a PC/104 CPU module engineered for embedded systems requiring compact form factor, integrated I/O connectivity, and extended temperature operation. Built around a 533 MHz VIA Mark processor paired with VIA Mark + VT82C686B chipset, this module delivers sufficient compute capability for industrial, military, and scientific deployments while maintaining a footprint of 115 mm × 96 mm. Technical Specifications Processor & Memory VIA Mark 533 MHz processor with VT82C686B chipset 144-pin SDRAM SODIMM socket supports up to 512 MB PC-100/133 SDRAM 256 KB FLASH ROM BIOS Lithium battery with hardware status monitoring (power supply voltages and temperature) Watchdog timer with system reset generation Display & Graphics VIA VT8606 chipset with up to 32 MB shared system memory CRT support: 1280×1024 at 24 bpp LCD support: 1024×768 at 18 bpp; 18/24-bit TTL and 18/36-bit

LVDS TFT interfaces Simultaneous CRT/LCD display capability I/O Interfaces Ethernet: Realtek RTL8100BL, 10/100 Base-TX Serial: 1× RS-232, 1× RS-232/485 Parallel port (SPP/EPP/ECP modes) USB: 4× USB 1.1 ports via headers and cables PS/2 keyboard and mouse connector IrDA Tx/Rx header EIDE interface (UDMA 33, single device) Type I CompactFlash slot Floppy Disk Drive connector PC/104+ expansion socket Power & Environmental +5V/AT or +5V-only operation; typical consumption: +5V @ 2.31 A (533 MHz, 512 MB PC-133) Operating temperature: 0°C to 60°C Storage temperature: -40°C to 80°C Operating humidity: 0% to 90% RH (non-condensing) MTBF: 100,000 hours Key Features Compact 115 mm × 96 mm board for space-constrained installations Dual-display support with flexible resolution options Mixed serial protocol support (RS-232/485 switching) Multiple storage interfaces: EIDE, CompactFlash, floppy Integrated real-time monitoring and watchdog functionality Compatibility & Integration Supports WinCE, Linux, WinXPe, and MS-DOS. Optional AC97 audio daughter board (TF-PER-U00A-A12) available for enhanced audio capabilities.

PFM550S Characteristics / Specifications

PARAMETER	VALUE
Model	PFM-550S
Instrument Type	PC/104 CPU module
Family	AAEON PFM embedded CPU
Processor	VIA Mark 533 MHz
Chipset	VIA Mark + VT82C686B
Memory	144-pin SODIMM SDRAM up to 512 MB
Boot Rom	256 kB flash ROM
Ethernet	one 10/100Base-TX
Ide	EIDE UDMA33 × 1
Compactflash	SSD Typelslot
Serial	RS-232 × 1 (COM1), RS-232/485 × 1 (COM2)
Usb	four USB 1.1 ports
Irda	one IrDA Tx/Rx header
Parallel	one parallel port
Ps2	keyboard + mouse x 1
Display Ttl	18/24-bit TTL LCD
Display Lvds	18/36-bit dual LVDS to 1920-class panels per family
Vga Memory	integrated on Mark, up to 32 MB shared frame buffer
Audio	AC97 via audio daughter board
Expansion	PC/104-Plus socket
Watchdog	timeout system reset
Board Size	115 mm x 96 mm
Mass	0.25 kg
Supply	5 V
Operating Temperature	0 C to 60 C

PARAMETER	VALUE
Manufacturer	AAEON / Asus
Literature	AAEON PFM-550S user manual Ch.1 and Electronic Design PFM-550S-A10 note

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 60 C
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Manufacturer	AAEON / Asus
Literature	AAEON PFM-550S user manual Ch.1 and Electronic Design PFM-550S-A10 note Notes From AAEON PFM-550S user manual general information and Electronic Design PFM-550S-A10 item. Artisan example ships 128 MB SODIMM; 512 MB is the socket maximum.

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

From AAEON PFM-550S user manual general information and Electronic Design PFM-550S-A10 item. Artisan example ships 128 MB SODIMM; 512 MB is the socket maximum.

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>

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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.