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**Data Sheet**

August 15, 2026

ASUS / AAEON

# Asus / Aaeon PFM-540I PC/104 Module with AMD Geode LX Processor with Intel LAN Chip

The AAEON PFM-540I is a PC/104 embedded computing module designed for industrial applications requiring compact form-factor integration and fanless operation. Built around the AMD Geode LX800 processor running at 500 MHz, this module delivers reliable computing performance for legacy and embedded systems without active cooling. The single PC/104 expansion socket supports straightforward integration into carrier boards and existing embedded platforms. Hardware watchdog timer with 255 levels; generates timeout-triggered system reset Aumictech offers NIST-traceable calibration and repair for the ASUS / AAEON PFM-540I. Calibration covers analog input channel accuracy and offset at all gain settings, analog output accuracy, digital I/O logic threshold verification, sample rate and timing accuracy, and trigger and synchronization bus functional verification. NI CompactRIO and PXI chassis als



MODEL

**ASUS / AAEON  
PFM-540I**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**PFM-540I**

LISTING

<https://aumictechlabs.com/products/pfm-540i-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The AAEON PFM-540I is a PC/104 embedded computing module designed for industrial applications requiring compact form-factor integration and fanless operation. Built around the

AMD Geode LX800 processor running at 500 MHz, this module delivers reliable computing performance for legacy and embedded systems without active cooling. The single PC/104 expansion socket supports straightforward integration into carrier boards and existing embedded platforms. Technical Specifications CPU: AMD Geode LX800, 500 MHz Chipset: AMD Geode LX800 + CS5536 Memory: 1 x DDR333/400 SODIMM slot; up to 1 GB DDR333 or 512 MB DDR400 BIOS: Award 512 KB FLASH ROM Storage: 1 x EIDE (UDMA33), 1 x CompactFlash Type I, 1 x FDD interface Power: +5V AT type, 1.53A @ +5V typical (500 MHz, DDR400 512 MB configuration) Operating Temperature: 0°C to 60°C Storage Temperature: -40°C to 80°C Operating Humidity: 0–90% relative humidity, non-condensing MTBF: 715,353 hours Physical: 90 mm × 96 mm (3.55" × 3.77") Weight: 0.11 kg (0.25 lb) Key Features Fanless, passively cooled design Hardware watchdog timer with 255 levels; generates timeout-triggered system reset Power supply voltage and temperature monitoring Dual display output: CRT and TTL LCD simultaneous support Video resolutions: up to 1600 × 1200 @ 32 bpp (CRT), 1024 × 768 @ 24 bpp (LCD) 18/24-bit TTL/TFT LCD interface capability 4 × USB 2.0 ports 1 × 10/100Base-TX Ethernet with Realtek RTL8139DL 1 × RS-232 and 1 × RS-232/422/485 serial port 1 × SPP/EPP/ECP parallel port Wake-on-LAN support IR interface with IrDA Tx/Rx header RoHS compliant CE/FCC Class A certified Compatibility & Integration Supports Windows CE, Windows XP Embedded, and Windows XP Professional. The PC/104 connector enables integration with legacy embedded systems and custom carrier boards requiring x86 processing in minimal footprint applications.

## PFM540I Characteristics / Specifications

| PARAMETER                 | VALUE                                                    |
|---------------------------|----------------------------------------------------------|
| Model                     | PFM-540I                                                 |
| Instrument Type           | PC/104 CPU module                                        |
| Family                    | Aaeon PFM-540I Rev.A / Rev.B                             |
| Form Factor               | PC/104 3.55 × 3.77 in (90 × 96 mm)                       |
| Processor                 | onboard AMD Geode LX800 500 MHz                          |
| Chipset                   | AMD Geode LX800 plus CS5536                              |
| Memory                    | DDR333/400 SODIMM x1; 1 GB max DDR333; 512 MB max DDR400 |
| Bios                      | Award 512 KB (Rev.A); Award 1 MB flash on Rev.B listings |
| Watchdog                  | 255 levels                                               |
| Power Requirement         | plus 5 V AT only                                         |
| Power Consumption Typical | 1.53 A at plus 5 V (LX800 500 MHz, DDR400 512 MB)        |
| Operating Temperature     | 0 C to 60 C (32 F to 140 F)                              |
| Storage Temperature       | minus 40 C to 80 C                                       |
| Operating Humidity        | 0 to 90 percent RH non-condensing                        |
| Ethernet Rev A            | 10/100Base-TX Realtek RTL8139DL                          |
| Ethernet Rev B            | 10/100 Intel 82551ER / 82551IT                           |
| Usb                       | USB 2.0 x4                                               |
| Serial Rev A              | RS-232 ×1 and RS-232/422/485 ×1                          |
| Parallel                  | SPP/EPP/ECP x1                                           |
| Ide                       | UDMA33 ×1                                                |
| Compactflash              | TypeIVideo: CRT and TTL LCD; 18/24-bit TFT on Rev.B      |
| Expansion                 | PC/104                                                   |
| Mtbf Rev A                | 715353 hours                                             |
| Certification             | CE/FCC ClassAWake On Lan: yes                            |
| Manufacturer              | Aaeon (Asus/Aaeon listings)                              |

| PARAMETER  | VALUE                                                           |
|------------|-----------------------------------------------------------------|
| Literature | Aaeon PFM-540I Rev.A specification and PFM-540I Rev.B datasheet |
| Humidity   | 0 to 90 percent RH non-condensing                               |

## General Specifications & Supplementary Characteristics

| PARAMETER             | VALUE                                                                                                                                                                                                                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage temperature   | minus 40 C to 80 C                                                                                                                                                                                                                                                                              |
| Operating temperature | 0 C to 60 C (32 F to 140 F)                                                                                                                                                                                                                                                                     |
| Operating Temperature | 0 C to 60 C (32 F to 140 F)                                                                                                                                                                                                                                                                     |
| Humidity              | 0 to 90 percent RH non-condensing                                                                                                                                                                                                                                                               |
| Operating Humidity    | 0 to 90 percent RH non-condensing                                                                                                                                                                                                                                                               |
| Ethernet Rev A        | 10/100Base-TX Realtek RTL8139DL                                                                                                                                                                                                                                                                 |
| Ethernet Rev B        | 10/100 Intel 82551ER / 82551IT                                                                                                                                                                                                                                                                  |
| Usb                   | USB 2.0 x4                                                                                                                                                                                                                                                                                      |
| Serial Rev A          | RS-232 ×1 and RS-232/422/485 ×1                                                                                                                                                                                                                                                                 |
| Parallel              | SPP/EPP/ECP x1                                                                                                                                                                                                                                                                                  |
| Ide                   | UDMA33 ×1                                                                                                                                                                                                                                                                                       |
| Compactflash          | TypeIVideo: CRT and TTL LCD; 18/24-bit TFT on Rev.B                                                                                                                                                                                                                                             |
| Expansion             | PC/104                                                                                                                                                                                                                                                                                          |
| Mtbf Rev A            | 715353 hours                                                                                                                                                                                                                                                                                    |
| Certification         | CE/FCC ClassAWake On Lan: yes                                                                                                                                                                                                                                                                   |
| Manufacturer          | Aaeon (Asus/Aaeon listings)                                                                                                                                                                                                                                                                     |
| Literature            | Aaeon PFM-540I Rev.A specification and PFM-540I Rev.B datasheet<br>Notes From Aaeon PFM-540I Rev.A/B datasheets (LX800 500 MHz,<br>1.53 A at 5 V, 90×96 mm, 0-60 C). Queue title cites Intel LAN, which is<br>Rev.B 82551ER; Rev.A uses RTL8139DL. Confirm revision on the<br>installed module. |

# 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            |                                                          |
|---------------------------|----------------------------------------------------------|
| Technical Specifications  |                                                          |
| PARAMETER                 | VALUE                                                    |
| Model                     | PFM-540I                                                 |
| Instrument Type           | PC/104 CPU module                                        |
| Family                    | Aaeon PFM-540I Rev.A / Rev.B                             |
| Form Factor               | PC/104 3.55 x 3.77 in (90 x 96 mm)                       |
| Processor                 | onboard AMD Geode LX800 500 MHz                          |
| Chipset                   | AMD Geode LX800 plus CS5536                              |
| Memory                    | DDR333/400 SODIMM x1; 1 GB max DDR333; 512 MB max DDR400 |
| Bios                      | Award 512 KB (Rev.A); Award 1 MB flash on Rev.B listings |
| Watchdog                  | 255 levels                                               |
| Power Requirement         | plus 5 V AT only                                         |
| Power Consumption Typical | 1.53 A at plus 5 V (LX800 500 MHz, DDR400 512 MB)        |
| Operating Temperature     | 0 C to 60 C (32 F to 140 F)                              |
| Storage Temperature       | minus 40 C to 80 C                                       |
| Operating Humidity        | 0 to 90 percent RH non-condensing                        |
| Ethernet Rev A            | 10/100Base-TX Realtek RTL8139DL                          |
| Ethernet Rev B            | 10/100 Intel 82551ER / 82551IT                           |
| Usb                       | USB 2.0 x4                                               |
| Serial Rev A              | RS-232 x1 and RS-232/422/485 x1                          |
| Parallel                  | SPP/EPP/ECP x1                                           |
| Ide                       | UDMA33 x1                                                |
| Compactflash              | Type I                                                   |
| Video                     | CRT and TTL LCD; 18/24-bit TFT on Rev.B                  |
| Expansion                 | PC/104                                                   |
| Mtbf Rev A                | 715353 hours                                             |
| Certification             | CE/FCC Class A                                           |
| Wake On Lan               | yes                                                      |

| PARAMETER    | VALUE                                                           |
|--------------|-----------------------------------------------------------------|
| Manufacturer | Aaeon (Asus/Aaeon listings)                                     |
| Literature   | Aaeon PFM-540I Rev.A specification and PFM-540I Rev.B datasheet |

### Specifications

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| Bios                      | Award 512 KB (Rev.A); Award 1 MB flash on Rev.B listings        |
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| Ethernet Rev A            | 10/100Base-TX Realtek RTL8139DL                                 |
| Ethernet Rev B            | 10/100 Intel 82551ER / 82551IT                                  |
| Usb                       | USB 2.0 x4                                                      |
| Serial Rev A              | RS-232 x1 and RS-232/422/485 x1                                 |
| Parallel                  | SPP/EPP/ECP x1                                                  |
| Ide                       | UDMA33 x1                                                       |
| Compactflash              | TypeIVideo: CRT and TTL LCD; 18/24-bit TFT on Rev.B             |
| Expansion                 | PC/104                                                          |
| Mtbf Rev A                | 715353 hours                                                    |
| Certification             | CE/FCC ClassAWake On Lan: yes                                   |
| Manufacturer              | Aaeon (Asus/Aaeon listings)                                     |
| Literature                | Aaeon PFM-540I Rev.A specification and PFM-540I Rev.B datasheet |

#### Notes

From Aaeon PFM-540I Rev.A/B datasheets (LX800 500 MHz, 1.53 A at 5 V, 90x96 mm, 0-60 C). Queue title cites Intel LAN, which is Rev.B 82551ER; Rev.A uses RTL8139DL. Confirm revision on the installed module.

### Available from Aumictech

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

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

#### Aumictech

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NIST-traceable calibration · SAM registered ·  
30-day returns  
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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.