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**Data Sheet**

August 15, 2026

EMERSON / MOTOROLA

# Emerson / Motorola PPMC750-1241 Processor PCI Mezzanine Card

The Emerson/Motorola PPMC750-1241 is a single-wide PCI Mezzanine Card (PMC) processor module built around the PowerPC 750 microprocessor running at 350 MHz. Leveraging Motorola PowerPlus II architecture, it delivers 32-bit processing with a 64-bit PCI host bridge operating at 33 MHz, making it suited for embedded systems where size and performance must coexist. The module integrates 64 MB of ECC SDRAM, 1 MB L2 backside cache, 8 MB Flash memory, and a 144-bit ECC memory controller ASIC to ensure data integrity in applications. I/O Connector: Pn4 connector supporting Flash expansion, JTAG, and COP debug features 144-bit ECC memory controller provides single-error correction and double-error detection Aumictech offers NIST-traceable calibration and repair for the Emerson / Motorola PPMC750-1241. Calibration covers analog input channel accuracy and offset at all gain settings, analog outp



MODEL

**Emerson /  
Motorola  
PPMC750-1241**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**PPMC750-1241**

LISTING

<https://aumictechlabs.com/products/ppmc750-1241-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

**This unit**

The Emerson/Motorola PPMC750-1241 is a single-wide PCI Mezzanine Card (PMC) processor module built around the PowerPC 750 microprocessor running at 350 MHz. Leveraging Motorola PowerPlus II architecture, it delivers 32-bit processing with a 64-bit PCI host bridge operating at 33 MHz, making it suited for embedded systems where size and performance must coexist. The module integrates 64 MB of ECC SDRAM, 1 MB L2 backside cache, 8 MB Flash memory, and a 144-bit ECC memory controller ASIC to ensure data integrity in applications.

**Technical Specifications**

**Processor:** PowerPC 750, 350 MHz  
**Memory:** 64 MB ECC SDRAM; 1 MB L2 cache; 8 MB Flash  
**Memory Controller:** 144-bit ECC ASIC  
**PCI Interface:** 64-bit host bridge, 33 MHz  
**Timers:** Four 32-bit general timers; two watchdog timers  
**Serial Port:** One asynchronous I/O  
**Connector:** Pn4 connector supporting Flash expansion, JTAG, and COP debug features  
**Power:** 1.0 A typical, 1.5 A maximum  
**Form Factor:** Single-wide PMC module  
**PCB Rating:** 94V-0 (UL recognized)

**Key Features**

- 64-bit PCI host bridge enables high-bandwidth host system communication
- 144-bit ECC memory controller provides single-error correction and double-error detection
- Dual watchdog timers support system fault detection and recovery
- Flexible I/O through Pn4 connector with JTAG/COP debug support
- Low power envelope: 1.5 A maximum current draw
- Standards-compliant PMC architecture for plug-and-play integration

**Typical Applications**

- Multiprocessor embedded systems requiring loosely-coupled architectures
- Space-constrained computing environments demanding PowerPC processing
- Industrial control and data acquisition systems
- Real-time embedded applications with ECC memory requirements

**Compatibility & Integration**

Designed for PCI-based carrier boards supporting PMC modules. Compliant with FCC Part 15 Subpart B Class A (non-residential) and Canada ICES-003 Class A (non-residential). CE marked per European EMC Directive 89/336/EEC; emissions conform to EN55022 Class A; immunity meets EN55024.

## PPMC7501241 Characteristics / Specifications

| PARAMETER               | VALUE                             |
|-------------------------|-----------------------------------|
| Model Family            | PPMC750 PrPMC750                  |
| Processor               | PowerPC MPC750                    |
| Cpu Speed 1141 Class    | 233 MHz                           |
| Cpu Speed 1241 Class    | 350 MHz                           |
| L2 Cache                | 1 MB                              |
| Flash Memory            | 8 MB                              |
| Dram 11                 | 32 MB                             |
| Dram 12                 | 128 MB                            |
| Memory Type             | ECC SDRAM                         |
| Form Factor             | PMC standard size                 |
| Bus Interface           | PCI mezzanine                     |
| Manufacturer            | Motorola Emerson                  |
| Also Known As           | PrPMC750                          |
| Debug Support           | on-chip emulation class           |
| Addressing              | PowerPC memory map                |
| Operating Systems Class | VxWorks and other PowerPC BSPs    |
| Carrier Compatibility   | PMC on VME cPCI carriers          |
| Power Rails Class       | PMC 3.3 V 5 V                     |
| Cooling Class           | conduction or airflow per carrier |
| Temperature Class       | commercial embedded               |
| Humidity Class          | non condensing                    |
| Firmware                | flash boot firmware               |
| Humidity                | Class: non condensing             |

# PPMC7501241 Specifications

| PARAMETER                                                | VALUE                          |
|----------------------------------------------------------|--------------------------------|
| Emerson Motorola PPMC750 Processor<br>PCI Mezzanine Card | Overview                       |
| Key Features                                             | PowerPC 750 processor PMC      |
| Technical Specifications                                 | Model Family: PPMC750 PrPMC750 |

# 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 Family                                                                  | PPMC750 PrPMC750                  |
| Processor                                                                     | PowerPC MPC750                    |
| Cpu Speed 1141 Class                                                          | 233 MHz                           |
| Cpu Speed 1241 Class                                                          | 350 MHz                           |
| L2 Cache                                                                      | 1 MB                              |
| Flash Memory                                                                  | 8 MB                              |
| Dram 1131                                                                     | 32 MB                             |
| Dram 1141                                                                     | 64 MB                             |
| Dram 1231                                                                     | 32 MB                             |
| Dram 1241                                                                     | 64 MB                             |
| Dram 1251                                                                     | 128 MB                            |
| Memory Type                                                                   | ECC SDRAM                         |
| Form Factor                                                                   | PMC standard size                 |
| Bus Interface                                                                 | PCI mezzanine                     |
| Manufacturer                                                                  | Motorola Emerson                  |
| Also Known As                                                                 | PrPMC750                          |
| Model PPMC750-1141: 233 MHz 64 MB DRAM Model PPMC750-1241: 350 MHz 64 MB DRAM |                                   |
| Specifications                                                                |                                   |
| PARAMETER                                                                     | VALUE                             |
| Debug Support                                                                 | on-chip emulation class           |
| Addressing                                                                    | PowerPC memory map                |
| Operating Systems Class                                                       | VxWorks and other PowerPC BSPs    |
| Carrier Compatibility                                                         | PMC on VME cPCI carriers          |
| Power Rails Class                                                             | PMC 3.3 V 5 V                     |
| Cooling Class                                                                 | conduction or airflow per carrier |

| PARAMETER         | VALUE               |
|-------------------|---------------------|
| Temperature Class | commercial embedded |
| Humidity Class    | non condensing      |
| Firmware          | flash boot firmware |

Notes

From Motorola PrPMC750 Installation and Use manual model table. PPMC750-1141 and PPMC750-1241 map to the 233 MHz 64 MB and 350 MHz 64 MB rows.

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