Motorola MVME5100

Installation & Commissioning | field workflow

Use this guide to prepare, fit, test and document the offered MVME5100 within its actual installed system.

Exact offered identity	MVME5100
Engineering role	PowerPlus II VME Processor Module
Installed-system reference	MVME5100 PowerPlus II VME processor series

Before work starts

MVME5100 is a family-level marking. Motorola lists different full order configurations for processor, memory and temperature class, so none of those variant values is assigned to this unqualified unit.

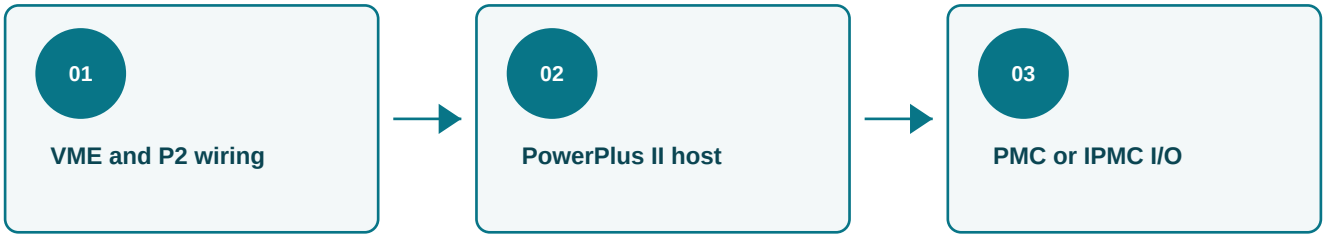
Record first

Send the complete MVME5100 marking, installed revision, quantity and system configuration with your enquiry.

Work package

Architecture	Motorola PowerPlus II VME
Base expansion	Two IEEE P1386.1 PMC positions
Ethernet	Dual 10/100BaseT interfaces in series architecture
Serial	Two 16550-compatible asynchronous ports in series architecture

Engineering path



02 Pre-installation readiness

STEP	ACTION	ACCEPTANCE
01	Identify variant	Read the complete board order code and revision before selecting CPU or memory-specific software.
02	Disconnect safely	Isolate chassis power and mark front/rear cables before extracting the board.
03	P2 jumper mode	Record PMC or IPMC selection and compare it with the transition hardware.
04	Mezzanine population	Document RAM500, PMC and IPMC cards and their exact slot positions.

Companion and host check

Confirm the complete board label, fitted RAM500 and IPMC/PMC modules, P2 mode and transition hardware in the quotation; host software and rear cabling are separate.

03 Fit and interface

VME compute host

Run the existing processor application with its original firmware and VME bus configuration.

PMC customization

Retain fitted PMC cards and their front or P2 field connections when the base board is exchanged.

Legacy rear I/O

Use MVME761 or MVME712M paths only with the matching IPMC module and adapter arrangement.

Network and serial service

Restore the intended Ethernet and console connections, then validate the application protocol after boot.

Configuration identity

Record the full board order suffix and any RAM500, PMC or IPMC population before selecting a spare.

04 Commission and prove

STEP	ACTION	ACCEPTANCE
01	Boot state	Back up firmware settings, boot image and network identity before replacement.
02	Return-to-service proof	Test VME startup, both used communications paths and every fitted expansion function.

STEP	ACTION	ACCEPTANCE
03	Record the functional result	Prove firmware startup, the identified memory and processor build, VME transactions, active network/serial paths and all fitted PMC or IPMC functions.

P2 compatibility

PMC mode and IPMC mode expose different rear-I/O signals; compare jumper position with the original transition module.

05 Handover record

Log the fitted marking, firmware or board revision, wiring changes and measured acceptance results.

Diagnostic decisions

How should MVME5100 boot data be protected?	Capture monitor settings, storage path and network parameters; verify the replacement uses the correct software image for its complete board configuration.
What Ethernet checks matter on MVME5100?	Identify the selected front or rear port, confirm cable and link, then validate host addressing and real application traffic.
Why can an apparently matching MVME5100 still fail in a chassis?	Different full order variants, P2 mode, RAM mezzanines and transition modules can change the installed interface map. Compare all of them to the working assembly.
What should an MVME5100 acceptance test include?	Prove firmware startup, the identified memory and processor build, VME transactions, active network/serial paths and all fitted PMC or IPMC functions.

Discuss the complete model and fitted revision with Apter Power.
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Technical basis: Motorola MVME5100 Series VME Processor Modules, M5100-D13, 12/02