Motorola MVME31006E-1152

Installation & Commissioning | field workflow

Use this guide to prepare, fit, test and document the offered MVME31006E-1152 within its actual installed system.

Exact offered identity	MVME31006E-1152
Engineering role	VMEbus MPC8540 Single-Board Computer
Installed-system reference	MVME3100 6E VME single-board computer

Before work starts

The exact MVME31006E-1152 order row identifies its 667 MHz processor, 256 MB DDR, 64 MB flash, Gigabit Ethernet, SATA and IEEE handles. The higher-memory -1263 version is a different order code.

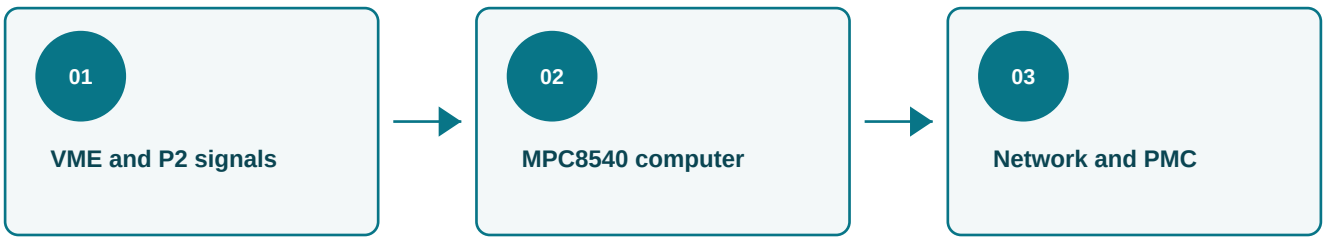
Record first

Send the complete MVME31006E-1152 marking, installed revision, quantity and system configuration with your enquiry.

Work package

CPU	667 MHz MPC8540 PowerPC e500
DDR memory	256 MB
Soldered flash	64 MB
VME protocol	VME64 with 2eSST-capable series interface

Engineering path



02 Pre-installation readiness

STEP	ACTION	ACCEPTANCE
01	Isolate power	Shut down the VME chassis and connected peripherals before removing the processor.
02	6E mechanical match	Check IEEE handle, slot and rear-transition clearance for this 6E execution.
03	P2 routing	Identify which Ethernet and serial connections run through P2 and the installed RTM.
04	PMC and storage	Record fitted mezzanines, SATA cabling and boot media; do not assume the base board supplies them.

Companion and host check

Confirm the exact 6E board and any PMC cards, rear transition module, storage device and firmware image in the offer; these accessories are installation-dependent.

03 Fit and interface

VME application processing

Use the MPC8540 board to run a supported PowerPC application with the installed VME address and interrupt map.

Backplane data exchange

Apply 2eSST only where peer boards and the chassis backplane are verified for that protocol; legacy VME transfers remain an integration consideration.

Networked control

Route the intended Gigabit or 10/100 port through its documented front or rear path and restore host addressing.

Peripheral expansion

Use PMC-X and SATA functions only with the fitted cards, power budget and software drivers recorded for the machine.

Order-code boundary

The 6E-1152 row specifies 256 MB DDR and 64 MB flash; -1263 has a different processor and memory build.

04 Commission and prove

STEP	ACTION	ACCEPTANCE
01	MOTLoad state	Preserve firmware and environment settings before changing flash or boot selection.
02	Acceptance testing	Run board diagnostics, confirm memory and flash identification, then exercise VME, network and application I/O.

STEP	ACTION	ACCEPTANCE
03	Record the functional result	Confirm MOTLoad and memory tests, expected VME transactions, selected network and SATA functions, and all application-specific PMC channels against the prior system record.

Rear interface

Match the installed MVME721-type rear transition arrangement before using P2 network or serial ports.

05 Handover record

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

Diagnostic decisions

How should SATA devices be checked with MVME31006E-1152?	Confirm controller mode, cable route, device power and boot configuration, then verify the device is visible to the chosen software image.
Which PMC checks matter when exchanging MVME31006E-1152?	Compare mezzanine identity, slot position, PCI/PMC driver and field cable path; a working base processor does not prove optional I/O.
Why can a network link appear healthy while MVME31006E-1152 remains offline?	Physical link is only the first layer. Check the exact port, address, booted application and host protocol before diagnosing the board as failed.
What demonstrates a successful MVME31006E-1152 replacement?	Confirm MOTLoad and memory tests, expected VME transactions, selected network and SATA functions, and all application-specific PMC channels against the prior system record.



Discuss the complete model and fitted revision with Apter Power.
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Technical basis: SMART Embedded Computing MVME3100 Data Sheet, MVME3100-DS, 21Feb2020