

HP 2102B Memory Controller installation manual



HEWLETT-PACKARD COMPANY
11000 WOLFE ROAD, CUPERTINO, CALIFORNIA, 95014

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INTRODUCTION

This manual provides installation instructions for the HP 2102B Memory Controller, for use in HP 21MX E-Series and M-Series Computers. For additional information, refer to the following manuals:

- a. *HP 21MX E-Series Computer Operating and Reference Manual* part no. 02109-90001.
- b. *HP 21MX E-Series Computer Installation and Service Manual*, part no. 02109-90002.
- c. *HP 21MX Computer Series Reference Manual*, part no. 02108-90002.
- d. *HP 21MX Computer Series Installation and Service Manual*, part no. 02108-90006.

DESCRIPTION

The HP 2102B Memory Controller provides interfacing capability between the central processor unit (CPU) and one or more memory modules. The memory controller, which also provides parity generation and checking as a standard feature, consists of the following:

- a. One memory controller printed circuit assembly (PCA), part no. 02102-60001.
- b. One memory cable assembly, part no. 02112-60015.

INSTALLATION

Refer to figure 1 and install the memory computer as follows:

- a. Switch off computer ~LINE power and battery supply.
- b. Lower the operator panel to the access position.
- c. Remove memory PCA retainer from memory PCA cage.
- d. Configure memory controller jumpers as shown in figure 2.
- e. Install memory controller, with component side up, in the bottom computer memory slot as follows (this is the recommended configuration):

| COMPUTER | MEMORY SLOT |
|--------------|-------------|
| HP 2105 | 115 |
| HP 2108/2109 | 118 |
| HP 2112/2113 | 123 |

- f. Connect memory cable assembly between memory controller PCA connector J1 and all memory module J1 connectors.
- g. If desired, a sharp knife or scissors may be used to remove the unused connector(s) from the cable assembly.
- h. Reinstall memory PCA retainer and operator panel.

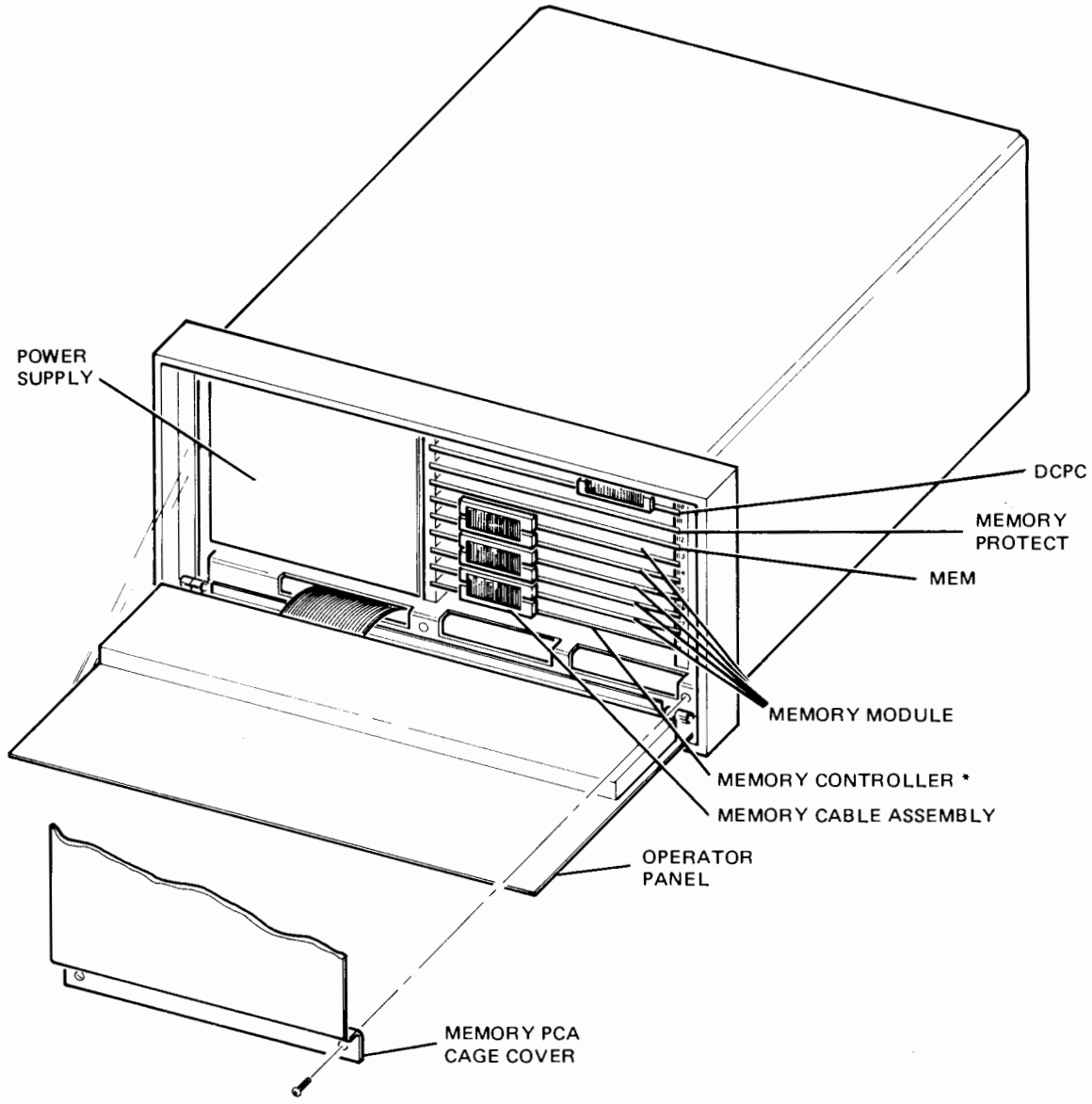
CHECKOUT

After installing the HP 2102B Memory Controller, verify proper operation by performing the following diagnostic checks:

| DIAGNOSTIC* | MANUAL PART NO. | ABSOLUTE BINARY PROGRAM NUMBER |
|----------------------|-----------------|--------------------------------|
| Semiconductor Memory | 24395-90001 | 24395-16001 |
| Memory Parity Error | 02100-90221 | 02100-16221 |

If the diagnostic test is completed without an error halt, the memory controller is operating correctly. If the diagnostic test indicates an error halt, notify your nearest Hewlett-Packard Sales and Service Office. A list of HP Sales and Service Offices is given in the appropriate computer *Reference Manual* and *Installation and Service Manual*.

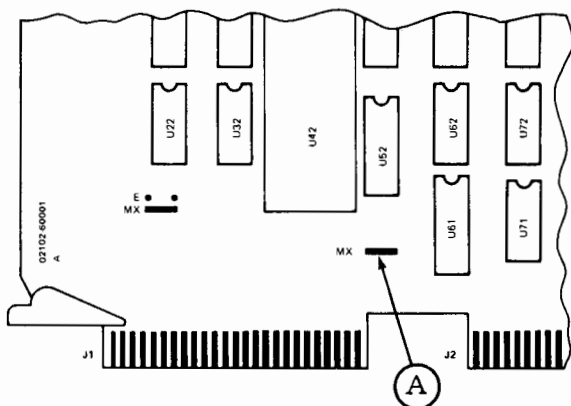
*The absolute binary code for this diagnostic is contained on one or more media (e.g., paper tape, mini-cartridge tape, discs, and magnetic tape). The binaries also exist on single as well as multiple files. For the current date code(s) associated with these media, refer to appendix A in the *Diagnostic Configurator Reference Manual*, part no. 02100-90157, dated January 1977 or later.



(2109 SHOWN AS TYPICAL)

* IT IS RECOMMENDED THAT THE MEMORY CONTROLLER BE INSTALLED IN SLOT 118 (2108/2109) AND SLOT 123 (2112/2113).

Figure 1. Installation details



Install jumpers in indicated positions

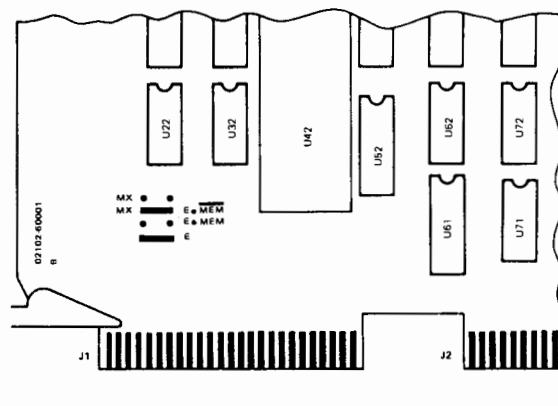
MX = 21MX M-Series Computer

E = 21MX E-Series Computer

A For 21MX E-Series Computer with Memory Expansion Module (MEM) not installed, also install "MX" jumper near U61.

Board as shown configured for a 21MX M-Series Computer.

Revision "A" Board



Install jumpers in indicated positions
(There will always be 2 jumpers installed)

MX = 21MX M-Series Computer

E • MEM = 21MX E-Series Computer, Memory Expansion Module (MEM) Not Installed

E • MEM = 21MX E-Series Computer, Memory Expansion Module (MEM) not installed.

E = 21MX E-Series Computer

Board as shown configured for a 21MX E-Series Computer, MEM not installed.

Revision "B" Board

NOTE:

Two different board layouts are possible. Determine board revision from letter ("A" or "B") on board as shown, then use appropriate figure to configure Memory Controller.



Figure 2. Memory Controller Jumper Configuration

