

HP Documentation

HP 3000 Model 9x8 LX/RX Owner's Guide (A2051-90003)

HP 3000 Model 9x8 and HP 9000/E-Class Computer Systems Memory Upgrade Manual (A2051-90009)

Determine System Memory Size

Perform an orderly shutdown of the MPE operating system. Reference the Owner's Guide for detailed instructions.

The shutdown steps are as follows:

- (1) Log on as **manager.sys**
- (2) Press Ctrl-A and enter SHUTDOWN.
- (3) After the messages **Shut 16** and **Shut 6** have been display, turn off the system power. The power button is located in the upper left corner of the SPU's front panel.

Reboot the system, at the Boot Console Interface prompt (PDC>), type *ma* to get the main menu. Then type *in* to get the information menu. Then type *me* to get the memory information. The memory status table provides the size of the cards installed in each slot and the system memory size.

System Shutdown

Perform an orderly shutdown of the MPE operating system. Reference the Owner's Guide for detailed instructions (see above).

If the system is connected to an UPS, put the UPS output switch in the OFF (0) position. Disconnect the system power cable and the power cord of any peripheral devices from the ac wall outlets or UPS.

Remove Cables from the Rear Panel

Label each cable and its corresponding point of attachment to make it easier to reconnect it after you have finished the installation.

Remove all the cables from the rear panel

Remove CPU Card

Loosen the two captive mounting screws on the Memory/CPU cover plate using a Torx screwdriver. Remove the cover plate. Attach the ESD Wrist Strap using the instructions on the 3M package. Loosen the two captive mounting screws that hold the CPU card. Pull the extraction tabs on the CPU card and slide the card out of the SPU cabinet. Place the CPU on an antistatic bag or pad. Position the card with the backplane connector facing you.

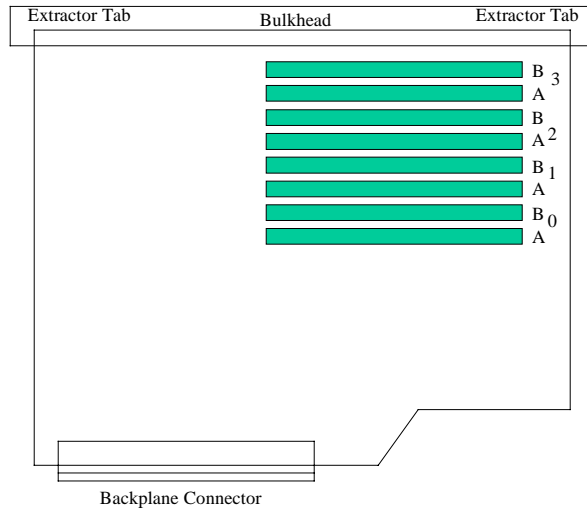
Install Memory Cards

The CPU card has eight memory connector slots. The slots are labeled Slot 0 A&B, Slot 1 A&B, Slot 2 A&B, and Slot 3 A&B. (see figure below). The memory cards must be installed in sets of two. If you install a card in slot 3A, you must install a card in slot 3B. The slots should be loaded starting with slot 3 (A & B) then slot 2, then slot 1, then slot 0. This is due to the angle the memory cards are inserted into the connectors during installation. Memory sets can be installed in any order but they must be installed as pairs where each card in the pair is the same size.

To install a SIMM, position the SIMM so that the notched corner is at the right side of the CPU. Then tilt the top edge away from the bulkhead at about a 45 degree angle to the CPU card. Insert the SIMM into the slot. When the SIMM is seated, rotate it into a vertical (upright) position. The retaining clips on the CPU card will snap into place and should hold the SIMM firmly.

To remove a SIMM, push the two slot clips out and then tilt its top toward the bulkhead of the system unit. Lift the memory card up and out of the connector.

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Verify SIMMs are Seated Correctly

After all the SIMMs have been installed, check to ensure that they are seated evenly and that all the SIMMs are the same height. An incorrectly seated SIMM may stick out above the other.

System Reassembly

Slide the CPU card back into the system. Screw the card into place. Attach the Memory/CPU cover plate using the two screws. Reconnect the I/O cables. Reconnect the power cords.

Verify the New System Memory

Power up the peripherals first, then power up the system. The system memory is automatically configured to the system by the software. If there is a problem with the installed memory, then the boot process could be halted. The system displays the amount of memory installed before it boots up MPE.

At the Boot Console Interface prompt (PDC>), type *ma* to get the main menu. Then type *in* to get the information menu. Then type *me* to get the memory information. The memory status table provides the size of the cards installed in each slot and the system memory size.

If the system has errors or the memory status table does not reflect the expected configuration then the possible error sources are the SIMMs are not seated properly, the SIMMs are not paired, or an incorrect value matching of paired SIMMs. If errors exist or the table does not reflect the expected configuration, then repeat the installation procedure but take special care to seat the SIMMs properly and in the correct pair sizes and sequence.

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