

MS7CC Memory Upgrade

EK-MS7CC-UI. A01

This document explains how to upgrade MS7CC memory modules (see Table 1) used in AlphaServer 8200/8400 systems and how to transfer SIMMs from the MS7AA-FA memory module used in VAX and DEC 7000 systems to the memory module used in AlphaServer 8200/8400 systems.

Upgrade options are:

- MS7CC-UA 16 8-MB SIMMs; to be added to the E2035 module that has 8-MB SIMMs; upgrades a 128 MB module to 256 MB
- MS7CC-UB 16 32-MB SIMMs; to be added to the E2035 module that has 32-MB SIMMs or to replace 8-MB SIMMs on the E2035 module
- MS7CC-UC An empty E2036-AA module to be populated with 32 SIMMs removed from a 2-Gbyte E2055-CA module used in a DEC or VAX 7000 system

Table 1 Memory Modules and Related SIMMs (AlphaServer 8200/8400)

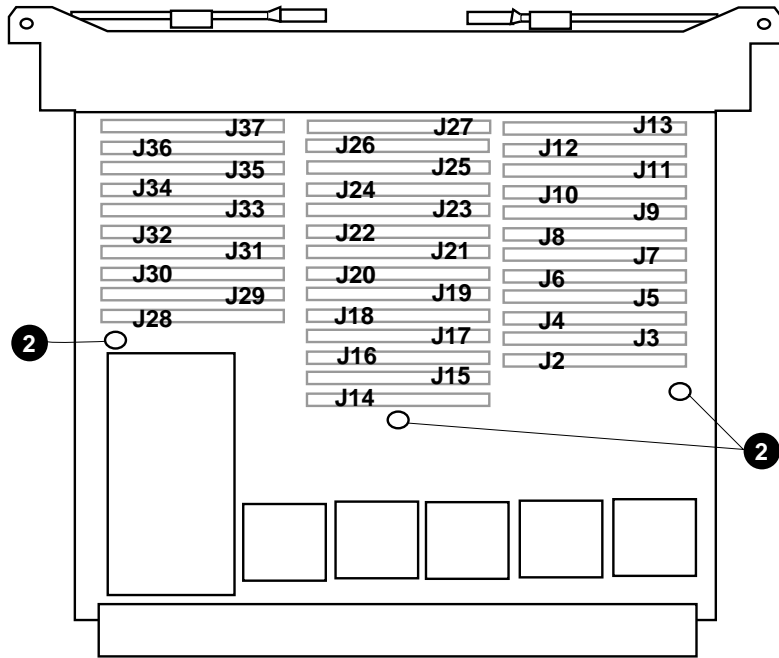
Memory (Size)	Motherboard Part Number	SIMM Part Number
MS7CC-BA (128 MB)	E2035-AA	54-21724-01 (8 MB)
MS7CC-CA (256 MB)	E2035-AA	54-21724-01 (8 MB)
MS7CC-DA (512 MB)	E2035-AA	54-21726-01 (32 MB)
MS7CC-EA (1 GB)	E2035-AA	54-21726-01 (32 MB)
MS7CC-FA (2 GB)	E2036-AA	54-21718-01 (64 MB)

NOTE: Different size SIMMs must not be installed on the same module. 8 or 32 MB SIMMs must not be installed on the 2 GB module (E2036).

Tools required: Small Phillips screwdriver, adjustable wrench, torque wrench

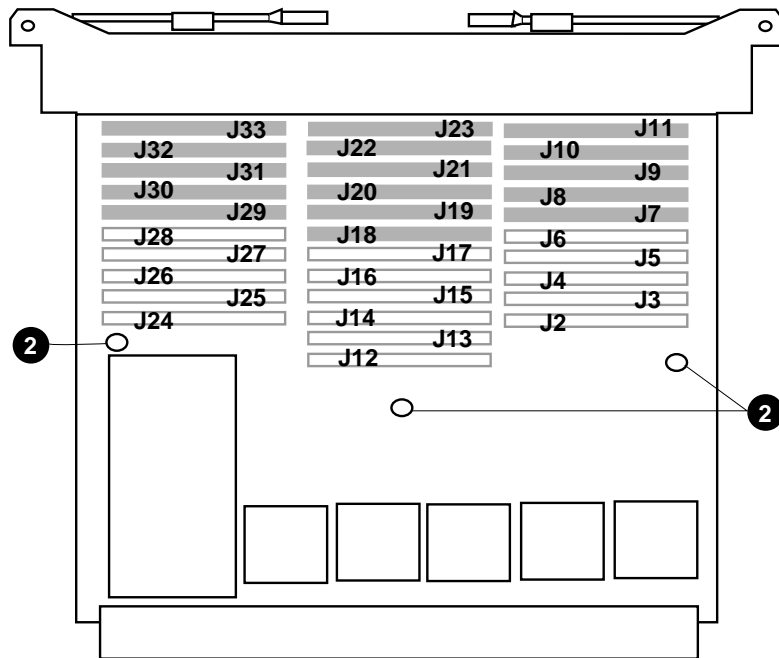
Module return required: Empty E2055-CA modules must be returned to Digital.

Figure 1 SIMM Connector Numbers — E2036 (2-Gbyte) Module



BX-0770A-95

Figure 2 SIMM Connector Numbers — E2035 Module



BX-0771A-95

Where to Insert SIMMs

Figure 1 shows the location of connectors on the E2036 memory module. Fill the module with the SIMMs taken from the E2055-CA module. Start inserting the SIMMs at J13, J27, and J37 and fill each row.

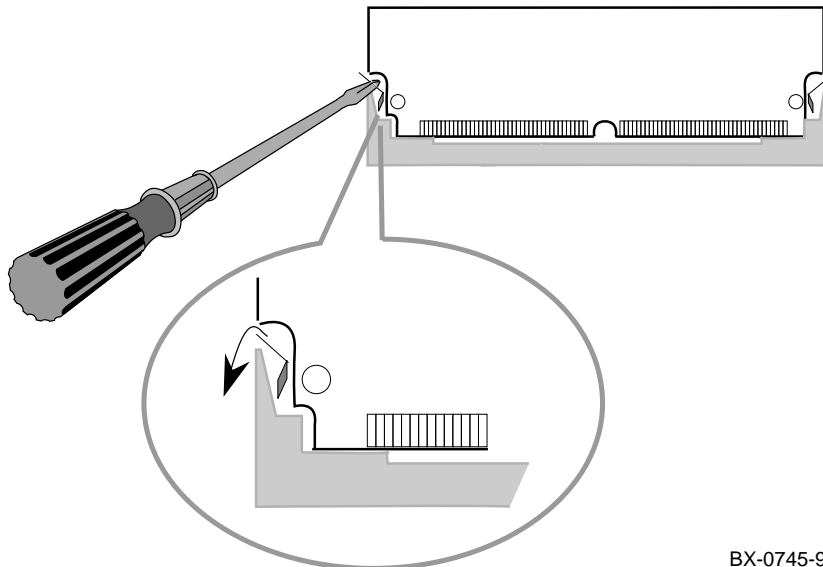
Figure 2 shows the location of connectors on the E2035 memory module. The shaded portion shows the area to be filled in a partially populated module. Start inserting the SIMMs at J11, J23, and J33 and fill each row or the connectors indicated in the shaded portion of the figure.

SIMM Removal and Replacement

CAUTION: You must wear an antistatic wrist strap when you handle any modules.

1. Place the module on an ESD pad on a level surface. Remove both covers by removing the screws from each. (The screws that attach to the end plate of the module are larger than those that attach to the standoffs.)
2. Remove any dust covers on the module used to cover unpopulated areas.
3. Remove the standoff at the end of each row. See ❷ in Figures 1 and 2. Hold the standoff on side 1 with your fingers as you turn it with an adjustable wrench on side 2.
4. Remove SIMMs from the module beginning with those closest to the gate arrays. Release the latches on both ends of the SIMM connector by carefully inserting a small Phillips screwdriver into the slot and pressing down. See Figure 3.

Figure 3 Removing a SIMM



BX-0745-94

5. For where to insert SIMMs and which connectors to fill first, see the description above. Insert the SIMM at a 45 degree angle. As you rotate it to an upright position, the latches will snap into place. (The SIMM is keyed on the sides and in the center so that the correct side faces front.)
6. Replace the standoffs. The square standoff goes on side 1 (the component side) and the hexagonal standoff on side 2. Torque the standoffs on side 2 to 12 inch-pounds (15 inch-pounds maximum).
7. Install dust covers over any unpopulated areas of the module.
8. Replace the module covers.

Installation in System

Install the memory module and power up the system.

CAUTION: Modules must be inserted from left to right to avoid damaging EMI gaskets on modules. Disconnect modules from the backplane to the right of where the memory module is to be inserted. Install the memory module in the backplane and then any other modules to its right.

Verification

Check the self-test display to see that all memory modules pass self-test as indicated by plus signs in the console display. The last line of the display gives the size of the memory modules. Then check to see that all SIMMs are good by entering the **show_simm** command. You must first enter set **simm_callout on** and then initialize the system. Look for a “no error” message.

```
P00>>> set simm_callout on
P00>>> init
        [self-test display appears]
P00>>> show simm
        [test message appears]
P00>>> set simm_callout off
```