

KN7CC CPU INSTALLATION CARD

Use this card as a quick reference to install the KN7CC CPU module (E2056) in AlphaServer 8200/8400 systems.

For more information, refer to the *AlphaServer 8200/8400 Service Manual* (EK-T8030-SV). If you are doing an upgrade from a VAX or DEC 7000 system, see the *AlphaServer 8400 Upgrade Manual* (EK-T8430-UI).

Overview

- Before turning off power, note the console firmware version.
- Determine where to install the new KN7CC modules.
- Run LFU on new modules, one at a time, with no other CPUs installed.
- Install all CPU modules.
- Power up the system.
- Build the EEPROMs, if necessary.
- Copy the EEPROM information to the new CPUs.

Determine Where to Install Modules

Determine the new configuration for modules in the TLSB card cage. In an 8400, CPUs are installed beginning at slot 0, and in an 8200 CPUs begin at slot 4.

8400 Front		8200 Front	8400 Rear	
		First CPU (8200)		4
3		CPU or Memory		5
2	Additional CPUs	I/O, CPU, Memory		6
1	or Memories	I/O or Memory		7
0	First CPU (8400)	I/O Module		8

BX-0307-95

Identify the New Module's Console Version

All CPU modules must have the same version of firmware. Results are unpredictable if processor modules have different firmware revisions.

To identify the version:

1. Power down the system.
2. Disconnect all KN7CC modules from the backplane.
3. Install a new KN7CC module in the desired slot, following the procedure in the next step.
4. Power up the system and note the console version given in the last line of the self-test display.
5. If the new module console firmware is the same version as was on the system, power down the system and remove the module. Repeat this procedure for each new module.

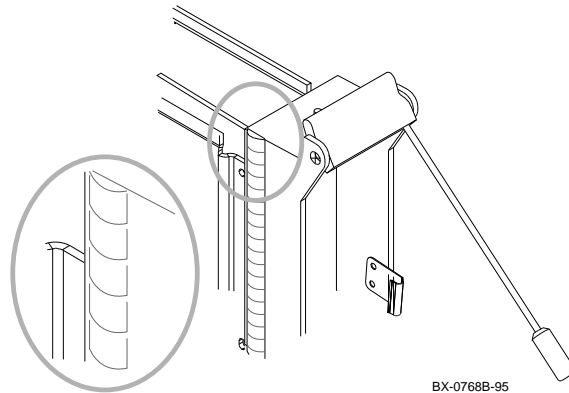
If the console version is different, upgrade the firmware using LFU, as shown below.

Install KN7CC CPU Module

1. Turn off the system at the control panel and wait for the yellow Fault LED to stop flashing. When the LED stops flashing, power has been removed from the TLSB backplane and you may safely proceed.
2. Open the cabinet door and ground yourself to the cabinet with the antistatic wrist strap.
3. Remove terminator modules from slots where you will be installing KN7CC modules.
4. Pull out modules to the right of where you will insert a new KN7CC module.

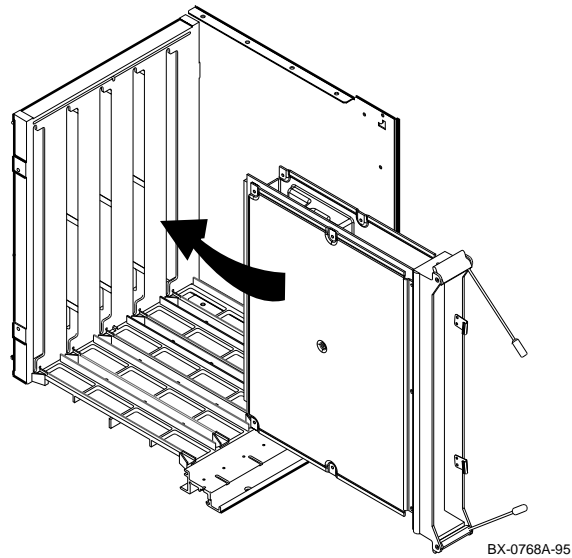
CAUTION: Modules must be inserted from left to right to avoid damaging EMI gaskets on the modules.

5. Inspect the KN7CC module to see that the EMI gasket does not extend beyond the endplate. If it does, slide it back.



6. Release the spring-loaded handles from the stops. To do this, push both handles toward the module endplate and away from the stops.
7. Support the module with one hand and with the other hand, grasp the endplate. Align the module with the card guide and the cover with the rail.

8. Slide the module into the card cage as far as it will easily go.



9. Push both handles at the same time to the module endplate. You will feel the module make contact with the connectors. Release the handles so they spring back into the stops.
10. Check that terminator modules are installed in all unused slots.
11. Close the cabinet door.

Running LFU

Turn on the system and boot the Loadable Firmware Update (LFU) utility. Enter the **update** command.

```
UPD> update kn7cc*
Confirm update on:
kn7cc-ab1
[Y/(N)]y
WARNING: updates may take several minutes to complete for each
device.
                DO NOT ABORT!
kn7cc-ab1  update rev 2.01543 is less than current rev 2.0145.
Continue [y(n)] y
kn7cc-ab1  Updating to 2.1543...Verifying 2.1543... PASSED.
UPD> exit
Initializing...
                [self-test display appears]
```

Power off the system, remove this module, and install additional KN7CC modules, one at a time, to check and update the console firmware.

Install All KN7CC Modules

When all KN7CC modules have the same version of the console firmware, you can install them and power up the system.

Verify the System

1. Power up the system. Power sequencing begins, and the system runs self-test.
2. Check the self-test display to make sure that the system recognizes the new modules. In Example 1 two dual-processor modules are in slots 0 and 1 (see ❶).
3. Check the ST lines to see that the KN7CC modules passed testing (see ❷).

Example 1

```

F E D C B A 9 8 7 6 5 4 3 2 1 0 NODE #
      A A M . . . M P P TYP ❶
      O O + . . . + ++ ++ ST1 ❷
      . . . . . . EE EB BPD
      O + + . . . + ++ ++ ST2 ❷
      . . . . . . EE EB BPD
      + + + . . . + ++ ++ ST3 ❷
      . . . . . . EE EB BPD
      . + + + + + + + C0 PCI +
+ . + . + + + . . . + + + C1 XMI +
+ . + . + + + . . . + + + C4 FBUS +
+ . + . + + + . . . + + + C5 XMI +
+ . + . + + + . . . + + + C6 XMI +
+ . + . + + + . . . + + + C7 XMI +
      . . A1 . . . A0 . . ILV
      . .512 . . .512 . . 1GB
AlphaServer 8400 Console V2.1-1,SROM V1.0, Nov 2 1995 10:32:03
P00>>>

```

Build the EEPROM

Whenever you update the console firmware on a KN7CC module, you should build the EEPROM on that module.

Issue the **build -e** command.

```
P00>>> build -e kn7cc-ab0
Build EEPROM on kn7cc-ab0 ? [Y/N]> y
```

```
EEPROM built on kn7cc-ab0
P00>>> init
```

Do an EEPROM Copy

Copy the EEPROM system information to the new processors. You can use the **build -c** command implemented in V2 of the console code.

```
P00>>> build -c kn7cc*
```

Or you can enter an environment variable, such as **boot_reset**, which automatically causes the entire EEPROM contents to be written to each processor.

```
P00>>> set boot_reset on
P00>>> set boot_reset off
```

NOTE: Refer to the current Firmware Update Procedures and Release Notes for further information.