FIELD CHANGE ORDER

NUMBER: 62XMX-I003

APPLICABILITY: Upgrade applicable 6000-2xx system CPU modules (T2011-00) to a minimum part revision of "AL" ONLY WHEN ADDING a DWMVA option to an existing system. Also, ensure a spare module rev "AL" is available to support this at the SDU. This FCO incorporates ECO #T2011-TW010.

PROBLEM & SYMPTOM: Installation of the DWMVA option requires 6000-2XX CPU modules to be upgraded to a new minimum part revision of "AL".

SOLUTION: Upgrade applicable 6000-2XX CPU modules upon installation of the DWMVA add-on option. Use minimum module part revision "AL" or higher.

QUICK CHECK: For module rev "AL" ROM location E16 should be marked 23-303E9-00 and ROM location E8 should be 23-302E9-00.

PRE/CO-REQUISITE FCO: N/A

MTTI HRS

.5/MODULE

TOOL/TEST EQUIPMENT:

FCO PARTS INFORMATION

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<th>FCO KIT NO.</th>
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<td>(1) T2011-00 Module Min Rev &quot;AL&quot;</td>
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<td>(1) FA-04965-01 FCO Document</td>
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FCO CHARGING INFORMATION

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APPROVALS

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FCO RELEASE DATE

FCO REVISION A
INSTALLATION AND TEST PROCEDURE FOR 62XMX-I003

1. Shut down the VAX/VMS operating system:

   Example of shutdown:

   $ @sys$system:shutdown

   SHUTDOWN -- Perform an Orderly System Shutdown on node PEEVEE

   How many minutes until final shutdown [0]:<CR>
   Reason for shutdown [Standalone]:<CR>
   Do you want to spin down the disk volumes [NO]?<CR>
   Do you want to invoke the site-specific shutdown procedure [YES]?<CR>
   Should an automatic system reboot be performed [NO]?<CR>
   When will the system be rebooted [later]:<CR>
   Shutdown options (enter as a comma-separated list):
     REMOVE_NODE       Remaining nodes in the cluster should adjust quorum
     CLUSTER_SHUTDOWN  Entire cluster is shutting down
     REBOOT_CHECK      Check existence of basic system files
     SAVE_FEEDBACK     Save AUTOGEN feedback information from this boot

   Shutdown options [NONE]:<CR>

   VMS will issue several messages indicating it is shutting down.
   Finally, VMS will issue:

   SYSTEM SHUTDOWN COMPLETE - USE CONSOLE TO HALT SYSTEM

2. At this point perform a Control^P to halt the primary processor.
   The console will print the following, but the numeric values may
   not match the example:
3. Enter INITIALIZE at the >>> prompt. This will reset the whole system and force all processors into console mode.

4. Examine the console map to determine the location of each processor in your system. Record the location of each processor and which processor is the dedicated primary.

5. Enter the SHOW BOOT command, and record the saved boot specifications. Here is a sample of the command output:

   >>> SHOW BOOT
   DEFAULT /XMI:E /BI:4 DU3D
   R54A /R5:00000001/XMI:E/BI:4 DU4A
   DIAG /R5:00000010/XMI:E/BI:4 DU15

   If the SHOW BOOT command does not produce information it means that there hasn’t been a SAVE BOOT.

6. Enter the <CTRL/3><DEL>SHOW SYSTEM SERIAL command, and record the system serial number. Here is a sample of the command output:

   *********************************************************
   *                         NOTE                          *
   *On VT100 series terminals replace <CTRL/3> with <ESC>     *
   *in the steps below.                                        *
   *********************************************************

   >>> $^?SHOW SYSTEM SERIAL
   System serial number: xxxxxxxxx

7. Use the SETUP feature on your terminal, and ensure the baud rate of the terminal is set to 1200 baud. This is necessary due to the T2011-00 module within the FCO kit has the baud rate set to 1200 as the default.

8. Turn the upper key switch on the system control panel fully counterclockwise. This shuts off the output of the battery backup unit if present. To ensure "Total Off", pull the power circuit breaker on the H405 AC power controller located on the lower right side at the back of the system. Unplug the system.

9. Use ALL ESD safety precautions to prevent DOA modules in upgrade kit.
10. Unscrew the XMI cardcage cover assembly and remove the cover.

11. Remove the T2011-00 module targeted for upgrade from the cardcage using all ESD procedures. Check the revision of the module taken from the machine. If the module is an "AL" re-install it in the same slot and proceed to next step. If the module revision is below revision "AL" install module from EQ-01630-01 and repeat this step for all T2011-00 modules installed within the XMI backplane.

12. Re-install the XMI cardcage cover assembly and tighten retaining screw.

13. Install the new DWMVA option in accordance with the Installation Guide which comes with the option.

14. Record the original position of the lower key switch. Turn lower key switch on the system console panel to the UPDATE Position.

15. Plug in the system. Apply power to the system by pushing the Circuit Breaker in to the "ON" position. Power up the system by turning the upper key switch on the system control panel clockwise to the "ENABLE" position.

16. Enter the <CTRL/3><DEL>SET SYSTEM SERIAL command, using the serial number you recorded in Step 6. Here is a sample output from the command:

```
>>> $^?SET SYSTEM SERIAL
System Serial Number>>> AG83701988
Serial number read as: AG83701988

Update EEPROM? (Y or N) >>> Y
?73 System serial number updated.
```
17. Enter the boot specifications you saved previously in Step 5 using the SET BOOT command. Here is a sample input;

```bash
>>> SET BOOT DEFAULT /XMI:E/BI:4 DU3D
```

If your system contains more than one processor, entering the SET BOOT command causes the boot specification to be copied to all processors, so this command does not need to be repeated on each processor.

18. Return the lower front panel key switch to the HALT position.

19. Boot the Diagnostic Supervisor (VDS) ELSAA.EXE

20. Load and run the following diagnostics:

   - ELKAX: Functionality
   - ELKMP: Multiprocessor Exerciser
   - EVKAQ: Basic Instructions Exerciser Part I
   - EVKAR: Basic Instructions Exerciser Part II
   - EVKAS: Floating Point Instructions Exerciser Part I
   - EVKAT: Floating Point Instructions Exerciser Part II
   - EVKAU: Privileged Architecture Exerciser Part I
   - EVKAV: Privileged Architecture Exerciser Part II

21. Return the lower key switch to the position recorded in step 14.

22. Bring up the operating system.

23. Update Site Management Guide to reflect this FCO.

24. Report FCO activity on LARS form in the "Module/fail area/FCO".

LARS EXAMPLE
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<th>CATEGORY</th>
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(a) Contract and Warranty W U Y
(b) IN-DEC Contract K
   Hardware Segment Code 031 111
   Non Contract/Non Warranty F F F
(c) RTD/Off-site Agreement F
   Product Line 031 031

DEC Option 62XMX 62XMX 62XMX
Type of Call M M M
Action Taken D D I
Fail Area-Module-FCO-Comments 62XMX-I003 62XMX-I003 62XMX-I003
Material Used EQ-01630-01 EQ-01630-01 EQ-01630-01

(a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements; * Note material (only) free of charge for all customers.
(b) Applies to IN-DEC Area Only
(c) RTD=Return to Digital or Off-site Agreements; If Field Engineer On-site, use Activity Code "F".

\FCO_DOCS
\62XMX
\6000-2XX
\EQ-01630-01
\EQ-01630-01
\1992