| DIGITA   | Ĺ         |                 |                  | F                                    | CO  |                      |                            | CATEGORY<br>[I]                |                      |           | Y                         | PAGE 1<br>OF 5 |
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| FIELD CHANGE ORDER NUMBER: 63XM                          |           |                 |                  |                                      |   |                      | X-I004                     |                                |                      |           |                           |                |
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|  |           |                 |                  |                                      |   |                      | MTTI HRS<br> .5/MODULE     |                                |                      |           |                           |                |
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| EQ-01630-02   (1) T2011-YA   FA-04965-02   (1) FA-04965- |           |                 |                  |                                      | t   |                      |                            | CABILLI                        |                      |           |                           |                |
|  |           |                 |                  |                                      | FCO CHARC   | GING I               | NFORMAT                    | CION                           |                      | —— I      |                           |                |
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\* The DWMVA option requires VAX/VMS Version 5.4-3. PLEASE DO NOT

INSTALL the DWMVA option until the system has been upgraded with this

\* version of VAX/VMS.

## INSTALLATION AND TEST PROCEDURE FOR 63XMX-I004

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:

- ?02 External halt (CTRL/P, break, or external halt)
  PC = 801C7F92
- 3. Enter INITIALIZE at the >>> prompt. This will reset the whole system and force all processors into console mode.

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- 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:

>>> \$^?SHOW SYSTEM SERIAL
System serial number: xxxxxxxx

- 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-YA 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.

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|  | 1 | FCO  | 63XMX-I004 |  |
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- 10. Unscrew the XMI cardcage cover assembly and remove the cover.
- 11. Remove the T2011-YA 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 "AF" re-install it in the same slot and proceed to next step. If the module revision is below revision "AF" install module from EQ-01630-02 and repeat this step for all T2011-YA 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.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* NOTE 2 \*

\* 
\*If more than one processor is being FCO'd, the system serial \*

\*number must be updated for each processor. Proceed with \*

\*command "SET CPU n" where n = CPU Node Id.Repeat step 16 for \*

\*each CPU module installed. \*

17. Enter the boot specifications you saved previously in Step 5 using the SET BOOT command. Here is a sample input;

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

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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".

## CATEGORY I USA GIA EUROPE Activity (a)Contract and Warranty W U Y

LARS EXAMPLE

| (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                    | 63XMX       | 63XMX       | 63XMX       |
| Type of Call                  | M           | M           | M           |
| Action Taken                  | D           | D           | I           |
| Fail Area-Module-FCO-Comments | 63XMX-I004  | 63XMX-I004  | 63XMX-I004  |
| Material Used                 | EQ-01630-02 | EQ-01630-02 | EQ-01630-02 |

- (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".

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\\FCO_DOCS
\\63XMX
\\6000-3XX
\^ 63XMX
\\EQ-01630-02
\\1992
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