

<pre> - - - - - d i g i t a l - - - - - - </pre>	FCO	Level of Urgency +---+ I +---+	Page_1_ Of_11
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FIELD CHANGE ORDER

Number: DEBNT-I001

Applicability: Retrofit all DEBNT options to Revision Level "B1".

This FCO incorporates the following ECO:

ECO T1032-LK004 - New Part Revision "F1/F2"

Field spares stock should also be upgraded.

Problem/Symptom:

New firmware (AIE 40.0) for MicroVAX required to fix LANCE receive buffer mismatch bus which resulted in occasional out of sequence and duplicate packets.

Quick Check: See page 2

Compatibility/Prerequisite FCO: N/A

Est. Time to Install:
1 hour

Special Tools or Test Equipment: See page 2

FCO Parts Information

Order by	Quantity:	Part Number:	Description:
FCO Kit#:			
EQ-01444-01	1	See Page 2	PROMS
EQ-01444-02	1	BL-ZZNEA-JS	RX50 Floppy
FA-04730-01	1		FCO Document

EQ Kit Variation System/Option Applic: N/A

Approvals

CSSE Engineer
Jim Riddle

F.S. Product Safety
Jerry Gannelli

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Ed Duggan

CSSE Manager
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F.S. Microfiche Libraries

Affected Population:
400

ESD&P Micropub.
Ray LeBlanc

EP-FSNVX-LB VAX
VAXnotes
STARS

Initial Kitting:
400/200

Revision:
A

Hardcopy Publication:
700

FCO Release Date
26-NOV-86

Parts Availability:
November 1986

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Quick Check: Continued from page 1

Location	Part #	Location	Part #
E48	23-216E6	E70	23-217E6
E71	23-218E6	E72	23-219E6

SPECIAL TOOLS: Continued from page 1

Field Service Tool Kit.
VELOSTAT Electrostatic Field Service Kit (P/N 29-11762).

FCO KIT CONTENTS: Continued from page 1

	Quantity	Part Number	Description
	-----	-----	-----
EQ-01444-01	1	23-216E6-00	Microcode ROM
	1	23-217E6-00	Microcode ROM
	1	23-218E6-00	Microcode ROM
	1	23-219E6-00	Microcode ROM
	1	36-19208-01	Wire Marker "1"
	1	36-19208-02	Wire Marker "2"
	1	36-19209-06	Wire Marker "F"
	1	FA-0430-01	FCO Document
EQ-01444-02	1	BL-ZZNEA-JS	RX50 Floppy (ETDRIVER X-13C)
	1	FA-0430-01	FCO Document

DEBNT MICROCODE UPGRADE TABLE OF CONTENTS: PAGE NO.

I. Installation information for installing the ETDRIVER version

X-13C on a VAX 8200/8300/8500/8550/8700/8800 from the floppy
(BL-ZZNEA-JS)..... 03

II. Installation Procedures for PROMS on VAX 8500/8550/8700/8800... 04

III. Installation Procedures for PROMS on VAX 8200/8300..... 07

IV. FIGURE 1..... 11

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```

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Section I - Installation information for installing the ETDRIVER version
X-13C on a VAX 8200/8300/8500/8550/8700/8800 from the floppy
(BL-ZZNEA-JS).

```

*****
*
*           NOTE
* This installation should only be performed on VMS 4.4 systems.
*
* The files mentioned in step 2 in the FCO are in directory [SAVSETS].
*
* The procedure on copying the files to the system disk is as follows:
*
* The following steps should be taken to install the ETDRIVER.
*
*****

```

1. Log into the system manager account and set default to SYS\$UPDATE.
2. Insert the floppy (BL-ZZNEA-JS) in RX50 drive [1 or 2] in the VAXCONSOLE.

Directory Listing on BL-ZZNEA-JS

LABEL IS: DEBNT
DIRECTORY IS: SYSMOINT

FILE	SIZE	TITLE
VMSET044.A;1	96	ETDRIVER SAVE-SET A
VMSET044.B;1	32	ETDRIVER SAVE-SET B
VMSET044.C;1	32	ETDRIVER SAVE-SET C
VMSET044.MEM;1	5	ETDRIVER INSTALL GUIDE
ETDRIVER.MEM;1		

From VMS issue the command to mount the floppy to the system

```
VMS_PROMPT$      MCR sysgen
SYSGEN>          Connect console
SYSGEN>          EXIT
VMS_PROMPT$      Mount CSA#: DEBNT
                  (# = 1 or 2, whichever drive the diskette
                  is in)
                  (You will then get the message that the diskette
                  is mounted).
```

3. Copy the following savesets into SYS\$UPDATE: VMSET044.A, VMSET044.B, and VMSET044.C (from diskette (BL-ZZNEA-JS)).

```
VMS_PROMPT$      Copy CSA#:[SAVSETS]VMSET044.A,VMSET044.B,
                  VMSET044.C          SYS$UPDATE:*
```

```
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```

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4. Execute the VMSINSTAL procedure (\$ @VMSINSTAL). At the end of the procedure, the system will be AUTOMATICALLY shutdown by VMSINSTAL.
5. Answer the questions. Here are some vital answers during VMSINSTAL:
- ```
...
Where will the distribution volumes be mounted: SYS$UPDATE:
Product: VMSET
What would you like to do [3]: 3
...
```
6. When the system is rebooted, verify that the ETDRIVER is in the right destination. (\$ DIR/DATE SYSS\$SYSTEM:ETDRIVER.EXE) You may want to delete the savesets and document files after you are done.
- In case you have a problem installing the ETDRIVER on a VAXcluster, the following steps can be taken.
7. Retrieve the file ETDRIVER.EXE from VMSET044.A saveset:  
\$ BACKUP VMSET044.A/SAVE/SEL=[RBHANK.AIE.KIT.VMSET044]ETDRIVER.EXE \*/LOG
8. Copy the file ETDRIVER.EXE into the SYS\$COMMON:[SYSEXE] directory and reboot the system.

1. Shut down the system by executing the Shutdown Command Procedure.

```
$ @SYS$SYSTEM:SHUTDOWN
```

After VMS shuts down, type HALT.... you will now be in console mode  
PROMPT is >>>

2. Using the 8800 console command, power the 8800 off, open the front left CPU cabinet door and set CB1, the main circuit breaker on the 876-A power controller to the "OFF" (0) position.

```
>>>POWER OFF (CR)
```

Now turn CB1 off

```
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 | _ _ _ _ _
```

```
FCO DEBNT-I001
```

```
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```

3. Use ALL ESD safety precautions to prevent DOA modules.
4. Open air-flow slides in front of the card cage exposing the area around the slot containing the T1032 module.

```

* *
* C A U T I O N *
* *
* The module, as all other VAX 8X00 modules, *
* contains electrostatic discharge sensitive *
* devices (ESDS). The use of the VELOSTAT *
* kit is essential to prevent damage which may *
* not be noticed immediately. *
* *

```

5. Set up VELOSTAT KIT
- Unfold the VELOSTAT mat to full size (24" x 24").
  - Attach the 15 foot ground cord to the VELOSTAT snap fastener on the mat.
  - Attach the alligator clip end of the ground cord to a good ground.
  - Attach the wrist strap to either wrist and the alligator clip to a convenient portion of the mat.

6. Remove the module from its backplane slot and place it on the mat.

7. Check the revision of the T1032 module in the machine using the quick check chart below:

Quick Check for Rev F1/F2:

| Location | Part #   | Location | Part #   |
|----------|----------|----------|----------|
| E48      | 23-216E6 | E70      | 23-217E6 |
| E71      | 23-218E6 | E71      | 23-219E6 |

If the T1032 module is at rev F1/F2, reinstall it in the same slot and proceed to step 13. If the module revision is below revision F1/F2, proceed to step 8.

```
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_	_	_	_	_	_	_	_	_
```

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8. Unplug PROM at location E48 on the T1032. Install new PROM P/N 23-216E6-00 in the same location. (See figure 1, page 11.)
9. Unplug PROM at location E70 on the T1032. Install new PROM P/N 23-217E6-00 in the same location. (See figure 1, page 11.)
10. Unplug PROM at location E71 on the T1032. Install new PROM P/N 23-218E6-00 in the same location. (See figure 1, page 11.)
11. Unplug PROM at location E72 on the T1032. Install new PROM P/N 23-219E6-00 in the same location. (See figure 1, page 11.)
12. Attach the brady markers "F1 or F2" to the T1032 module. Replace module in the same slot from which you removed the old module.
13. Set Circuit Breaker CB1 on the 876-a Power Controller to the ON (1) position. Close and latch cabinet doors.  
  
Power up the CPU by typing the following command:  
  
>>>POWER ON <CR> at the console.
14. Verify that the DEBNT passes self test by observing that the amber light is illuminated on the DEBNT (T1032) module.
15. Verify total CPU operation by running the following diagnostics as follows:
  - a. Type SYSINIT.COM to initialize CPU.
  - b. Type @DIABOO to load Diagnostic Supervisor

c. Load and execute the following diagnostics:

(Console    Rev "C"    Rev "D")

|       |      |      |
|-------|------|------|
| EVKAA | 10.3 | 10.3 |
| EVKAB | 5.2  | 5.2  |
| EVKAE | 6.5  | 6.5  |
| EZKAX | 1.1  | 2.0  |
| EZCJA | 1.2  | 1.2  |
| EVCBB | 2.1  | 2.1  |

16. Bring up the VMS Operating System.
17. Update the Site Management Guide to reflect this FCO.
18. Report this FCO activity on the LARS for in the "Fail Area/  
Module/FCO/Comments" column as follows: FCO DEBNT-I001  
(See page 10 for further instructions).

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```

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### Section III - Installation Procedures for PROMS on VAX 8200/8300.

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1. Shut down the system by executing the Shutdown Command Procedure.  
  
\$ @SYS\$SYSTEM:SHUTDOWN
2. Remove the processor cabinet front and rear doors.
3. Turn the upper keyswitch on the console panel fully counterclockwise and set the main circuit breaker at the back of the BA32 box to the "OFF" (down) position.

```

* NOTE *
* If battery backup H7231 is present as an option, the DEC- *
* PWR-BUS cable 17-00931-0X must be in place between the 877 *
* power controller and the H7231 prior to the BA32 circuit *
* breaker being placed in the off position. If this cable *
* is not in place, battery backup may become activated. The *
* circuit breaker on the 877 power controller must not be *
* utilized. *

```

4. From the front of the CPU Cabinet, fully extend the cabinet stabilizer leg.

5. From the rear of the processor cabinet, release the BA32 box track lock.
6. Slide the BA32 box out of the cabinet.
7. Remove the BA32 box top cover.
8. Use ALL ESD safety precautions to prevent DOA modules.

```

*
* C A U T I O N
*
* The module, as all other VAX 8X00 modules,
* contains electrostatic discharge sensitive
* devices (ESDS). The use of the VELOSTAT
* kit is essential to prevent damage which may
* not be noticed immediately.
*

```

```

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_	_	_	_	_	_	_	_

```

```

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```

9. Set up VELOSTAT KIT
  - a. Unfold the VELOSTAT mat to full size (24" x 24").
  - b. Attach the 15 foot ground cord to the VELOSTAT snap fastener on the mat.
  - c. Attach the alligator clip end of the ground cord to a good ground.
  - d. Attach the wrist strap to either wrist and the alligator clip to a convenient portion of the mat.
10. Lift the lever of the VAXBI cardcage slot housing the T1032 module to be replaced.
11. Remove the module from its backplane slot and place it on the mat.
12. Check the revision of the T1032 module in the machine using the quick check chart below:

Quick Check for Rev F1/F2:

| Location | Part #   | Location | Part #   |
|----------|----------|----------|----------|
| E48      | 23-216E6 | E70      | 23-217E6 |
| E71      | 23-218E6 | E71      | 23-219E6 |





- 22. If there are problems either with self test or with EVDYC, refer to the DEBNT Ethernet and MAYA Tape BI Controller Maintenance Handbook, EK-DEBNT-HB-001.
- 23. Secure the BA32 box's top cover.
- 24. Slide the BA32 box back into the cabinet making sure that cables are not harmed.
- 25. Replace and latch the processor cabinet front and rear doors.
- 26. Bring up the Operating System.
- 27. Update the Site Management Guide to reflect this FCO.
- 28. Report this FCO activity on the LARS form in the "Fail Area/Module/FCO/Comments" column as follows: FCO DEBNT-I001 (See page 10 for further instructions).

```

_	_	_	_	_	_	_	_
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_	_	_	_	_	_	_	_

```

```

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```

LARS

| Activity | DEC<br>Option | Type<br>of<br>Call | Action<br>Taken | FCO #<br>Comments | Material<br>Used |
|----------|---------------|--------------------|-----------------|-------------------|------------------|
|----------|---------------|--------------------|-----------------|-------------------|------------------|

\*\*\*\*\*

For Contract and Warranty Customers U.S. and G.I.A.

|   | Option # |   |   | FCO #      | EQ Kit #                   |
|---|----------|---|---|------------|----------------------------|
| W | DEBNT    | M | D | DEBNT-I001 | EQ-01444-01<br>EQ-01444-02 |

\*\*\*\*\*

For Per Call Customers U.S., G.I.A

|  | Option # |  |  | FCO # | EQ Kit # |
|--|----------|--|--|-------|----------|
|--|----------|--|--|-------|----------|

F DEBNT M D DEBNT-I001 EQ-01444-01  
EQ-01444-02

\*\*\*\*\*

For Contract and Warranty Customers Europe

|   | Option # |   |   | FCO #      | EQ Kit #                   |
|---|----------|---|---|------------|----------------------------|
| Y | DEBNT    | M | I | DEBNT-I001 | EQ-01444-01<br>EQ-01444-02 |

\*\*\*\*\*

For Per Call Customers Europe

|   | Option # |   |   | FCO #      | EQ Kit #                   |
|---|----------|---|---|------------|----------------------------|
| F | DEBNT    | M | I | DEBNT-I001 | EQ-01444-01<br>EQ-01444-02 |

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|\_|\_|\_|\_|\_|\_|\_|\_|\_|

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Section IV. - FIGURE 1  
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THIS IS FOR FIGURE 1 (PICTURE OF T1032 MODULE)

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\FCO\_DOCS