

DIGITAL

FCO

CATEGORY

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FIELD CHANGE ORDER

NUMBER: PC736-F001, PC741-F001
PC743-F001, PC744-F001, PC746-F001

APPLICABILITY: This "F" coded FCO should be installed on DECpc736, 741, 743, 744 and 746 computers at customer sites that require the BIOS support for 5.25", 360KB formatted diskettes. It will upgrade the PCs by replacing the BIOS ROM with revision level 1.22 on the Main Logic Board, P/N 54-22042-01.

This FCO is only for customers that require the BIOS support for 5.25", 360KB formatted diskettes.

This FCO incorporates ECO 5422042-TA009 and will not change the revision of the 54-22042-01 Main Logic Board.

PROBLEM & SYMPTOM: Problems & symptoms fixed by this FCO are as follows:

- Problem reading 5.25", 360KB formatted diskettes
- Disk type 34 and 35 do not comply with 85MB and 127MB Quantum drives
- NO extended printer support for NS87C311 & NS87C312
- Wrong polarity for V-SYNC and H-SYNC in 1024X768 display mode

SOLUTION: Replace the BIOS ROM in location E48 on the Main Logic Board 54-22042-01 with BIOS ROM, P/N 23-397E9-00 (BIOS V1.22).

QUICK CHECK: There are several ways to check for DECpc LP revision level.

- DECpc LP Rev level is displayed during power up. Refer to sample screen display on Step 10 of suggested installation procedure in this document.
- For spares check the P/N printed on the BIOS ROM located on the Main Logic board (54-22042-01). It should be 23-397E9-00 V1.22, refer to Figure 1 in this document for visual assistance.

PRE/CO-REQUISITE FCO: N/A

MFIT HRS
1.0 hrs.

TOOL/TEST EQUIPMENT:

Field service tool kit, Electrostatic kit and chip extracting tool.

FCO PARTS INFORMATION

FCO KIT NO.

DESCRIPTION OF CONTENTS

EQ-01671-01

1 - 23-397E9-00 BIOS ROM

FA-05006-01

1 - FCO document

FCO CHARGING INFORMATION (See Last Page)

APPROVALS

TECH. ENGINEER	ENG. BUSINESS MGR.	DS LOGISTICS	DS PRODUCT SAFETY
Mike Ardehali	Ed Tang	George Simko	Robert Brister
MICROMEDIA	PARTS AVAILABILITY	FCO REVISION	FCO RELEASE DATE
Diane MacDonald	April, 1993	A	

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Field Installation and verification Procedure for BIOS V1.22

1. Check the BIOS revision level by rebooting the system. If it is below V1.22 then install EQ-01671-01. Refer to Step 10 for sample screen printout.
2. Use ALL ESD safety precautions to prevent DOA's on material in kit.

```

*****
*                               CAUTION                               *
* The module, as with all modules, contain electrostatic          *
* discharge sensitive devices (ESDS). The use of the Velostat *
* Kit or ESD module box is essential to prevent damage which *
* may not be noticed immediately. *
*****

```

3. Setting 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 on the cabinet.
- d. Attach the wrist strap to either wrist and the alligator clip to a convenient portion of the mat.
- e. Remove the module from its CPU option slot and place it on the mat.

Or:

- f. Remove the module from the spares kit and lay it on the velostat mat.

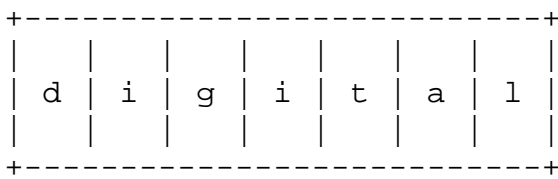
```

*****
*                               CAUTION                               *
* If using a module in an ESD box, insure wrist strap is          *
*****

```

* connected to the box and the box is connected to chassis of *
 * the device being upgraded. *

4. Turn the power off to all external devices first, then turn the computer off and disconnect the power cord.
5. Remove the enclosure cover by unlocking the outside cover lock, located in the back of the chassis. Then remove the 2 screws on each side of the unit. Remove the cover by sliding it towards the rear of chassis and then lifting it.



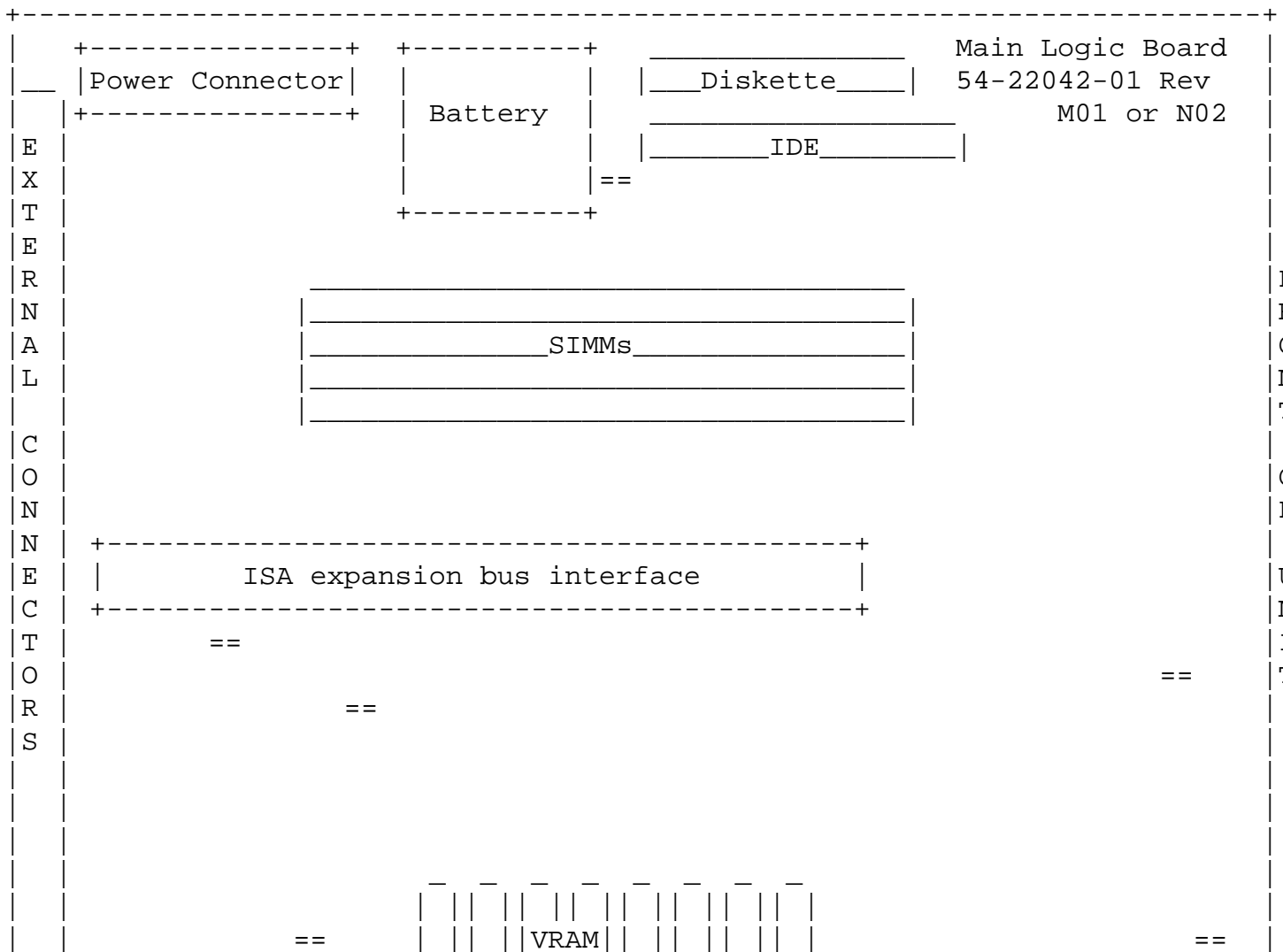
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 PC743-F001, PC744-F001,
 PC746-F001

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6. Locate the BIOS ROM on the Main Logic Board. Refer to the following diagram for visual assistance: (The BIOS ROM is located on the left side of the Main Logic Board.)

Power Supply Unit

Disk Drives



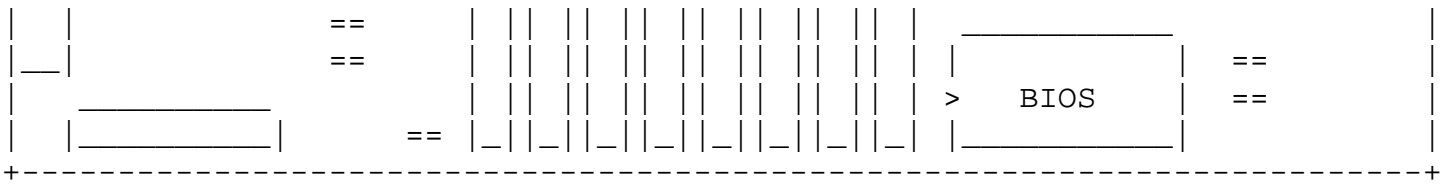
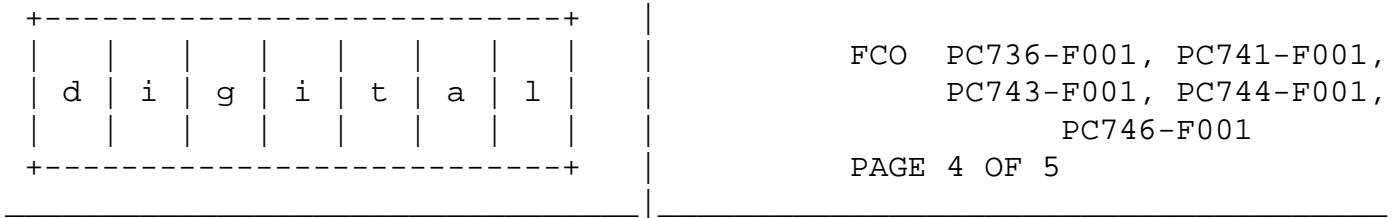


Figure 1: Main Logic Board layout

- Remove any optional ISA boards which obstruct the removal of BIOS ROM.



- Use the chip extracting tool to remove the old BIOS ROM, pay attention to the chip orientation and make a note of which way the notch is facing. Replace it with the BIOS ROM V1.22 (23-397E9-00) supplied in EQ-01671-01. Pay particular attention to pin alignment and chip orientation when you are replacing the BIOS ROM. The notch on the ROM should face the back of the chassis, refer to Figure 1 on previous page for visual assistance. The notch on the chip is indicated by ">". Check to make sure there aren't any bent pins after you've replaced the chip.

```
*****
*                               C A U T I O N                               *
*  Damage to Main Logic Board will result if BIOS ROM is not             *
*  inserted properly.                                                     *
*****
```

- Replace the enclosure by reversing the removal procedure and reconnect the power cord.
- Turn on all the external devices first and then power up the computer. Note DECpc LP revision level should read 1.22 as shown in an example below.

SAMPLE SCREEN DISPLAY:

```
PhoenixBIOS(TM) A486 Version xx.xx.xx
Copyright (C) 1985-1992 Phoenix Technologies LTD.
All Rights Reserved
```

```
DECpc LP xxx Version 1.22
```

```
640k Base Memory
xxxxxK Extended Memory
```

- Press [F1] to enter setup, select the diskette drives A or B by

using the arrow keys. Change the value of the field using +/- you should see that the 5.25", 360KB is one of the section choices.

Use the ESC key to exit the setup.

12. CLEANUP: The removed BIOS ROM should be discarded per standard Digital procedures.
13. Report this FCO activity in the LARS form in the "fail area/module /FCO/comments" column as follows; FCO XXXXX
See LARS example on the last page of this document.

For more detained information on removal and replacement of cabinet cover or Main Logic Board layout, refer to DECpc 300/400 LP series User's Guide, Part Number ER-PC740-UA.

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14. Upgrade all field spares with EQ-01671-01. Mark the box "BIOS V1.22". This upgrade does not change the module revision.

LARS

CATEGORY F

	USA	GIA	EUROPE
Activity -			
(a)Contract	W	U	K
Warranty	W	U	W
(b)IN-DEC Contract	K	U	A
Non Contract/Non Warranty	F	F	F
(c)RTD/Off-site Agreement	F	U	F
Hardware Segment Code	111	111	111
Product Line	007	007	007
DEC Option	PC730/740	PC730/740	PC730/740
Option ID	X	N/A	N/A
Type of Call	M	M	M
Action Taken	D	D	I/V
Fail Area-Module-FCO-Comments	*	*	*
Material Used	EQ-01671-01	EQ-01671-01	EQ-01671-01

*NOTE: The following are the FCO numbers that apply to this section:

PC736-F001, PC741-F001, PC743-F001

- (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 CHARGING INFORMATION

WARRANTY/CONTRACT				NONWARRANTY/NONCONTRACT				
ON-SITE		OFF-SITE		ON-SITE		OFF-SITE		MATERIAL ONLY
TRAVEL/ INSTALL	EQ KIT	INSTALL	EQ KIT	TRAVEL/ INSTALL	EQ KIT	INSTALL	EQ KIT	ORDER-ADMIN, HANDLING PKG, SHIPPING & EQ KIT
DEC	DEC	DEC	DEC	CUS	CUS	CUS	CUS	CUS

\\FCO_DOCS

\\EQ-01671