DIGITAL FCO	LEVEL OF URGENCY PAGE 1 OF 4 [R]

FIELD CHANGE ORDER   NUMBER: TQK50-R002

APPLIC: This FCO is intended for all PDP11 16-bit Q-Bus systems. Do not install this FCO on any 32 bit Q-Bus systems. 32 bit systems do not exhibit any of the symptoms that are described in this FCO. See below for Problem/Symptom statement. All locally stocked spares will be upgraded with this FCO.

PROB/SYMPT: Failure of TK50/TQK50 subsystem to: A. Consistently Perform Backup/Verify. B. Recover from a Control C (abort) during an operation. C. Consistently write multiple small files without errors using PIP, and the NXM timeout value causes "Non-Existent Memory/Parity Errors".

QCK CK: See page 2.

COMPATIB/PREREQ: DSM11 Patch 4.2.98	EST INSTALL TIME 1.0 Hour

TOOLS/TEST EQUIP: No special tools are required.

FCO PARTS INFORMATION

ORDER BY FCO KIT #	CONTENTS	
	QUANTITY PART NUMBER	DESCRIPTION
EQ-01494-01	1	See page 2
FA-04788-01	1	FCO document only

EQ KIT VARIATION/SYS-OPT APPLICABILITY: N/A

APPROVALS

CSSE ENGINEER Stephen Piazza	F.S. PRODUCT SAFETY Steve Caccia	F.S. LOGISTICS Ed Duggan
RESPON. CSSE MANAGER Curtis Smith	F.S. MICROFICHE LIBS	AFFECTED POPULATION 20,000
MICROMEDIA PUBLISHING Ray LeBlanc	EP-FSP11-LB PDP11 EP-FSNVX-LB VAX	INITIAL KITTING 20,000
REVISION A	VAXnotes STARS	HARDCOPY PUBLICATION 20,000

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|d|i|g|i|t|a|l|                       |         PAGE 2 OF 4
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Quick Check: Continued from page 1.

Quick Check: Existence of 23-331E5 in location E28 indicates that the
FCO is present. Module Revision J1 or greater already has this change.
Controller hardware revisions 8 and 9 have this change. The hardware
revision can be determined by examining the errorlog.

FCO Kit contents: Continued form page 1

FCO Kit #	Quantity	Part Number	Description
EQ-01494-01	1	23-065L1-00	FPLS ROM
	1	23-331E5-00	High Byte ROM
	1	23-330E5-00	Low Byte ROM
	1	FA-04811-01	Set Revision Labels

                            CAUTION

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    ***********************************************************************
    *   The TQK50 contains electrostatic discharge sensitive devices. *
    *   The use of the Velostat kit is essential when handling the     *
    *   TQK50 and the ROMS/FPLS chip provided in this kit.             *
    ***********************************************************************
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1. Perform normal system shutdown procedures. Refer to the appropriate
   system manuals applicable to the system involved.

2. Power down the system and remove the covers and panels required to gain
   access to the TQK50, (M7546 Module).

3. Remove the interface cable (P1) from the M7546 module and remove the
   M7546 module from the system.

4. Using Figure 1 on page 4 as a reference, replace the following
   components with the parts supplied.

   A. Check location E3 for the presence of P/N 23-065L1-00. If it
      is NOT present, then remove the chip from location E3 and replace
      it with the chip marked 23-065L1-00.

   B. Remove the chips from location E28 and E29. Replace them with the
      supplied chips. E28 is the High Byte ROM, part number 23-331E5-00.

E29 is the Low Byte ROM, part number 23-330E5-00. Ensure correct
chip orientation. See Figure 1.

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|d|i|g|i|t|a|l|          |          PAGE 3 OF 4
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C. After you installed the new ROMs, update the Module Revision with
the supplied labels. Place the label on the handle. Use the
following table to determine the new Module Revision.

Etch Rev.		Module Rev.		New Module Rev.
D1	+	C1	=	J1
D1	+	D1	=	J1
D1	+	E1	=	J1
D1	+	F1	=	J1
C1	+	F2	=	J2
D1	+	H1	=	K1
C1	+	H2	=	K2
E1	+	H3	=	K3

Note: The Module Revision can be found on the back of the module
handle. The Etch Revision can be found etched on the module. Example
of Etch Revision: 5016268-01-D1 equals Etch Revision D1.

D. New Module Revisions J1 and J2 correspond to Hardware Rev. 8. New
Module Revs. K1, K2, and K3 correspond to Hardware Rev. 9. Change
switch pack E38 to reflect the new Module Rev. as per this table:

Switch Pack E38		1	2	3	4	5	6	7	8
Module Revision	J1,J2 (8)	Off	Off	Off	On	Off	Off	Off	Off
Module Revision	K1,K2,K3 (9)	On	Off	Off	On	Off	Off	Off	Off

5. Replace the module into its original slot and reconnect cable P1.

6. Power up the system and observe the M7546 module for normal power up
microdiagnostic completion. Both LEDS, TMSCP INIT (D1), and LEVEL 1 (D2),
should illuminate. Then LED D1 should go out leaving LED D2 on.

7. Replace all covers and panels and return the system to the customer.

8. If they are running DSM11 Version 3.3 operating system, have the
customer install Patch 4.2.98. Address offset; 6770, Old Contents; 170,
New Contents; 454.

9. Complete your LARS form as per the table below.

10. Update the Site Management Guide to reflect this FCO activity.

LABOR ACTIVITY REPORTING

It is IMPERATIVE that this table be followed when reporting your labor.

	USA	GIA	EUROPE
Activity -			
Contract and Warranty	W	U	Y
Non Contract/Non Warranty	F	U	F
DEC Option	TQK50	TQK50	TQK50
Type of Call	M	M	M
Action Taken	D	D	I
Fail Area-Module-FCO-Comments	TQK50-R002	TQK50-R002	TQK50-R002
Material Used	EQ-01494-01	EQ-01494-01	EQ-01494-01

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|d|i|g|i|t|a|l|               |        PAGE 4 OF 4
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Figure 1

M7546 (TQK50) Side 1 View

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\^ TQK50
\\TQK50
\\PIAZZA
\\1988
\\APR
\\FCO_DOCS
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