_ FCO DRB32-O005, Problem during FAST DMA WRITE’s to user device

DIGITAL	FCO	CATEGORY [O]	PAGE 1 OF 9

FIELD CHANGE ORDER — NUMBER: DRB32-O005

APPLICABILITY: This FCO applies to all DRB32-W options. The DRB32-W option may be found on any VAXBI bus system that provides connectivity to any one of a wide variety of far end devices. This FCO incorporates ECO T1023YA-TWO002.

PROBLEM & SYMPTOM: This FCO corrects a problem that exists during FAST DMA WRITE’s to a user device.

SOLUTION: Replace T1023-YA module with Min Revision "C03".

QUICK CHECK: Locations E82, E83, E84 and E85 will contain 19-21330-01.

PRE/CO-REQUISITE FCO: N/A

MTTI HRS: 1

TOOL/TEST EQUIPMENT: N/A

FCO PARTS INFORMATION

FCO KIT NO.	DESCRIPTION OF CONTENTS	EQ KIT VARIATION APPLICABILITY
EQ-01645-01	(1) T1023-YA Module	N/A
FA-04981-01	FCO Document	

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	CUST	CUST	CUST	CUST	CUST

APPROVALS

SPE	DSHQ LOGISTICS	DS PRODUCT SAFETY
Rose Murphy	Bill Stanley	Robert Brister
SPE MANAGER: Ric Grogan	This document is published on multiple media including Customer Services and MDS	FCO RELEASE DATE:
MICROMEDIA: Anne James Smith	Microfiche Libraries. It is also available electronically via TIMA and the SSD CD-ROM.	FCO REVISION: A
POPULATION		PARTS AVAILABILITY

550		

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digital

FCO DRB32-0005

I. FIELD INSTALLATION AND TEST PROCEDURE FOR 6XXX Systems

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

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

After VMS shuts down, type ^P .... you will now be at the console mode prompt, >>>

At the console prompt type HALT <CR>

2. Turn the upper key switch on the system’s console panel fully counterclockwise. This shuts off the output of the battery backup unit if present. To ensure "Total Off", push the power circuit breaker to the OFF position on the H405 AC power controller located on the lower right side at the back of the system to the OFF position.

3. Use ALL ESD safety precautions to prevent DOA modules in upgrade kit.

```
**********************************************************************
*    CAUTION       *
*   All VAX modules contain electrostatic discharge sensitive      *
*   devices (ESDS). The use of the new VELOSTAT case is  essential *
*   to prevent damage which may not be noticed immediately.      *
**********************************************************************
```

4. Hook the static strap from the system to the ESD case. Hook the other ESD strap to your wrist.

5. Remove the module, T1023-YA, from the cardcage and place it on the open top half of the conductive package. Install T1023-YA (EQ-01645-01) in the same slot.

6. Complete the Non-Conforming Material Tag and attach the tag to the old T1023-YA module.

7. Package the old module in the same ESD container and close the case.

8. Remove the grounding cable from the ESD container once closed.

9. Return the old T1023-YA module through normal channels ASAP.

10. Power up the system by pushing the Circuit Breaker to the "ON" position. Turn the upper key switch on the systems console panel clockwise to the "ENABLE" position.

11. Boot the Diagnostic Supervisor (VAX/DS).


```
**********************************************************************
*    NOTE       *
*  Before diagnosing the DRB32-W using EVDRI, be sure the DRB32-M  *
*  module (T1022) is fully functional by running Self-Test and     *
*  EVDRH.EXE. Only after the DRB32-M is known to be good should    *
*  diagnosing of the DRB32-W take place. This will help prevent    *
*  erroneous testing results.  The DRB32-W does not contain a VAXBI*
*  corner and, therefore, does not need to be attached to the      *
*  supervisor process.                *
**********************************************************************
```

12. Run EVDRI.EXE to verify installation of the T1023-YA module.

13. Upon successful completion of the diagnostics exit the VAX/DS.

14. Bring up the operating system.

15. Update Site Management Guide to reflect this FCO.

16. Report FCO activity on LARS form in the "Module/fail area/FCO". (See attached examples.)

II. FIELD INSTALLATION AND TEST PROCEDURE FOR 82XX/83XX Systems Config. 1

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

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

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

At the console prompt type HALT (CR)

2. Remove the processor cabinet front and rear doors and fully extend the cabinet stabilizer leg.

```
**************************************************************
*   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.       *
**************************************************************
```


3. Turn the upper key switch on the console panel fully counterclockwise and slide the BA32 system box out of the cabinet. Set the main circuit breaker at the back of the BA32 box to the "OFF" (down) position. Remove the BA32 top cover.

4. Use ALL ESD safety precautions to prevent DOA modules/chips in upgrade kits.

```
**********************************************************************
*    CAUTION     *
*   All VAX modules contain electrostatic discharge sensitive    *
*   devices (ESDS). The use of the new VELOSTAT case is essential*
*   to prevent damage which may not be noticed immediately.      *
**********************************************************************
```

5. Hook the static strap from the system to the ESD case. Hook the other ESD strap to your wrist.

6. Remove the module, T1023-YA, from the cardcage and place it on the open top half of the conductive package. Install T1023-YA Min Rev "C03" (EQ-01645-01) in the same slot.

7. Complete the Non-Conforming Material Tag and attach the tag to the old T1023-YA module.

8. Package the old module in the same ESD container and close the case.

9. Remove the grounding cable from the ESD container once closed.

10. Return the old T1023-YA module through normal channels ASAP.

11. Replace the BA32 Top Cover. Power up the system by pushing the Circuit Breaker to the "ON" position. Turn the upper key switch on the systems console panel clockwise to the "ENABLE" position.

12. Boot the Diagnostic Supervisor (VAX/DS).

```
**********************************************************************
*    NOTE       *
*  Before diagnosing the DRB32-W using EVDRI, be sure the DRB32-M  *
*  module (T1022) is fully functional by running Self-Test and     *
*  EVDRH.EXE. Only after the DRB32-M is known to be good should    *
*  diagnosing of the DRB32-W take place. This will help prevent    *
*  erroneous testing results.  The DRB32-W does not contain a VAXBI*
*  corner and, therefore, does not need to be attached to the      *
*  supervisor process.                *
**********************************************************************
```


13. Run EVDRI.EXE to verify installation of the T1023-YA module.

14. Upon successful completion of the diagnostics exit the VAX/DS.

15. Slide the BA32 box back into the cabinet and retract the stabilizer leg.

16. Update Site Management Guide to reflect this FCO.

17. Report FCO activity on LARS form in the "Module/fail area/FCO". (See attached examples.)

II. FIELD INSTALLATION AND TEST PROCEDURE FOR 82XX/83XX SYSTEMS - Config. 2

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

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

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

At the console prompt type HALT (CR)

2. Remove the processor cabinet rear door.

```
**************************************************************
*   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.       *
**************************************************************
```

3. Turn the upper key switch on the console panel fully counterclockwise and set the main circuit breaker at the back of each AC input assembly to the "OFF" (down) position.

4. Remove the plastic shield in front of the modules to allow access to the modules.

```
*********************************************************************
*    CAUTION              *
*  All modules contain electrostatic discharge sensitive devices     *
*  (ESDS). The use of the new VELOSTAT case is essential to prevent  *
*  damage which may not be noticed immediately.                 *
*                  *
*********************************************************************
```

5. Hook the static strap from the system to the ESD case. Hook the other ESD strap to your wrist.

6. Remove the module, T1023-YA, from the cardcage and place it on the open top half of the conductive package. Install T1023-YA Min Rev "C03" (EQ-01645-01) in the same slot.

7. Complete the Non-Conforming Material Tag and attach the tag to the old T1023-YA module.

8. Package the old module in the same ESD container and close the case.

9. Remove the grounding cable from the ESD container once closed.

10. Return the old T1023-YA module through normal channels ASAP.

11. Return the plastic shield in front of the modules. Power up the system by turning both Circuit Breakers on each AC input assembly to the ON (1) position and turning the upper keyswitch on the front console panel to ENABLE.

12. Boot the Diagnostic Supervisor (VAX/DS).

```
**********************************************************************
*    NOTE       *
*  Before diagnosing the DRB32-W using EVDRI, be sure the DRB32-M  *
*  module (T1022) is fully functional by running Self-Test and     *
*  EVDRH.EXE. Only after the DRB32-M is known to be good should    *
*  diagnosing of the DRB32-W take place. This will help prevent    *
*  erroneous testing results.  The DRB32-W does not contain a VAXBI*
*  corner and, therefore, does not need to be attached to the      *
*  supervisor process.                  *
**********************************************************************
```

13. Run EVDRI.EXE to verify installation of the T1023-YA module.

14. Upon successful completion of the diagnostics exit the VAX/DS.

15. Replace and latch the processor cabinet rear door.

16. Bring up the operating system.

17. Update Site Management Guide to reflect this FCO.

18. Report FCO activity on LARS form in the "Module/fail area/FCO". (See attached examples.)

III. FIELD INSTALLATION AND TEST PROCEDURE FOR VAX 85X0/8700/88X0/8974 & 8978

****

* *

* C A U T I O N *

* *

* The module, as all other VAX 8XXX modules, *

* contains electrostatic discharge sensitive *

* devices (ESDS). The use of the new VELOSTAT *

* case is essential to prevent damage which may *

* not be noticed immediately. *

* *

****

1. Shut down the system by executing the Shutdown Command Procedure.
   $ @SYS$SYSTEM:SHUTDOWN

   After VMS shuts down, type CTRL^P HALT.... you will now be in the console mode. The prompt is ">>>"

2. Using the 85X0/8700/88X0/897X console commands, power the CPU off.

   >>>POWER OFF (CR)

   After the system has powered down, place the Circuit Breaker (CB1) located near the input power cord, in the "OFF"(0) position. Wait five minutes to allow the capacitors to bleed down.

3. Use ALL ESD safety precautions to prevent DOA modules/chips in upgrade kit.

4. Hook static strap from 8XXX to ESD case, hook the other ESD strap to wrist.

5. Remove the module, T1023-YA, from the cardcage and place it on the open top half of the conductive package. Install T1023-YA Min Rev "C03" (EQ-01645-01) in the same slot.

6. Complete the Non-Conforming Material Tag and attach the tag to the old T1023-YA module.

7. Package the old module in the same ESD container and close the case.

8. Remove the grounding cable from the ESD container once closed.

9. Return the old T1023-YA module through normal channels ASAP.

10. Power up the system by pushing the Circuit Breaker (CB1) to the "ON" position. Type POWER ON at the console:

```
>>>POWER ON (CR)
```

11. Boot the Diagnostic Supervisor (VAX/DS).

```
**********************************************************************
*    NOTE       *
*  Before diagnosing the DRB32-W using EVDRI, be sure the DRB32-M  *
*  module (T1022) is fully functional by running Self-Test and     *
*  EVDRH.EXE. Only after the DRB32-M is known to be good should    *
*  diagnosing of the DRB32-W take place. This will help prevent    *
*  erroneous testing results.  The DRB32-W does not contain a VAXBI*
*  corner and, therefore, does not need to be attached to the      *
*  supervisor process.                    *
**********************************************************************
```

12. Run EVDRI.EXE to verify installation of the T1023-YA module.

13. Upon successful completion of the diagnostics exit the VAX/DS.

14. Type @SYSINIT.COM to initialize the CPU and boot the Operating System.

15. Update Site Management Guide to reflect this FCO.

16. Report FCO activity on LARS form in the "Module/fail area/FCO". (See attached examples.)

LARS

CATEGORY F	USA	GIA	EUROPE
Activity -			
(a)Contract and Warranty	W	U	Y
(b)IN-DEC Contract	K		
Hardware Segment Code	111	111	
Non Contract/Non Warranty	F	F	F
(c)RTD/Off-site Agreement	F		
Product Line 01			
DEC Option	DRB32-W	DRB32-W	DRB32-W

Type of Call	M	M	M
Action Taken	D	D	I
Fail Area-Module-FCO-Comments	DRB32-O005	DRB32-O005	DRB32-O005
Material Used	EQ-01645-01	EQ-01645-01	EQ-01645-01

(a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements.
(b) Applies to INDEC AREA ONLY - Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements.
(c) RTD=Return to Digital or Off-site Agreements; If Field Engineer On-site, use Activity Code "F".

\\FCO_DOCS
\\DRB32
\\EQ-01645-01
\^ DRB32
\\AUG 1992