

PROCESSOR TYPE PDP-11 Family, PDP-15

**M7255-00001 CODE: D CS: C ETCH: D**

OCT-72 - PROBLEM 1: Errors in etch runs.

PROBLEM 2: Producibility Check requests use of 0.040 tape instead of 0.031 where possible, and the movement of resistor R19 farther from the adjacent split lug.

CORRECTIONS 1 and 2: Update M7255 artwork to new etch revision "D".

NOTE: See continuation supplement ECO M7255-0001A.  
In-plant effectivity -03 rework immediately**M7255-0001A CODE: D**

NOV-72 - PROBLEM: Tolerance too loose on capacitor and resistors for one-shot at E40.

CORRECTION: Replace 0.01 capacitor, 47K ohm and 30K ohm resistor with a 0.015 capacitor, 18.2K ohm and 31.6K ohm resistor.

In-plant effectivity -Unchanged

**M7255-00002 CODE: D CS: D**

FEB-73 - PROBLEM: Clock pulses need to be standardized throughout control.

CORRECTION: Replace ST4 CLK H with DISK 4 CLK 4.

In-plant effectivity -03 rework immediately

**M7255-C0003 CODE: F CS: E**

MAR-73 - PROBLEM: If an interrupt request has been made as a result of a hardware poll, but not yet granted, and an attempt is made to examine the status of a disk drive other than the drive requesting the interrupt, the status received will be that of the interrupting drive, not the drive thought to be under examination.

CORRECTION: Unlike the RK11-C, the RK11-D, -E, changes the ID bits with the occurrence of any interrupt. To fix this problem, we must make the RK11-D, -E, operate as does the RK11-C. Rework boards to reflect this.

NOTE: Future revision boards will be capable of either method, jumper selectable.

In-plant effectivity -03 \* rework all module-level machines immediately. Rework all system-level machines as needed or as is convenient. Rework all M7255 modules shipping after April 15.

Field effectivity -Rework all M7255's in all RK11-D and RK11-E on systems with two or more disk drives.

( Time To Install And Test 1.5 Hours. ) ( Kit Contents -FCO/Prints )

**M7255-C0004 CODE: F CS: F**

APR-73 - PROBLEM: The one-shot E21, being set when not polling, can cause false SCH CMP by allowing R/W/S RDY lines of nonselected drives to set INT SCH CMP.

CORRECTION: Disable one-shot E21 when not polling. The rework procedure is as follows: 1: Etch cut side one between E21 pin 2 and E21 pin 3. 2: Etch cut side two between E21 pin 3 and E21 pin 11. 3: Add wire between E21 pin 3 and the feed-thru from E22 pin 1. 4: Add wire between E21 pin 2 and the end of R16 which is connected to E21 pin 11.

In-plant effectivity -Rework all in-house M7255 modules immediately, with the exception of system level machines which must be done if the RK11 is not functioning properly; as of May 7, all M7255's must be reworked.

Field effectivity -Rework all M7255's in RK11-D's

( Time To Install And Test 1.0 Hour. ) ( Kit Contents -FCO/Prints )

**M7255-00005 CODE: D CS: H ETCH: E**

JUL-73 - PROBLEM: The M7255 module has no spare IC locations, some long etch runs, and poor capability of XOR testing of the Hardware Poll logic.

CORRECTION: Relayout board to high density standards to add spare IC locations, shorten the long etch runs, and to incorporate new design for Hardware Poll timing.

In-plant effectivity -02 \* -All etch board revisions "D" and earlier in progress by July 2, 1973 may be completed. Do not scrap any boards. Only revision "E" boards may be etched after July 2.

**M7255-C0006 CODE: F CS: J and F1**

SEP-73 - PROBLEM: During a Power Fail sequence, it is possible for WT GATE to be on while an INIT from the M7254, caused by BUS DC LO, is issued. This will damage the data being written on the disk.

CORRECTION: Replace DR BUS AC LO with BUS AC LO in the R/W GATE EN circuit and remove its terminator. If BUS AC LO is asserted at sector pulse time, then WT GATE is not turned on. DR BUS AC LO is not required for proper operation of the control. Resistor R10, 390 ohms, is deleted; a 0.01 capacitor is deleted also, identified as C45 on the revision "B" Circuit Schematic and as C74 on the revision "C" Circuit Schematic.

NOTE 1: See correction supplement FCO's M7255-C006A and M7255-C006B.

NOTE 2: This FCO must be implemented in all M7255's in RK11's with FCO RK11D-C0009.

In-plant effectivity -Rework all M7255's leaving Puerto Rico and Westfield after October 15. Rework all others as required or as convenient.

Field effectivity -Rework all M7255's when symptoms are present.  
( Time To Install And Test 1.5 Hours. ) ( Kit Contents -F1042 -FCO/Prints )**M7255-C006A CODE: F**

OCT-73 - PROBLEM: The BREAK-IN/EFFECTIVITY of FCO M7255-C0006 stated erroneously that the ECO was to be installed on all M7255's in RK11's with ECO RK11D-00010.

CORRECTION: Install FCO M7255-C0006 on all M7255's in RK11's with FCO RK11D-C0009.

In-plant effectivity -Unchanged

Field effectivity -Unchanged

**M7255-C006B CODE: F**

OCT-73 - PROBLEM: The BREAK-IN/EFFECTIVITY of FCO M7255-C0006 is unreasonable.

CORRECTION: Change the first sentence of the BREAK-IN/EFFECTIVITY to read "Rework all units built in Westfield after October 15 and all units leaving Puerto Rico after October 15."

In-plant effectivity -Redefined

Field effectivity -Unchanged

**M7255-B0007 CODE: F CS: K and F2**

JAN-74 - PROBLEM: Power and ground distribution is very poor, which results in high susceptibility to conducted and induced noise. This may show up as intermittent data, check sum, or write check errors.

CORRECTION: Add four ground and four power jumpers to side 1 of the board to improve the network of power and ground distribution; rework only etch revision "D" and earlier. The rework procedure is as follows: GROUND RUNS : Add wire from E50 pin 3 to ground side of C46; ground feed-thru adjacent to E45 pin 1 to ground feed-thru adjacent to E41 pin 7; ground side of C31 to ground side of C28; ground side of C22 to ground side of C17. ÷ 5 RUNS : Add wire from E35 pin 5 to +5V side of C30; E23 pin 14 to +5V side of C50; +5V side of C13 to +5V side of C10; +5V side of C17 to +5V side of R1.

NOTE: See correction supplement FCO M7255-B007A.

In-plant effectivity -Rework all units to be shipped from Puerto Rico Ireland, and Westminster after 1/15/74. Rework all units built in Westfield after 1/15/74.

Field effectivity -Rework M7255's in all RK11-D's at next PM or service call and verify in all new installations.

( Time To Install And Test 2.0 Hours. ) ( Kit Contents -NF1154 -FCO/Prints )

**M7255-B007A CODE: F**

FEB-74 - PROBLEM: FCO M7255-B0007 contains a typographical error in the rework instructions under "ground runs". Item #3 adds a wire from the ground side of C31 to the ground side of C38. C38 should be C28.

CORRECTION: Pictorial rework documentation D-AH-M7255-0-5, revision "F2", contains correct information. A wire is shown from C31 to C28. Change rework instructions to read "C28" instead of "C38". If actual rework is performed to C38, no hard failure will occur; the system will merely be incrementally more susceptible to the kind of problem described on FCO M7255-B0007.

In-plant effectivity -Unchanged

Field effectivity -Unchanged