

PROCESSOR TYPE PDP-11 Family

M7256-00001 CODE: D CS: B ETCH: C
NOV-72 - PROBLEM: The RK11-D samples WORD COUNT OVERFLOW at SECTOR END time, causing premature termination of write and write check functions when transferring short sectors.
CORRECTION: Create a FILE DONE condition that can be sampled instead of WORD COUNT OVERFLOW.
In-plant effectivity -03 rework immediately all revision "B" boards

M7256-00002 CODE: P CS: C
FEB-73 - CORRECTION: Correct print errors on M7256 Circuit Schematics.
In-plant effectivity -06 documentation change only

M7256-C0003 CODE: F CS: D
JUN-73 - PROBLEM: If BUS D16 is asserted while writing the last word of a short sector on an RK11-D in a system with parity memory, the rest of the sector will be filled with ones instead of zeros because the FILE IN buffer fills with parity information, BUS D16.
CORRECTION: Modify the M7256 so that BUS D16 cannot be clocked into the FILE IN buffer. The rework procedure is as follows: 1: Cut etch side one between E28 pin 6 and E27 pin 6. 2: Add a wire between E28 pin 6 and E27 pin 10.

NOTE 1: This FCO must not be installed in RK11-E.
NOTE 2: See continuation supplement ECO M7256-00004.
Quick Check -Wire from E28 pin 6 to E27 pin 10.
In-plant effectivity -03 * -All M7256's in RK11-D's on systems with parity memory must be reworked immediately. Rework in Systems Area. Begin rework in Module Production by 7/1/73.
Field effectivity -Rework all M7256's in RK11-D's with parity memory. (Time To Install And Test .5 Hour.) (Kit Contents -FCO/Prints)

M7256-00004 CODE: D CS: E ETCH: D
JUL-73 - PROBLEM 1: FCO M7256-C0003 was a retrofit FCO which added a wire and etch cut to the M7256 to prevent clocking BUS D16 into the FILE IN buffer; the etch was not updated at that time.
CORRECTION 1: Update the M7256 etch to include jumpers to prevent clocking of BUS D16 for RK11-D or to allow clocking for RK11-E.
PROBLEM 2: Boards are presently built with all jumpers installed, which necessitates the cutting of some jumpers before testing.
CORRECTION 2: Change Parts List to install only those jumpers required for RK11-D operation.

NOTE: See correction supplement ECO M7256-0004A.
In-plant effectivity -02 -Use present stock until new etch revision "D" is available.

M7256-0004A CODE: D
AUG-73 - PROBLEM: ECO M7256-00004 updated the Parts List to specify which jumpers on the module should be installed and which are optional. Jumper W5 was called out to be installed, however it is shown as being optional on the Circuit Schematic, a broken line.
CORRECTION: : Correct the Circuit Schematic to show W5 as being installed, a solid line.
In-plant effectivity -06 -Document correction only

M7256-B0005 CODE: F CS: F
JAN-74 - PROBLEM: The pulse COUNT SA is currently 200 nsec wide. When writing on the disk, the leading edge of COUNT SA stops write current and the trailing edge increments the RKDA register. If bit 5 of RKDA, surface select, changes from a "zero" to a "1", a change in head selection may occur before write current has stopped, destroying the trailing edge of sector 13 on surface 1.
CORRECTION: Increase COUNT SA to 500 nsec by replacing the 10 pfd capacitor, C36, with 56 pfd.

NOTE 1: See continuation supplement FCO M7256-B005A.
NOTE 2: The M7256 module contained within test equipment, XOR, in Ireland, Puerto Rico, and Westfield should be reworked.
In-plant effectivity -Rework all boards to be shipped from Puerto Rico and Ireland module production after 1/15/74. Rework all units built in Westfield after 1/15/74. Rework all units leaving Westminster after 1/15/74.
Field effectivity -Rework M7256's in all RK11-D's at next PM or service call, and verify its implementation in all new installations. (Time To Install And Test 1.5 Hours.) (Kit Contents -PF1156 -FCO/Prints And Parts)

M7256-B005A CODE: F
JAN-74 - PROBLEM: FCO M7256-B0005 corrected a potential race condition in the RK11-D. Further investigation has shown that an extension of this same fix could resolve an inherent write recovery problem in the RK05 that would otherwise be expensive and time consuming.
CORRECTION: FCO M7256-B0005 lengthened the COUNT SA pulse from 200 nsec to 500 nsec by increasing the value of capacitor C36 from 10 pfd to 56 pfd. Do not rework boards to FCO M7256-B0005; instead use a 150 pfd capacitor to lengthen COUNT SA to 1 usec. Symptoms of this problem are the same as detailed in FCO M7256-B0005.
In-plant effectivity -Rework all boards to be shipped from Puerto Rico and Ireland module production after 2/1/74. Rework all units built in Westfield after 2/1/74. Rework all units leaving Westminster after 2/1/74.
Field effectivity -Rework all units exhibiting this problem.