

NEW NUMBER - MAINDEC-11-DZMMJ

PDP-11 MEMORY 8K SPECIAL

ABSTRACT

The "8K special" program is designed to allow all PDP-11 memory diagnostics to reside in the first 4K bank of core. An executive routine controls execution of all diagnostics selected via the switch register.

REQUIREMENTS

PDP-11 with at least 8K of core storage.

STORAGE - The first 4K of core memory is used by the program.

LOADING - Absolute Loader

EXECUTION TIME - Following is a list of approximate run times when testing 8K of memory under normal conditions. When testing other than 8K, the times expand (nearly) except for no dual addressing and core heating which expand exponentially.

Base up and down	35 sec
Base memory patterns	2 min
Moving 1's and 0's	2 min
1's susceptibility	2 min
Worst case noise	3 min
Core heating	19 min
Randat	2 min
No dual addressing	40 min

STARTING PROCEDURE - Starting at address 200 and all switches down executes all tests.

PRINTOUTS - Yes

SWITCH REGISTER OPTIONS - Yes

SW15	= HALT ON ERROR
SW14	= SCOPE LOOP
SW13	= INHIBIT PRINTOUT
SW12	= INHIBIT TEST HEADER
SW11	= BELL ON ERROR
SW10	= HALT AT END OF PASS
SW09	=
SW08	= SKIP TEST 08 (NO DUAL ADDRESSING)
SW07	= SKIP TEST 07 (RANDAT)
SW06	= SKIP TEST 06 (CORE HEATING)
SW05	= SKIP TEST 05 (WORST CASE NOISE)
SW04	= SKIP TEST 04 (1's SUSCEPTABILITY)

SW03 = SKIP TEST 03 (MOVING 1's AND 0's)
SW02 = SKIP TEST 02 (BASIC MEM PAT(S))
SW01 = SKIP TEST 01 (BASIC UP AND DOWN)

SEE MAINDEC FOR FURTHER INFORMATION.