

MAYDEC=11=D9D

NEW NUMBER = DZQCA

Communication Test Program (CTP)

ABSTRACT

The function of this test is to detect malfunctions caused by the interaction of multiple communication devices. The test is designed to run 32 DC11 asynchronous line interfaces, 16 KL11 user teletype interfaces, 32 DP11 synchronous line interfaces, 16 DM11 asynchronous multiplexers, 16 DN11 auto calling units (64 lines), one DX11 (IBM 360 or 370 Interface), 31 DL11C, D or E asynchronous interfaces, one LP11 line printer, one TC11 DECTape, one RF11 disk, one RK11 disk, one RP11 disk and one KL11 console teletype interface. All devices are fully interrupt driven. This allows a background program to monitor the comm. devices (DC's, KL's, DP's, DM's, DL's, DN's) and continuously check NPR data (RF, RK, RP, TC). On the first pass of this program the user must generate the hardware configuration to be tested. This is accomplished by leaving the start address in the console switches when pressing START. A systems configuration of devices currently on the system will be output on the CTY. The program then halts, permitting the user to select the device to be tested. After the initial configuring has been accomplished the restart procedure is to "LOAD ADDRESS", zero switches, "START".

REQUIREMENTS = PDP-11 = 8K

STORAGE = Fixed core 0 = 026760
Variable core 026762 and up

LOADING = Absolute Loader

EXECUTION TIME = The run time is a function of system overhead. With no devices running it takes approximately 1 min. to complete the background. As the number of devices tested increases so does the background time. Printout will occur.

STARTING PROCEDURE = Start at 200 (leave start ADRS in switches if first run or new test configuration);
Start at 1000 if LPT was tested

PRINTOUTS = Yes

SWITCH REGISTER OPTIONS = Yes

With start address in switches program halts with R0=1.
Program halts R0=3 thru R0=16 allocation of line activity for devices selected on halts below.

R0 =1 SWITCH SELECTIONS
(SET) (TEST)

R0 =2 SWITCH SELECTIONS
(SET) (TEST)

SW0 =1, NON-COMM DEVICES	SW0 =1, CTY (CONSOLE TTY)
SW1 =1, DC11/s	SW1 =1, LP11 (LINE PRINTER)
SW2 =1, KL11/s	SW2 =1, TC11 (DECTAPE)
SW3 =1, DP11/s	SW3 =1, RF11 (DISK)
SW4 =1, DM11A/s	SW4 =1, RK11 (DISK)
SW5 =1, DN11/s	SW5 =1, RP11 (DISK)
SW6 =1, DM11BB/s	SW6 =
SW7 =1, KS11/s	SW7 =
SW8 =1, DX11/s	SW8 = NOT USED
SW9 =1, DL11C,D OF E/s	SW9 =

R0=177777 DYNAMIC SWITCH SELECTION
(SET) (FUNCTION)

SW 8=1, INHIBIT MEM,TEST WORST CASE NOISE
 SW 9=1, INHIBIT MEM,TEST FAST READ WRITE
 SW10=1, BELL ON ERROR
 SW11=1, INHIBIT ITERATIONS
 SW12= (NOT USED)
 SW13=1, INHIBIT ERROR TYPEOUT
 SW14=1, SCOPE LOOP
 SW15=1, HALT ON ERROR