

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PROJECT MAC

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The Calcomp plotter as an output device

in TS and LISP

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TS plotter routines.

(1) CHAR PLOT (see AI Memo. # 125) has been modified for TS. [It may be found on MS4 with the non-TS version].

The following changes should be noted:

CRKBRK (now called PLTBRK in the non-TS CHAR PLOT), SUBPLT (which is not needed since PLOT C can be called recursively), PP (ditto), LBUFF and LWBUFF (as the TS system does the buffering) do not exist in the TS version. CRKCHN, now called PLTCHN (in both TS and non-TS versions) does exist.

The command 111Ø ... (go to effective address at process time) still exists, but in TS return is with "POPJ P", rather than JRST 12, @ PLTBRK". The character codes Ø and 2ØØ (lower case Ø) respectively OPEN and CLOSE the plotter.

(2) CHARPL SCOPE may soon be also so modified for TS.

(3) SCOPE PLOT is unchanged.

(4) None of the above TS routines can be used easily at present due to the lack of a TS STINK.

LISP plotter commands.

The plotter version of TS LISP is on the disk and may be loaded by PLISP H. The non-TS version is on MS4 as PLISP.

The LISP functions to use the plotter are as follows:

(PLOT n). Same as calling PLOT C with n in accumulator C (See AI. Memo. # 125). Returns T except if n = Ø or 2ØØ, in which case it will return NIL if the plotter is not open after the command has been executed.

(CLENGTH n). Same as calling CLNGTH with n in accumulator C. Returns a non-LISP number.

(IPL). Opens plotter and initializes for plotting display lists. Returns T unless plotter is busy.

(PLOTLIST arrayname) [SUBR]. Plots the display list which is in the array. Returns NIL if (GET arrayname (QUOTE SUBR)) is NIL. Otherwise returns as a LISP number the last location from which it obtained a #scope word.

The display list is assumed terminated by a stop flag, a command to enter an illegal mode, or a command to enter vector continue mode (which it doesn't know about).

(NEXTPLOT). Moves the paper to an empty portion after a "PLOTLIST". In addition, the plotter may be used as an output device. It can be turned on by a P and off by a U. Before using it as such, it is advisable to execute some such sequence of commands as (PLOT 31) (PLOT 10) (PLOT 22) to make the results more legible.