TWIN Technical Note General

Number : GN007

Subject: Basic and Pascal

Date : 29-6-82

We are pleased to announce the availability of TWO high level languages for TWIN.

1) Basic

This BASIC consists of an 8K interpreter to translate BASIC statements and to execute them on the TWIN. The following BASIC instructions are available within this version:

CALL

DATA

DIMension

END

FOR

GOSUB

GOTO

IF .. THEN

INPUT

LET

NEXT

PEEK

POKE

PRINT

READ

RESTORE RETURN

REMark

STOP

Upto 4 chennels may be used within a BASIC program to communicate with the standard TWIN files and devices.

Program is supplied on disk for and is available under 12NC 9390 289 90701

2. PASCAL

The implemented language is Standard Pascal (see: K. Jensen and N. Wirth, "Pascal User Manual and Report", Springer Verlag, second edition 1978) with a number of limitations and certain extensions.

Porgrams are compiled to P-code, object for an abstract stack oriented processor. A P-code interpreter emulates this processor.

The design of this Pascal system allows implementation on a variety of 2650 systems, thanks to its following features:

- adaptability to memory space allocation of the host system (easy relocation),
- 2. separation of program and data space so that the interpreter and program may reside in (P)ROM,
- 3. adaptability to the I/O devices available to the host system, by separating the I/O-routines and allowing adaptation by the user,
- 4. availability of an "integer" version, with the same features except for operations on real numbers, which allows the interpreter to be much smaller,

5. the possiblity to compile programs either on the "TWIN"-development system or on the target system itself.

Pascal is supplied on disk together with a configurating program to simplify the generation of the PASCAL Compiler and Interpreter.

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K.T. Merrington