CINCH I

A FLOATING POINT INTERPRETER FOR THE PB250.

MEMORY

4095 words. Commands and alphanumeric information occupy 1 word
Data occupies 2 words each with even numbered addresses only.

EXTERNAL KEYBOARD OPERATIONS

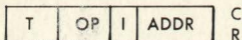|	
R	Prepare to read program tape.
B	Prepare to read binary tape.
M	Memory print out.
P	Binary punch out.
K	Prepare to read Flexowriter keyboard.
S	Set relocation index and read relocatable tape.
G	Transfer (Go To).

DATA FORMAT

$$10^{-38} < |N| < 10^{+38} \quad \text{or} \quad N = O$$

INPUT

$\pm$	SIGN ($+$ may be omitted).
n— —n	Up to 10 digits. Decimal point may be embedded.
$\pm$ ee	Exponent (may be omitted).

OUTPUT

$\pm$ n— —n $\pm$ ee 10 digit fraction with 2 digit exponent.

COMMAND FORMAT

T	OP	I	ADDR	C R

T   Trace tag, optional (T or space).

OP   2 numeric digits.

I   1 alphabetic character (A-G) or space.

ADDR Up to 4 numeric characters
      (0000-4095).

INPUT CODES

A	Alphanumeric information.
C	Commands.
D	Decimal numbers.
L	Locations.
E	End of data.
X	Non-relocation.
G	Go To.

pb

PACKARD BELL COMPUTER

1905 ARMACOST AVENUE
LOS ANGELES 25, CALIFORNIA

CODE	MNEMONIC	DESCRIPTION
ARITHMETIC		
10	CAD	Clear, add
20	CSU	Clear, subtract
11	CAA	Clear, add absolute
12	ADD	Add
13	ADA	Add absolute
22	SUB	Subtract
14	MUP	Multiply
15	DIV	Divide
25	DVM	Divide Memory
DECISION AND TRANSFERS		
30	CAM	Compare Accumulator & memory (sw = AC—M).
31	TCL	Transfer if comparison switch low (sw < 0).
32	TCH	Transfer if comparison switch high (sw > 0).
33	TCE	Transfer if comparison switch equal (sw=0).
34	TCU	Transfer if comparison switch unequal (sw ≠ 0).
40	TRU	Transfer unconditional.
41	TAN	Transfer accumulator negative
42	TAP	Transfer accumulator positive
43	TAZ	Transfer accumulator zero.
44	TNZ	Transfer accumulator non-zero
07	*TSI	Transfer and set index.
MANIPULATION AND TRANSFER OF INFORMATION		
60	STA	Store accumulator
05	*STB	Store base of index.
INSTRUCTION·MODIFYING AND TALLYING		
02	*SIB	Set base of index
03	*SIM	Set modifier of index
04	*SIL	Set limit of index
06	*MIT	Modify index and transfer
CONTROL		
00	HLT	Halt
01	NOP	No operation
INPUT-OUTPUT		
16	RTK	Read typewriter
17	RPT	Read paper tape
26	TNT	Type number & tab
27	TNC	Type number & carriage return
36	PNT	Punch number & tab
37	PNC	Punch number & carriage return
46	TAC	Type alphanumeric information
47	PAC.	Punch alphanumeric information
FUNCTIONS		
50	SIN	Sine
51	COS	Cosine
52	ATN	Arctan
53	LNE	$\log_e$
54	LOG	$\log_{10}$
55	EXP	e^x
56	SQR	Square Root
57	TEN	10^x

*Index letter required.