HP 82180A Extended Functions/Memory Module Quick Reference Card

While the HP 82180A Extended Functions/Memory Module is plugged into the calculator, the following functions are available for your use. This module also provides you with 127 registers of extended memory and enables you to utilize one or two HP 82181A Extended Memory Modules to increase the size of extended memory.

Extended Functions

ALENG	Returns the length of the string in the ALPHA register to the X-register.
ANUM	Searches the ALPHA register for an ALPHA-formatted number and returns the numerical value to the X-register. (The X-register is unaffected if there is no number in the ALPHA register.)
AROT	Rotates the contents of the ALPHA register by the number of characters indicated by the number in the X-register. Rotates left for positive numbers, right for negative.
ATOX	Moves leftmost character out of the ALPHA register and places its character code in the X-register. (Refer to back page, Displayable Characters and Their Corresponding Codes.)
CLKEYS	Clears all key assignments.
GETKEY	Halts program execution until either a key is pressed or approximately 10 seconds elapse. Puts keycode in X-register if key is pressed; puts zero in X-register if no key is pressed within the time period.

PASN	Assigns function or program name to specified key. Requires function or program name in the ALPHA register, keycode in the X-register.
PCLPS	Clears program named in the ALPHA register (or current program if the ALPHA register is empty) and all programs that follow.
POSA	Scans the ALPHA register for the character or characters in the X-register. If the X-register contains a numeric character code, a single character is searched for. If the X-register contains ALPHA data, that string is searched for. Returns position of first character to the X-register, or −1 if no match is found. (Refer to back page, Displayable Characters and Their Corresponding Codes.)
PSIZE	Allocates registers to data storage. Requires number of data registers in the X-register.
RCLFLAG	Recalls data representing the status of flags 00 through 43 to the X-register.
REGMOVE	Copies *nnn* main memory registers in block starting at register *sss* to block starting at register *ddd*. Requires index in form *sss.dddnnn* in X-register.
REGSWAP	Swaps *nnn* main memory registers beginning at register *sss* with *nnn* registers beginning at register *ddd*. Requires index in form *sss.dddnnn* in X-register.
SIZE?	Returns the number of data storage registers in main memory to the X-register.
STOFLAG	Uses data in X-register from RCLFLAG to restore flags 00 through 43, or the flag data in Y-register to restore a block of flags specified by a number in the form *bb.ee* in the X-register.

X<>F — Exchanges the contents of the X-register with the status of flags 0-7.

XTOA — Converts the character code in the X-register to the corresponding character and appends the character to the ALPHA register. (Refer to back page, Displayable Characters and Their Corresponding Codes.)

Extended Memory

APPCHR — Appends contents of the ALPHA register at the end of the current record in the working ASCII file.

APPREC — Appends contents of the ALPHA register to the working ASCII file as a new record.

ARCLREC — Appends a record or portion of a record from the working file to the contents of the ALPHA register. Stops when the ALPHA register is full or when the end of the record is reached.

CLFL — Clears a data file or ASCII file. Requires file name in the ALPHA register.

CRFLAS — Creates an ASCII file. Requires file name in the ALPHA register and file length (registers) in the X-register.

CRFLD — Creates a data file. Requires file name in the ALPHA register and file length in the X-register.

DELCHR — Deletes the number of characters indicated by the X-register from the current record, starting from the character pointer.

DELREC — Deletes the current record in the working ASCII file.

EMDIR — Displays a list of the files in extended memory and returns the number of registers that remain unused.

FLSIZE — Returns the number of registers in a file. Requires file name in the ALPHA register.

GETAS — Copies an ASCII file from an HP-IL mass storage device to extended memory. Requires the source file name and (if different) the destination file name, in the ALPHA register.

GETP — Replaces the last program in main memory with the contents of the program file named in the ALPHA register.

GETR — Copies an entire data file into main memory, beginning with register 00.

GETREC — Clears the ALPHA register and copies up to 24 characters from the current record in the working ASCII file to the ALPHA register.

GETRX — Copies registers from the working data file to a block of main memory specified by a number in the form *bbb.eee* in the X-register.

GETSUB — Copies the program file named in the ALPHA register to the end of program storage in main memory.

GETX — Copies the current register in the working data file to the X-register.

INSCHR — Inserts the contents of the ALPHA register into the current record ahead of the current character position.

INSREC — Inserts the contents of the ALPHA register ahead of the current record as a new record.

POSFL — Scans the working ASCII file for a match with the string in the ALPHA register. Returns pointer index (*rrr.eee*) to the X-register if a match is found, −1 if no match is found.

PURFL — Purges the file named in the ALPHA register.

RCLPT — Recalls the pointer index from the working file to the X-register. The pointer index is in the form *rrr* (register number) for data files, *rrr.ccc* (record number and character position) for ASCII files, or *bbbb* (number of bytes) for length of program file.

RCLPTA — Recalls the pointer index or length of program from the file named in the ALPHA register to the X-register.

SAVEAS — Copies an ASCII file from extended memory to an HP-IL mass storage device. Requires the source file name and (if different) the destination file name in the ALPHA register.

SAVEP — Copies the program named in the ALPHA register to extended memory.

SAVER — Copies all the data registers in main memory to the data file named in the ALPHA register.

SAVERX — Copies the block of main memory data registers specified by the number in the X-register (*bbb.eee*) to the working data file, starting at the current pointer position.

SAVEX — Copies the contents of the X-register to the working file at the current pointer position.

SEEKPT — Positions the pointer or pointers in the working file using an index number in the X-register. Requires index in the form *rrr* (register number) for data files or *rrr.ccc* (record number and character position) for ASCII files.

SEEKPTA — Positions the pointer or pointers in the file named in the ALPHA register using an index number in the X-register. Requires index in the form *rrr* (register number) for data files or *rrr.ccc* (record number and character position) for ASCII files.

Displayable Characters and Their Corresponding Codes

Char.	Code	Char.	Code	Char.	Code
‾	0	3	51	N	78
[illegible]	1	4	52	O	79
[illegible]	4	5	53	P	80
[illegible]	5	6	54	Q	81
[illegible]	6	7	55	R	82
μ	12	8	56	S	83
∡	13	9	57	T	84
≠	29	:	58	U	85
space	32	;	59	V	86
!	33	<	60	W	87
"	34	=	61	X	88
#	35	>	62	Y	89
$	36	?	63	Z	90
%	37	@	64	[	91
&	38	A	65	\	92
'	39	B	66	]	93
(	40	C	67	↗	94
)	41	D	68	_	95
*	42	E	69	⊤	96
+	43	F	70	a	97
,	44	G	71	b	98
−	45	H	72	c	99
.	46	I	73	d	100
/	47	J	74	e	101
0	48	K	75	Σ	126
1	49	L	76	⊦	127
2	50	M	77		

HEWLETT PACKARD

1000 N.E. Circle Blvd., Corvallis, OR 97330, U.S.A.

82180-90002

Printed in U.S.A. 11/81