

CONTROLLER STATEMENTS



IEEE 488

IEC 625

for
**STRING HANDLING
AND BUS CONTROL**

**P2000C/P2500
HP85/HP86
HP200 series
CBM commodore
System 4400**

9499 997 01411

840606

String handling

	P2000C/P2500	HP85/86	HP200 series
Substrings	LEFT\$(A\$,L) RIGHT\$(A\$,L) MID\$(A\$,P) MID\$(A\$,P,L)	A\$[1,L] A\$(P) A\$(B,E)	A\$[1,L] A\$(P) A\$(B,E) A\$(P:L)
Concatenation	A\$ + B\$	A\$&B\$	A\$&B\$
Searching substrings	INSTR(A\$,B\$) INSTR(P,A\$,B\$)	POS(A\$,B\$)	POS(A\$,B\$)
Length of string	LEN(A\$)	LEN(A\$)	LEN(A\$)
String into numeric value	VAL(A\$)	VAL(A\$)	VAL(A\$)
Numeric value into string	STR\$(V)	VAL\$(V)	VAL\$(V)
String character into dec. equivalent	ASC(A\$)	NUM(A\$)	NUM(A\$)
Dec. equivalent into string character	CHR\$(D)	CHR\$(D)	CHR\$(D)
Dec. equivalent into hexadecimal string	HEX\$(D)	DTH\$(D)	DVAL\$(D,16)
Hexadecimal string into dec. equivalent	VAL("&H" + H\$)	HTD(H\$)	DVAL(H\$,16)



PHILIPS

IEC/IEEE Buscontrol	P2000C/P2500	HP85/HP86	HP200 -series	CBM Commodore	System 4400
INITIALISATION	IEC INIT	ABORTIO 7	ABORT 7	after power on	INIT
STANDARD I/O					
Input	IEC INPUT # 27,A\$	ENTER 727;A\$	ENTER 727;A\$	[OPEN 5,27:]INPUT #5,A\$	INPUT #27:A\$
Output	IEC PRINT #22,B\$	OUTPUT 722;B\$	OUTPUT 722;B\$	[OPEN 6,22:]PRINT #6,B\$	PRINT #22:B\$
Status	IEC STATUS A				
I/O TERMINATION					
Change input term.	IEC LASTIN m,[B\$],R\$	ENTER 727 USING ...,A\$	ENTER 727 USING ...,A\$		CHEND(D)
Default input term.	LF ^ End or End	CR LF or LF	LF or CR LF or End	CR or End	ETX or End
Change output term.	IEC LASTOUT m,[B\$],R\$	CONTROL 7,16;X,...	OUTPUT 722 USING ...,B\$		CHEND(D)
Default output term.	LF ^ End	CR LF	CR LF	CR LF ^ End	ETX ^ End
LOW LEVEL I/O					
IEC TLAD #22, #23	IEC TLAD #22, #23	SEND 7;CMD X DATA A\$	SEND 7;CMD X DATA A\$		PREAD X
IEC UNT	IEC UNT	SEND 7;UNT	SEND 7;UNT		PWRITE X:A\$
IEC TALK #22	IEC TALK #22	SEND 7;TALK22	SEND 7;TALK22		
SERVICE REQUEST					
Interrupt enable	IEC ON SRQ GOSUB <In>	ON INTR 7 GOSUB <In>	ON INTR 7 GOSUB <In>		AT SRQ <In>
Interrupt disable	IEC ON SRQ OFF	ENABLE INTR 7;8	ENABLE INTR 7;2		OFF SRQ
Status SRQ line	IEC STATUS A	OFF INTR 7	OFF INTR 7	by PEEK and POKE	
STATUS 7,1;A		STATUS 7,1;A	STATUS 7,7;A		
SERIAL POLL					
Single device	IEC POLL #22,S	S = SPOLL(722)	S = SPOLL(722)	by PEEK and POKE	with PWRITE and PREAD
Until RQS bit is true					POLL 22,23,24:A,S
REMOTE LOCAL					
REN-line to 1	IEC REMOTE	REMOTE 7	REMOTE 7	REN is always true	INIT
Sel. device to remote	IEC REMOTE #17	REMOTE 717	REMOTE 717	[OPEN 6,17:]PRINT #6,	PRINT #17:
REN-line to 0	IEC LOCAL	LOCAL 7	LOCAL 7		DREN
Sel. device to local	IEC LOCAL #17	LOCAL 717	LOCAL 717	by PEEK and POKE	PRINT #17,1:
Local lockout	IEC LOCAL LOCKOUT	LOCAL LOCKOUT 7	LOCAL LOCKOUT 7	by PEEK and POKE	PWRITE 17
CLEAR					
All devices	IEC CLEAR	CLEAR 7	CLEAR 7	by PEEK and POKE	PWRITE 20
Selected device	IEC CLEAR #17	CLEAR 717	CLEAR 717	by PEEK and POKE	PRINT #17,4:
TRIGGER					
All listeners	IEC TRIGGER	TRIGGER 7	TRIGGER 7	by PEEK and POKE	PWRITE 8
Selected device	IEC TRIGGER #17	TRIGGER 717	TRIGGER 717	by PEEK and POKE	PRINT #17,8:
TIME OUT					
Time	IEC TIMEOUT <sec>	SET TIME OUT 7;<msec>	ON TIME OUT 7,M GOSUB L	fixed at 64 msec	TOUT <sec>
Enable	by time out spec	ON TIME OUT 7 GOSUB<In>	M = <msec> L = <In>	always enabled	always enabled
Disable	IEC TIMEOUT 0	OFF TIME OUT 7	OFF TIME OUT 7		
ADDRESS & CONFIGURATION	IEC ADDRESS A	STATUS 7,4;A	STATUS 7,3;A		

String handling

CBM Commodore

System 4400

Substrings

LEFT\$(A\$,L)
RIGHT\$(A\$,L)
MID\$(A\$,P)
MID\$(A\$,P,L)

SUBSTR\$(A\$,P,L)

Concatenation

A\$ + B\$

A\$ + B\$

Searching substrings

SEARCH(A\$,B\$,1)
SEARCH(A\$,B\$,P)

Length of string

LEN(A\$)

LENGTH(A\$)

String into numeric value

VAL(A\$)

STR(A\$)

Numeric value into string

STR\$(V)

NUM\$(V)

String character into
dec. equivalent

ASC(A\$)

CHR(A\$)

Dec. equivalent into
string character

CHR\$(D)

CHR\$(D)

Dec. equivalent into
hexadecimal string

Hexadecimal string into
dec. equivalent