

INTERPRETER VARIABLES

V0.002

9/10/82

NAME	SIZE	USAGE	
		(bytes)	
STLN	2	Physical pointer to first byte of line # table	
ENLN	2	Physical pointer to last byte of line # table (ENLN)+1 is first byte of text.	
PGMTOP	2	Physical pointer to last byte of text.	
NOTE: STLN, ENLN, PGMTOP are word-sized physical pointers because they are restricted to pointing to the first 64K of Physical Ram. STLN will be fixed for any given edition of armadillo Basic.			
CURLIN	2 (EXTRAM)	Physical pointer to current line number table entry.	
TEXT	2	Physical pointer to current line of text.	
PGMPTR	2 (CHPTR)	Physical pointer to current execution point. An absolute logical pointer, assuming line is mapped into the beginning of its standard window.	
CMTOP	4	Physical pointer to last available byte of CPU ram.	
USER	4	Physical pointer to first byte of ram allocated to user. (Initially (CMTOP)+1). (Last byte of available to interpreter is in (USER)-1.)	
CHAT	1	Next byte of statement being interpreted.	
VSPTR	2	Logical pointer to top of value stack, assuming standard window.	
STKTP4	4	Physical equivalent of STKTOP.	
STKBEG	4	Physical equivalent of STVSPT. (Value changes if PAB)	AEM
SYMTAB	4	Physical pointer to low end of symbol table.	
SYMPTR	4	Physical pointer to the free space of symbol table area.	WEY
STRSP	4	Physical pointer to high end of string space.	
STREND	4	Physical pointer to low end of string space.	
SREF	4	Physical pointer to temporary string.	
TEMP5	4	Physical ptr to string to be copied by LITSTR.	AM
SPSAL	2	VDP pointer to individual sprite attribute list.	JF10/82
PNT	2	VPD pointer to pattern name table.	
SAL	2	VPD pointer to sprite attribute list.	
SMT	2	VPD pointer to sprite motion table.	
PGT	2	VPD pointer to pattern/sprite generator table.	
VMODE	1	Current VDP mode.	
VWIDTH	1	Physical video line width. (depends on mode.)	
LEFT	1	Left margin.	
LWIDTH	1	Logical line width. (right margin is VWIDTH-LWIDTH-LEFT.)	
TOP	1	Top margin.	
LINES	1	Number of logical lines. (bottom margin is 24-LINES-TOP.)	
SCRBUF	40	Scroll buffer (also scratch)	
LLENG	24	Current line lengths. (for smart scroll)	
MAXPG	2	Maximum program size to save as PROGRAM file.	

S C R A T C H P A D A L L O C A T I O N

>8000-OFF Memory Mapper files, #0-#7, on 64 byte boundaries
 >8100-11F Memory Mapper XDP workspace (MEMWS)
 >8110-113 CMTOP - (R8 and R9 in MEMWS) Physical pointer
 first unusable byte. (NOTE: this is different from MEMTOP
 at >8370, which is the last usable byte in VDP RAM.)
 >8120-82FF

>8300-303 STLN first byte of line number table (always zero?)
>8304-307 ENLN last byte of line number table
>8308-30B PGMTOP last byte of program
>830C-30F CURLIN line number table entry of current line
>8310-313 EXTRAM address of line number table entry
>8314-317

>834A-36D FAC/ARG floating point accumulators
>836E-36F VSPTR value stack pointer
>8370-371 MEMTOP last free byte in VDP RAM
>8372 Data stack pointer
>8373 Subroutine stack pointer
>8374 Keyboard number for scan
>8375 Input character
>8376 Joystick Y
>8377 Joystick X
>8378 8-bit random number
>8379 Timer
>837A Sprite motion
>837B VDP status register copy
>837C Status
>837D Screen character buffer
>837E XPT
>837F YPT
>8380-3BF Subroutine stack
>83C0-3D8 Interpreter work area
>83C0-3C1 Random number seed
>83C2-3C3 VDP Interrupt flags
>83C4-3C5 User timer interrupt routine pointer
>83C6 KBD flag
>83C7 Saved modifier flags
>83C8 KBD 0 debounce
>83C9 KBD 1 debounce
>83CA KBD 2 debounce
>83CB Save grom address of header
>83CC-3CD Sound list address
>83CE-3CF Number of sound bytes.
>83D0-3D1 CRU list
>83D2-3D3 SADDR
>83D4-3D5 SAVVDP
>83D6-3D7 TIMEOUT counter (for screen)
>83D8-3D9 Save R11 in keyscan
>83DA-3DF Interrupt workspace (R13-R15)
>83E0-3FF GPL workspace
>8400-403 SOUND CHPI ACCESS - DO NOT USE
>8408-4FF
>8500-5FF Crunch buffer
>8600-6FF
>8700-7FF