

# SmartBASIC

## PEEKs, POKEs & CALLs - Revision 1.01

Compiled by Sharon McFarlane/NIAD for SmartBASIC+ v1.79 (10/01/1987)

Updated by Jim Notini/NIAD for SmartBASIC+ v1.99 (10/07/2025)

**IMPORTANT:** SmartBASIC 1.0 Revision 79 by Coleco, the last revision that is known to have been made available by Coleco although some information was shared about revisions up to 84, was used as a base point for all value listed.

Revisions prior to 79 are not very common, probably only the very earliest ADAM systems sold in the Northeast of the United States, and contain numerous differences compared to the default settings listed below for Revision 79. Once such example is the CHAIN command and incomplete routine code is present in earlier revisions and the code is removed in revision 79.

Location	Function/Description	SmartBASIC v1 Revision #79 Default/Range	SBv1.79 Setting	SBv1.99 Setting
159	FLASH Speed (1 = Slowest/255 = Fastest)	12		
260	Version of SmartBASIC V1.0 - Do Not Change	79		
456	Value 24 to LIST protect program, changes LIST command to RUN	--		
461	See *** at end of list	73		
1072	Value 4 allows Catalog read without Screen Display	89		
1083	Value 1 disables Coleco info from being displayed after SmartBASIC boots	28		
1145	Number of Prompt Fonts (1-2)	1	2	2
1146	1st Left Line Margin Prompt	93	27	93
1147	2nd Left Line Margin Prompt	0	7	7
6356	Value 201 disables NEW/Merge Basic files	205		
7879	Value 7 change to 1/4 screen spacing Good for 40 Column Text mode. Must be POKEd with 7881	15		
7881	Value 8 must be POKEd with 7879	16		
7884	Value ASCII # contains the value of the char. printed to screen between commas in a PRINT command	32		
8114	Value 201 disables ONERR GOTO	217		
8141	Value 0 implements a CLEAR command w/o205 a restore also being performed. Must be POKEs with 8142 & 8143			
8142	Value 0 must be POKEd with 8141 & 814310			
8143	Value 0 must be POKEd with 8141 & 814237			
9026	Value 0 disables CONTROL-C check when using INPUT command. Must be POKEd with 9027 and 9028	202		
9027	Value 0 must be POKEd with 9026 & 902898			
9028	Value 0 must be POKEd with 9026 & 902824			
9236	Value 255 Reverses "Input string subroutine ignores leading spaces unless they are in quotes	32		
9618	Value 255 To accept leading spaces in strings that are not in quotes	32		
11065	Value 201 disables clearing Title screen displayed while SmartBASIC loads	33		

12043	Value 201 disables PR#1 screen echo	245		
12185	Sets Line Limit in TEXT Mode/Maximum=239	128	216	239
12329	Value 7 changes TAB (? CHR\$(9)) to move 8 spaces instead of 4. Good for 40 Column Text mode. Must be POKEd with 12333	3		
12333	Value 8 used in conjunction with 123294			
12374	Value 148 activates INSERT Key (Cntl.N)	14	148	148
12375	Value 151 activates DELETE Key (Cntl.O)	15	151	151
12376	Value 150 activates CLEAR Key (Cntl.X)	24	150	145
12380	Value 150 activates CLEAR Key (Cntl.L) Must be poked with 18307 & 19311,150	12	12	150
13349	Value 0 deletes space after Comma	32	32	0
13357	Value 0 deletes space after Semi-Colon	32	32	0
13423	Value 0 deletes space after BASIC command	32		
15824	Value 216 = 1st fix re DATA/REM Bug	217	216	N&B /
15830	Value 8 = 2nd fix re DATA/REM Bug	19	8	D.E.I.
15831	Value 55 = 3rd fix re DATA/REM Bug	8	55	PATCH
15832	Value 19 = 4th fix re DATA/REM Bug	55	19	USED
16054	Value # = ASCII value of blank space	200		
16089	HIMEM Pointer (lo byte)	128		
16090	HIMEM Pointer (hi byte)	209		
16091	PEEK(16091)*256+PEEK(16092) = # of (lo)	0		
16092	of Program Lines in Memory (hi)	0		
16095	LOMEM Pointer (lo byte)	15		
16096	LOMEM Pointer (hi byte) PEEK(16096)*256+PEEK(16095) = LOMEM	107		
16097	End of Variable Table Pointer (lo byte)	0		
16098	End of Variable Table Pointer (hi byte)	0		
16099	End Variable Command Name Table (lo byte)	29	15	15
16100	End Variable Command Name Table (hi byte)	108	109	109
16105	Pointer-New Variables String (lo byte)	0		
16106	Pointer-New Variables String (hi byte)	0		
16107	Number of Variables (lo byte)	31	0	0
16108	Number of Variables (hi byte)	0		
16109	Start Numeric Variables (lo byte)	127		
16110	Start Numeric Variables (hi byte)	209		
16111	Pointer-End of String space (lo byte)	29	16	16
16112	Pointer-End of String space (hi byte)	108	107	107
16115	Pointer-Start of String space (lo byte)	29	16	16
16116	Pointer-Start of String space (hi byte)	108	107	107
16117-18	Current DATA Line # (lo/hi bytes)	0/0		
16119-20	Current DATA Value (lo/hi bytes)	0/0		
16121	# Bytes left in Current DATA Value	0		
16124-25	Start Next Line Number/Token Address	0/0		
16126	PEEK(16126)*256+PEEK(16127) = Line (lo)	0		
16127	# re ONERR GOTO (hi)	0		
16129	SPEED Value	255		
16130-31	Vector toUSR Routine (lo/hi bytes)	201/24		
16132-33	Ampersand Routine (lo/hi bytes)	227/32		
16134	Value 255 disables Cntl.C/Substitute Value 145 changes Cntl.C to UNDO Key	3	145	27
16135	Cntl.S (freeze screen)/Substitute Value 144 changes Cntl.S to WILDCARD	19	144	144
16136	Value 0 forces "Print Pause" in program	255		
16137-47	Temporary Storage Area	0		
16148	Value 0 deletes spaces from Line #'s &32 converts LIST to SmartWriter format			
16149	Highest Pokeable Address (lo byte) Value 255 allows pokes over 54160	144	255	255
16150	Highest Pokeable Address (hi byte) Value 255 allows pokes over 54160	211	255	255
16162	Floating Point Accumulator	0		
16171	Floating Point Operand	0		
16176	Value= # Print Underlined character trick	80		
16178	Number of digits in Float output	9		

16192	Pointer to RND Seed (lo byte)	145		
16193	Pointer to RND Seed (hi byte)	0		
16207	Last GOTO/GOSUB line # (lo byte)	0		
16208	Last GOTO/GOSUB line # (hi byte)	0		
16247	Keyboard Input Buffer	63	80	80
16641	Value Start-Up Storage Device/Tape #1	8	40	40
16641	Value Start-Up Storage Device/Disk #1	4		
16763	Last X-Coordinate HPLOT in HGR mode	255		
16764	Last Y-Coordinate HPLOT in HGR mode	255		
16765	SCALE (0-255) in HGR mode	255		
16766-67	Start Shape Table (lo/hi bytes)	206/103		
16776	Current COLOR (0-15)	255		
16777	Current HGR Color (0-15)	255		
16779	Same as PDL(6) Left Trigger OFF=0 ON=1	255		NOTE: ON=64?
16780	Same as PDL(8) Right Trigger OFF=0 ON=1	255		
16781	Same as PDL(12) Keypad # Pressed	255		
	Nothing = 15 * = 10 # = 11			
16783	Same as PDL(5) Direction	255		
	UP= 1 RIGHT= 2 DOWN= 4 LEFT= 8			
16784	Same as PDL(7) Left Trigger OFF=0 ON=1	255		
16785	Same as PDL(9) Right Trigger OFF=0 ON=1	255		
16786	Same as PDL(13) Keypad # Pressed	255		
	Nothing = 15 * = 10 # = 11			
16788	Same as PDL(4) Direction	1		
	UP = 1 RIGHT = 2 DOWN = 4 LEFT=8			
16797	Temporary Storage Area when INITing	255		
16821	Value of Current Storage Device	--	255	255
	DISK#1 = 4 DISK#2 = 5 RAMDISK = 26			
	TAPE#1 = 8 TAPE#2 = 24			
	TAPE#3 = 9 TAPE#4 = 25			
	DISK#3 = 6 DISK#4 = 7 - these must			
	be POKEd with 23275 & 23276			
16953	Value of Cursor Character	95		
	A value of 32 erases cursor			
16954	HOME Key / Substitute any Value	32		
16956	Current value of Left Margin	1	0	0
16957	Current value of Right Margin	31	0	0
16958	Current value of Top Margin (TEXT)	0		
16958	Current value of Top Margin (GR/HGR)	20	0	0
16959	Current value of Bottom Margin	23	0	0
16993	Number of Lines to Clear (TEXT)	24	255	255
	A value of 20 = clear 20 lines only			
16993	Number of Lines to Clear (GR/HGR)	4	255	255
16994	Number of Columns to Clear	30	255	255
16995	Top Margin to Clear	0	25	25
	A value of 16=HOME/Cursor to Line 16			
16996	Left Margin to Clear	1	255	255
17000	Cursor Blink (1 = Stop/TEXT or 0 = Normal)	0	255	255
17001	Value of VPOS (x)	1	255	255
17002	Value of POS (x)	0	255	255
17006	FLASH Command (Value 128 = On)	0	255	255
	Value 32 Flashes between Upper and			
	Lower case letters. Using values that			
	are POWERS OF 2 (16,32,64,etc) = FUN			
17008	Determine Current Graphics Mode	0	255	255
	0 = TEXT 1 = GR 2 = HGR 3 = HGR2			
17009	Instruct VDP to accept Info	255		
	Value 0 Screen Echo disabled			
17047	FUN POKE <1> - Value 55:TEXT/Simulates	0		
	a TV Sync/Rainbow effect on screen!			
17059	Background Color in TEXT Mode	0	252	240
17065	FUN POKE <2> - Value 200:TEXT/Changes	0		
	all screen characters to odd shapes!			
17067	FUN POKE <3> - Value 1:TEXT/Screen full	62		
	of assorted chars. flash for .25 sec			
	each time the TEXT command is used			

17115	Text & Screen Color in NORMAL TEXT Mode Ex:16 * 15 (white text) +0 (clear BG)	240	252	240
17126	Text & Screen Color in INVERSE TEXT Mode	15	207	15
17131	FUN POKE <4> - Value 0:TEXT/Inverses the entire text screen!	16		
17164	FUN POKE <5> - Value 0-255:TEXT/Entire screen flashes ASCII char. of choice	32		
17180	FUN POKE <6> - Value 200:TEXT/Causes all text in Rows 1-6 to "blink"!	0		
17198	Start value # of Lines to Clear on Screen	23		
17199	Start value # of Columns to Clear on Scrn	30		
17201	Start value of Top Margin	0		
17202	Start value of Left Margin	1		
17215	Video Mode value FUN POKE <7> Value 200:TEXT/Graphic characters replace all ASCII text!	224		
17291	Cursor Flash Speed (1=Fastest/255=Slowest)	4		
17302	Value 255 disables Screen Dump/CHR\$(16) Must be poked with 18320,255	16	149	149
17302	Value 149 activates PRINT Key (Cntl.P) Must be poked with 18320,149	16		
17411	Value of 36 with NORMAL & TEXT commands will change all INVERSE text NORMAL	62		
17529	Cursor (Value of 0 = No cursor)	66		
17950	CHR\$(7)/Bell Tone (lo byte) (0-1023)	143		
17954	CHR\$(7)/Bell Tone (hi byte) (1-255)	17		
17958	CHR\$(7)/Bell Volume (144-158,159 no sound)	144		
17962	CHR\$(7)/Bell Duration (lo byte) (1-65535)	128		
17963	CHR\$(7)/Bell Duration (hi byte) (1-255)	7		
18180	FUN POKE <8> Value 200 Blinks text in rows 1 - 6	0		
18304-20	Poke with different values eg. 255 to allow printing of graphic characters	--	8	8
18307	Value 150 activates CLEAR Key (Cntl.L) Must be poked with 12380 & 19311,150	12	12	150
18320	Value 255 disables Screen Dump/CHR\$(16) Must be poked with 17302,255	16	149	16
18320	Value 149 activates PRINT Key (Cntl.P) Must be poked with 17302,149	16	16	149
18607	Background Color in GR Mode	1	12	1
18633	Text Window Color in GR Mode	17		
18711	Text Color in GR Mode	240	28	240
18728	Value 121 corrects HCOLOR tables Must poked with 18729 & 18730,0	205	121	121
18729	Value 0 corrects HCOLOR tables Must poked with 18728,121 & 18730,0	59	0	0
18730	Value 0 corrects HCOLOR tables Must poked with 18728,121 & 18729,0	73	0	0
18735	Value 121 corrects COLOR tables Must poked with 18736 & 18737,0	205	121	121
18736	Value 0 corrects COLOR tables Must poked with 18735,121 & 18737,0	54	0	0
18737	Value 0 corrects COLOR tables Must poked with 18735,121 & 18736,0	73	0	0
18765-97	Correct Color Table (see AutoWriter/Mr. T)	--		
19256	Value 0 corrects SCRNL tables Must be poked with 19257 & 19258,0	205	0	0
19257	Value 0 corrects SCRNL tables Must be poked with 19256 & 19258,0	67	0	0
19258	Value 0 corrects SCRNL tables Must be poked with 19256 & 19257,0	73	0	0
19311	Value 150 activates CLEAR Key (Cntl.L) Must be poked with 12380 & 18307,150	12	12	150
19479	CHR\$(4) - Disable/Change character by poking with any number	4		
20185	See *** at end of list	65		

20435	DELETE "A" File Disable INIT Protect <1> POKE 20435,2 <2> INIT VolumeName <3> POKE 20435,65	65		
20420	ASCII # changes the system prompt char. for the incomplete FP command	93		
20421	ASCII # changes the system prompt char. for the incomplete INT command	50		
20451	DELETE "H" File	72		
20482	Value 72 changes "H" filetype to "A" Must be poked with 20487,65	65		
20487	Used with 20482, filetypes can be changed with RENAME command - eg. POKE 20482,72: POKE 20487,65 RENAME Myfile, Myfile then POKE values of 65 back	65		
20619	Value of 72 allows "H" File Recovery	104	72	72
21019	Value 11 corrects BRUN Bug eg. "Brun myfile,d6"	227	11	11
21298	Value 0 allows CATALOG to show actual BLOCKS FREE excluding Deleted files	235		
21370	Value 8 allows CATALOG to show actual Blocks Used - not assigned!	6		
21370	Value 2 allows CATALOG to show the Starting Block of each file	6		
21373	Change "Spaces" in CATALOG Listing Must be used with 21409 & 21420	32		
21405	ASCII value of character designating a "Locked" file	42		
21409	Change "Spaces" in CATALOG Listing Must be used with 21373 & 21420	32		
21420	Change "Spaces" in CATALOG Listing Must be used with 21373 & 21409	32		
21445	See *** at end of list	73		
21454-63	ASCII Codes for "__VOLUME:_" 1st Value for string = char. length	--		MOD to "TITLE"
21464-76	ASCII Codes for "_BLOCKS FREE_" 1st Value for string = char. length	--		
23231-48	Contains acceptable ASCII for filenames	--		
23234	Value 47 allows "/" in Filenames	37	47	47
23240	Value 32 allows spaces in Filenames	64	32	32
23273-78	Drive Suffix Table - 8,24,9,25,4,5 4 Disk Drives - 8,24,6,7,4,5	--		
23275	Value 4 designates 1st Disk Drive as Drive #3/d3 - Drive #4 still used	3	3	6
23276	Value 5 designates 2nd Disk Drive as Drive #4/d4 - Drive #5 still used	4	4	7
23328	INIT/Volume Name (Maximum = 11 Chars.)	10		
23522	LOAD & RUN "A" File	65		
23925	SAVE "A" File INIT Protect File: Input 10 REM File In Immediate Mode: <1> POKE 23925,2 <2> SAVE BASICPGM <3> POKE 23925,65	65		
24010	Value 163 disables LOAD / Used with 24011	212		
24011	Value 62 disables LOAD / Used with 24010	24		
24100	Value 0 = 1st fix / SAVE file & Print with SWriter exactly as LISTed in SBasic	50		
24101	Value 0 = 2nd fix / SAVE file & Print with SWriter exactly as LISTed in SBasic	20		
24102	Value 0 = 3rd fix / SAVE file & Print with SWriter exactly as LISTed in SBasic	63		
25257	INIT Routine to check for BASICPGM, If found INIT is aborted Value 32 = Disable routine check	66		
25305	INIT/Volume Length (lo byte) DISK = 160	255	181	181
25306	INIT/Volume Length (hi byte) 25305 and 23506 must used together	0	65	65

	0 and 1 = 256K Data Pack			
	160 and 0 = 160K 5 1/3" SS Disk			
	64 and 1 = 320K 5 1/4" DS Disk			
	208 and 2 = 720K 3 1/2" QD Disk			
25308	INIT/Directory Size (Use 1-3) then INIT	1	57	57
25431	Background Color in HGR Mode	1	12	1
25432	FUN POKE <9> - Value less than 255:HGR Causes irregular fluttering bars!	255		
25465	FUN POKE <10> - Value 255:HGR/Displays a fancy top border!	0		
25471	Text Window Color in HGR Mode	17		
25568	Text Color in HGR Mode	240	28	240
25573	Dimensions of HGR Text Window-# of Lines	3		
25574	Dimensions of HGR Text Window-Line Length	30		
25576	Dimensions of HGR Text Window-Top Margin	20		
25577	Dimensions of HGR Text Window-Left Margin	1		
25940	Value 160 corrects HPLLOT bug & allows HPLOTting vertical coordinate of 159	159	160	160
26198	Value 39 corrects HTAB in 40 Column Mode	31		
26198	Value 63 alternate correction for HTAB in 40 Column Text Mode. Program line using HTAB and PRINT commands must be followed with a VTAB 1. UNTESTED!	31		
27100	Same as PDL(0) UP & DOWN (0-255)	128		
27101	Same as PDL(2) LEFT & RIGHT (0-255)	128		
27102	Same as PDL(1) UP & DOWN (0-255)	128		
27103	Same as PDL(3) LEFT & RIGHT (0-255)	128		
54272-55295	Catalog Buffer Area Can repurpose to use temporarily for Data storage. A temp routine is acc- essed with a CALL 54272. Next use of CATALOG will overwrite temp Data.	--		
55296-56319	1st Input/Output File Buffer Area	--		
56320-57343	2nd Input/Output File Buffer Area Area is repurposed by Binary Convert- ers or Binary H-type Font Files	--		
62426	O/S Data Table re Volume Name/Length & Directory Size. Table = 104 bytes	--		
62741	Value 201 stops OS routine that sends strings to the Printer	97		
63842	Value x where x = the # of 1/2 seconds Wait value is a 1/2 second. Must be POKEd with 63844 and 63845	1		
63844	Value 255 to change wait period. Must be POKEd with 63842 and 63844	1		
63845	Value 255 to change wait period. Must be POKEd with 63842 and 63844	0		
64701	INIT medium Directory	189/252		
64755	Read Block from Medium	243/252		
64758	Write Block to Medium	246/252		
64806	Background Color in HGR(2) Mode	195		
64868	VDP Memory Tables: Sprite Attribute	0		
64870	VDP Memory Tables: Sprite Pattern	0		
64872	VDP Memory Tables: Screen (Name)	0		
64874	VDP Memory Tables: Character Pattern	0		
64876	VDP Memory Tables: Character Color	0		
64885	Last Key Pressed, POKE a 0 to clear	--		
65220	Value 2 UNLOCKS keyboard. Restore prior value immediately. PK = PEEK(65220) POKE 65220, 2: POKE 65220, PK	4		

\*\*\* These 3 POKES used with different ASCII values change the Reserved Words "LIST", "CATALOG" & "DIRECTORY" (NIAD #16 & #17)

SmartBASIC COMMANDS	CALL NUMBER
CLEAR	8141
CLRERR	8109
CONT	6387
END	6047
FLASH	11050
GR	11070
HGR	11075
HGR2	11080
HOME	11090
INVERSE	11055
LIST	7407
NEW	6356
NORMAL	11060
NOTRACE	6341
POP	8493
RESTORE	9482
RESUME	8313
RETURN	8477
RUN	6159
STOP	6378
TEXT	11065
TRACE	6336

MISCELLANEOUS COMMANDS	CALL NUMBER
Print a character	11194
Check for a character	11865
Check for a number	11885
Print a message	12110
Print a carriage return	12128
Get a Character	12137
Input a Line	12159
Print to screen	12420
Same as " Run HELLO "	16588
Same as TEXT Command	17008
Get a character	17289
Flashes cursor and waits for input Keypress' characters is returned to the accumulator	
Scroll TEXT screen one line up and leave cursor in present position	18112
Same as HOME Command	19520
Same as STOP Command	19529
Sets FLASH to ON	26163
Sets INVERSE to ON	26144
Sets NORMAL to ON	26151
Last Block read or written	55296
Warm Boot	63585
Warm Boot (same as COMPUTER RESET)	63599
Boot Disk Drive #1	63606
EOS Reset for all devices	63734
Jump to Electronic TypeWriter Mode/SWriter	64148
System Reset	64560
Display Character (no execute)	64563
Initialize Video Display	64566
Send char. to Screen & Display	64569
Delay executed after Hard Reset	64572
Check Printer Status	64575
Check Printer Status	64578
Check on I/O Progress	64581

Check on Keyboard I/O	64584
Get Keyboard Key/Current Status	64587
Check I/O Status following Write	64590
Check I/O Write Status of Printer	64593
Find Device Control Block for a specified device ID	64596
Calls same routine as above	64599
Get address of Processor Control Block (PCB) for current PCB	64602
Hard Init. All devices reset & all PCB's & DCB's are cleared	64605
Hard Reset of Adam-Net	64608
Send string to Printer	64611
Send one character to Printer	64614
Read block from device	64617
Read character from Keyboard	64620
Read DCB return codes/Keyboard	64623
Read DCB return codes/Printer	64626
Read DCB return codes/Device	64629
Read DCB return codes/Tape	64632
Relocate current PCB	64635
Initiate status request command	64638
Request status of Keyboard	64641
Request status of Printer	64644
Request status of Data Drive	64647
Scan active devices	64650
Initialize I/O processor	64653
Reset specified device	64656
Reset Keyboard which also UNLOCKS	64659
Reset Printer and clear outstanding chars.	64662
Reset Data Drive	64665
Start-up Print String	64668
Start-up Print Character	64671
Start-up read device block	64674
Start-up read device byte	64677
Start-up Keyboard byte read	64680
Start-up write for device block	64683
Start-up write for device byte	64686
Init bump	64689
Write 1 device block	64692
Write device byte	64695
File Manager Init	64698
Init device Directory	64701
Open File	64704
Close File	64707
Reset File	64710
Create Directory entry	64713
Find Directory entry	64716
Update Directory entry	64719
Read data from a file	64722
Write data to a file	64725
Set file date	64728
Get file date	64731
Rename file	64734
Delete file	64737
Read device dependent status	64740
Jump to Electronic Typewriter Mode which CALLs 64148	64743
Execute Z80 return code	64746
Trim file size	64749
Check file control block	64752
Read device block	64755
Write device block	64758
Check open mode	64761
Search Directory for filename	64764
Locate Directory entry	64767

Not implemented	64770-64782
Get I/O Ports	64785
Switch Memory Banks	64788
Copy ASCII character set to VRAM	64791
Write table to VRAM	64794
Read table from VRAM	64797
Send value to VDP Register	64800
Read value from VDP Register	64803
Fill VRAM Buffer (repeat character)	64806
Initialize VRAM table addresses	64809
0=Sprite Attribute	
1=Sprite Generator	
2=Pattern Name	
3=Pattern Generator	
4=Pattern Color Table	
Transfer data from RAM to VRAM	64812
Read data from VRAM	64815
Calculate Pattern Offset	64818
Calculate Pattern Position	64821
Transfer ASCII from ROM to VRAM	64824
Must CALL 64809 First!	
Load Sprites to VRAM	64827
Read Game Controllers/Store values	64830
Update spinner values	64833
Decrement low nibble	64836
Decrement high nibble	64839
Transpose high nibble to low nibble	64842
Add accumulator to HL pair	64845
Initialize Sound block	64848
Turn off all sound	64851
Start sound by number	64854
Send note to sound chip	64857
End tune	64860

REVISED: 10/05/2025