

SmartBASIC V1.0

PEEKs, POKES & CALLS
 Compiled by Sharon McFarlane/NIAD

Location	Function/Description	Default/Range
159	FLASH Speed (1=Slowest/255=Fastest)	12
260	Version of SmartBASIC V1.0	79
461	See *** Below	73
1072	Value 4 allows Catalog read without Screen Display	89 -
1145	Number of Prompt Fonts (1-2)	1
1146	1st Left Line Margin Prompt	93
1147	2nd Left Line Margin Prompt	0
6356	Value 201 disables NEW/Merge Basic files	205
8114	Value 201 disables ONERR GOTO	217
12185	Sets Line Limit in TEXT Mode/Maximum=239	128
12374	Value 148 activates INSERT Key (Cntl.N)	14
12375	Value 151 activates DELETE Key (Cntl.O)	15
12376	Value 150 activates CLEAR Key (Cntl.X)	24
12380	Value 150 activates CLEAR Key (Cntl.L) Must be poked with 18307 & 19311,150	12 -
13349	Value 0 deletes space after Comma	32
13357	Value 0 deletes space after Semi-Colon	32
13423	Value 0 deletes space after BASIC command	32
15824	Value 216 = 1st fix re DATA/REM Bug	217
15830	Value 8 = 2nd fix re DATA/REM Bug	19
15831	Value 55 = 3rd fix re DATA/REM Bug	8
15832	Value 19 = 4th fix re DATA/REM Bug	55
16089	HIMEM Pointer (lo byte)	128
16090	HIMEM Pointer (hi byte)	209
16091	PEEK(16091)*256+PEEK(16092) = # of	0
16092	Program Lines in Memory	0
16095	LOMEM Pointer (lo byte)	15
16096	LOMEM Pointer (hi byte) PEEK(16095)*256+PEEK(16096)=Current LOMEM	107 -
16099	End Variable Command Name Table (lo byte)	29
16100	End Variable Command Name Table (hi byte)	108
16105	Pointer-New Variables String (lo byte)	0
16106	Pointer-New Variables String (hi byte)	0
16107	Number of Variables (lo byte)	31
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

16112	Pointer-End of String space (hi byte)	108
16115	Pointer-Start of String space (lo byte)	29
16116	Pointer-Start of String space (hi byte)	108
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 #	0
16127	re ONERR GOTO	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	3
	Value 145 to change Cntl.C to UNDO Key	-
16135	Cntl.S (freeze screen)/Substitute	19
	Value 144 to change Cntl.S to WILDCARD	-
16136	Value 0 forces "Print Pause" in program	255
16148	Value 0 deletes spaces from Line #'s & converts LIST to SmartWriter format	32 -
16149	Highest Pokeable Address (lo byte)	144
	Value 255 allows pokes over 54160	-
16150	Highest Pokeable Address (hi byte)	211
	Value 255 allows pokes over 54160	-
16162	Floating Point Accumulator	0
16171	Floating Point Operand	0
16247	Input Buffer	63
16641	Value Start-Up Storage Device/Tape #1	8
16641	Value Start-Up Storage Device/Disk #1	4
16763	Last X-Coordinate HPLOT	255
16764	Last Y-Coordinate HPLOT	255
16765	SCALE (0-255)	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
16780	Same as PDL(8) Right Trigger OFF=0 ON=1	255
16781	Same as PDL(12) Keypad # Pressed Nothing=15 *=10 #=11	255 -
16783	Same as PDL(5) Direction UP=1 RIGHT=2 DOWN=4 LEFT=8	255 -
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 Nothing=15 *=10 #=11	255 -
16788	Same as PDL(4) Direction UP=1 RIGHT=2 DOWN=4 LEFT=8	1 -
16797	Temporary Storage Area when INITing	255
16821	Value of Current Storage Device DISK#1=4 DISK#2=5 RAMDISK=26 TAPE#1=8 TAPE#2=24	- - -
16953	Value of Cursor Character A value of 32 erases cursor	95 -
16954	HOME Key / Substitute any Value	32
16956	Current value of Left Margin	1

16957	Current value of Right Margin	31
16958	Current value of Top Margin (TEXT)	0
16958	Current value of Top Margin (GR/HGR)	20
16959	Current value of Bottom Margin	23
16993	Number of Lines to Clear (TEXT)	24
	A value of 20=clear 20 lines only	-
16993	Number of Lines to Clear (GR/HGR)	4
16994	Number of Columns to Clear	30
16995	Top Margin to Clear	0
	A value of 16=HOME/Cursor to Line 16	-
16996	Left Margin to Clear	1
17000	Cursor Blink (1=Stop/TEXT or 0=Normal)	0
17001	Value of VPOS (x)	1
17002	Value of POS (x)	0
17006	FLASH Command (Value 128=On)	0
17008	Determine Current Graphics Mode	0
	0=TEXT 1=GR 2=HGR 3=HGR2	-
17009	Instruct VDP to accept Info	255
17047	FUN POKE <1> - Value 55:TEXT/Simulates	0
	a TV Sync or Rainbow effect on screen!	-
17059	Background Color in TEXT Mode	0
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 seconds	-
	each time the TEXT command is invoked!	-
17115	Text & Screen Color in NORMAL TEXT Mode	240
17126	Text & Screen Color in INVERSE TEXT Mode	15
17131	FUN POKE <4> - Value 0:TEXT/Inverses the	16
	entire text screen!	-
17164	FUN POKE <5> - Value 0-255:TEXT/Entire	32
	screen flashes ASCII character of choice!	-
17180	FUN POKE <6> - Value 200:TEXT/Causes	0
	all text in Rows 1-6 to "blink"!	-
17198	Start value # of Lines	23
17199	Start value # of Columns	30
17201	Start value of Top Margin	0
17202	Start value of Left Margin	1
17215	Video Mode value	224
	FUN POKE <7> - Value 200:TEXT/Graphic	-
	characters replace all ASCII text!	-
17291	Cursor Flash Speed (1=Fastest/255=Slowest)	4
17302	Value 255 disables Screen Dump/CHR\$(16)	16
	Must be poked with 18320,255	-
17302	Value 149 activates PRINT Key (Cntl.P)	16
	Must be poked with 18320,149	-
17411	Value of 36 with NORMAL & TEXT commands	62
	will change all INVERSE text to normal	-
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)	17
17958	CHR\$(7)/Bell Volume (144-159(no sound))	144
17962	CHR\$(7)/Bell Duration (lo byte) (1-65535)	128
17963	CHR\$(7)/Bell Duration (hi byte)	7

18304-20	Poke with different values eg. 255 to allow printing of graphic characters.	-
18307	Value 150 activates CLEAR Key (Cntl.L) Must be poked with 12380 & 19311,150	12
18320	Value 255 disables Screen Dump/CHR\$(16) Must be poked with 17302,255	16
18320	Value 149 activates PRINT Key (Cntl.P) Must be poked with 17302,149	16
18607	Background Color in GR Mode	1
18633	Text Window Color in GR Mode	17
18711	Text Color in GR Mode	240
18728	Value 121 corrects HCOLOR tables Must be poked with 18729 & 18730,0	205
18729	Value 0 corrects HCOLOR tables Must be poked with 18728,121 & 18730,0	59
18730	Value 0 corrects HCOLOR tables Must be poked with 18728,121 & 18729,0	73
18735	Value 121 corrects COLOR tables Must be poked with 18736 & 18737,0	205
18736	Value 0 corrects COLOR tables Must be poked with 18735,121 & 18737,0	54
18737	Value 0 corrects COLOR tables Must be poked with 18735,121 & 18736,0	73
19256	Value 0 corrects SCRN tables Must be poked with 19257 & 19258,0	205
19257	Value 0 corrects SCRN tables Must be poked with 19256 & 19258,0	67
19258	Value 0 corrects SCRN tables Must be poked with 19256 & 19257,0	73
19311	Value 150 activates CLEAR Key (Cntl.L) Must be poked with 12380 & 18307,150	12
19479	CHR\$(4) - Disable/Change character by poking with any number	4
12043	Value 201 disables PR#1 screen echo	245
20185	See *** Below	65
20435	DELETE "A" File Disable INIT Protect: <1> POKE 20435,2 <2> INIT "VolumeName" <3> POKE 20435,65	65
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	65
20619	Value of 72 allows "H" File Recovery	104
21019	Value 11 corrects BRUN Bug eg. "Brun myfile,d6"	227
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	32
	Must be used with 21409 & 21420	-
21405	ASCII value of character designating	42
	a "Locked" file	-
21409	Change "Spaces" in CATALOG Listing	32
	Must be used with 21373 & 21420	-
21420	Change "Spaces" in CATALOG Listing	32
	Must be used with 21373 & 21409	-
21445	See *** Below	73
21454-76	ASCII Codes for VOLUME & BLOCKS FREE	-
	1st Value for each string=char.length	-
23234	Value 47 allows "/" in Filenames	37
23240	Value 32 allows spaces in Filenames	64
23273-78	Drive Suffix Table	-
23275	Value 4 designates 1st Disk Drive as	3
	Drive #3 / Drive #4 may still be used	-
23276	Value 5 designates 2nd Disk Drive as	4
	Drive #4 / Drive #5 may still be used	-
23328	INIT/Volume Name (Maximum=11 Chars.)	10
23522	LOAD & RUN "A" File	65
23925	SAVE "A" File	65
	INIT Protect File: Input 10 REM NewFile	-
	In Immediate Mode: <1> POKE 23925,2	-
	<2> SAVE BASICPGM <3> POKE 23925,65	-
24010	Value 163 disables LOAD/Used with 24011	24
24011	Value 62 disables LOAD/Used with 24010	228
24100	Value 0=1st fix/SAVE file & Print with	50
	SmartWriter exactly as LISTed in SBasic	-
24101	Value 0=2nd fix/SAVE file & Print with	20
	SmartWriter exactly as LISTed in SBasic	-
24102	Value 0=3rd fix/SAVE file & Print with	63
	SmartWriter exactly as LISTed in SBasic	-
25257	INIT Routine to check for BASICPGM	66
	If found INIT is aborted	-
25305	INIT/Volume Length (lo byte) DISK=160	255
25306	INIT/Volume Length (hi byte)	0
25308	INIT/Directory Size (Use 1-3)	1
25431	Background Color in HGR Mode	1
25432	FUN POKE <8> - Value less than 255:HGR	255
	Causes irregular fluttering bars!	-
25465	FUN POKE <9> - Value 255:HGR/Fancy Top	0
	Border!	-
25471	Text Window Color in HGR Mode	17
25568	Text Color in HGR Mode	240
25573	Dimensions of HGR Text Window	3
25574	Dimensions of HGR Text Window	30
25576	Dimensions of HGR Text Window	20
25577	Dimensions of HGR Text Window	1
25940	Value 160 corrects HPLOT bug & allows	159
	HPLOTing vertical coordinate of 159	-
26198	Value 39 corrects HTAB in 40 Column Mode	31
27100	Same as PDL(0) UP & DOWN	0-255
27101	Same as PDL(2) LEFT & RIGHT	0-255
27102	Same as PDL(1) UP & DOWN	0-255

27103	Same as PDL(3) LEFT & RIGHT	0-255
54272-55295	Catalog Buffer Area	N/A
55296-56319	1st Input/Output File Buffer Area	N/A
56320-57343	2nd Input/Output File Buffer Area	N/A
62426	O/S Data Table re Volume Name/Length & Directory Size. Table=104 bytes	-
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	N/A
65220	Value 2 unlocks keyboard. Restore previous value immediately - eg. 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)

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SmartBASIC Command          CALL NUMBER
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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

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MISCELLANEOUS CALLSCALL NUMBER

Get a Character	12137
Input a Line	12159
Run "HELLO"	16588
Same as TEXT Command	17008
Same as HOME Command	19520
Same as STOP Command	19529
Warm Boot	63585
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	64659
Reset Printer	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	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

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