

ST - The Status Variable

DS & DSS - Disk Status Variables

Bit	Val	Cassette Read	IEEE	Tape Load/Ver.	Vic/64 RS-232
0-7	0	OK	OK	OK	OK
0	1		time out on write		parity error
1	2		time out on read		framing error
2	4	short block		short block	rec. buffer overrun
3	8	long block		long block	unused
4	16	unrecoverable read error		any mismatch	CTS signal missing
5	32	checksum error		checksum error	unused
6	64	end of file	EOI		DSR signal missing
7	-128	end of tape	device not present	end of tape	break detected

DS	Error Description
0	OK, no error exists
1	files scratched response (not an error)
2-19	Unused: can occur, should be ignored
20	read error; block header not found
21	read error; sync character not found
22	read error; data block not present
23	read error; checksum error in data
24	read error; byte decoding error
25	write error; write verify error
26	write protect on
27	read error; checksum error in header
28	write error; data extends into next block
29	disk id mismatch
30	syntax error; general syntax
31	syntax error; invalid command
32	syntax error; command line > 58 chars
33	syntax error; invalid filename
34	syntax error; no filename given
39	syntax error; command file not given
50	record not present
51	overflow in record
52	file too large
60	file open for write
61	file not open
62	file not found
63	file exists
64	file type mismatch
65	no block; t,s is next available block
66	illegal track or sector
67	illegal system track or sector
70	no channels (available)
71	dir error (directory error)
72	disk full or directory full
73	cbm dos v2 (or v2.x for later dos's); power up message, also indicates write attempt with dos mismatch
74	drive not ready
75	format speed error
76	controller error

Printer Control Characters

CHR\$ values are sent to print file with Secondary Addr 0 or 1

CHR\$	Operation
10	Line Feed
13	'Carriage Return' (automatic Line Feed on CBM printers)
14	Begin double-width character mode
15	End double-width character mode
18	Begin reverse character mode
146	End reverse character mode
19	Set top of page
147	Feed to top of next page
17	Switch to upper/lower case character set
145	Switch to upper case/graphics character set
16	Tab to position in next 2 characters
27	Move to specified dot position
8	Begin dot-programmable graphic mode
26	Repeat graphics data

Table Of Secondary Addresses

Eg. OPEN 4, 4, 7 ; 7 is the Secondary Address on CBM printers that alters line spacing. Once open the new value can be sent. Secondary addresses are not applicable to the VIC 20/Commodore 64 RS-232 routines ('device' 2), keyboard ('device 0), screen ('device 3), or the CBM 8010 Modem ('device 5).

Sec. Addr.	Printer 4	I/O Device & Device Number (DV#)		
		Cassette 1 or 2	Vic/64 Cassette 1	Disk 8
0	Print data exactly as received	seq. read	Load & relocate (dflt)	Load, and Dir read
1	Print data according to previously defined format	Write file + end-of-file marker on Close	Load without relocating	Program Save
2	Format Set-up	Write file + eof + end of tape marker on Close	Write file + eof + end of tape marker on Close	R/W channels are 2-14
3	Set number of lines per page for paging			
4	Enable printer format diagnostics			
5	Define a programmable character			
6	Set spacing between lines			
7	Upper/Lower case			
8	ASCII/Graphics			
9	Suppress Diagnostic Message Printing			
10	Reset Printer			
11	Set Uni-Direction			
12	Reset Uni-Direction			
13	Set Condense mode			
14	Reset Condense mode			
15	Set pseudo letter quality			
21	Reset pseudo letter quality			
17	Storing bit image data			
18	Printing bit data previously written			

8032 Control Characters

Most functions can be activated by combinations of simultaneous key depressions, a phenomena of the keyboard hardware. Notice that the CHR\$ values of complimentary functions differ by 128.

Function	CHR\$	ESC/RVS	Keyboard Combination
BELL	7	G	
GRAPHICS TEXT	142 14	Shift N N	Both Shifts + `
SCROLL DOWN SCROLL UP	153 25	Shift Y Y	Left Shift + TAB + I
SET BOTTOM SET TOP	143 15	Shift O O	Shift + Z + A + L Z + A + L
INSERT LINE DELETE LINE	149 21	Shift U U	Shift + RVS + A + L RVS + A + L
ERASE BEGIN ERASE END	150 22	Shift V V	Shift + TAB + ⌫ + DEL TAB + ⌫ + DEL
SET/CLR TAB TAB	137 9	Shift I I	Shift + TAB TAB

8032 Window POKEs	
TOP:224, T where T=0 to 24	LEFT:226, L where L=0 to 79
BOTTOM:225, B where B=T to 24	RIGHT:213, R where R=L to 79