DEC Special Graphics
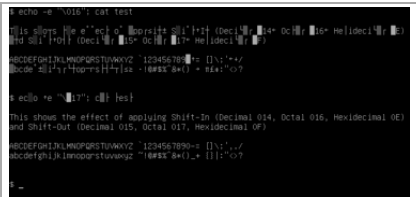
DEC Special Graphics[1] is a 7-bit character set developed by Digital Equipment Corporation. This was used very often to draw boxes on the VT100 video terminal and the many emulators, and used by bulletin board software. The designation escape sequence ESC (0 (hexadecimal 1B 28 30) switched the codes for lower-case ASCII letters to draw this set, and the sequence ESC (B (hexadecimal 1B 28 42) switched back.[2] IBM calls it **Code page 1090**.[3]

Character set

DEC Special[1][3]															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
5x																NBSP
6x	◆	▧[a]	H_T	F_F	C_R	L_F	°	±	N_L	V_T	⌟	⌐	⌐	⌊	┼	─
7x	─	─[b]	─	─	├	┤	┴	┬	│	≤	≥	π	≠	£	·

☐ Same as ASCII (not shown)

DEC Special Graphics

A modified DEC Special Graphics set (with additional fill blocks and arrows, and without the control pictures) accessed in a Linux terminal using Shift Out.

Alias(es)	IBM-1090
Based on	ASCII
Other related encoding(s)	PETSCII

See also

- Box-drawing character
- DEC Multinational Character Set (MCS)
- DEC National Replacement Character Set (NRCS)
- DEC Technical Character Set
- DEC VT100

Footnotes

a. In IBM's system of character IDs, this is SV240000,[3] not the SF150000 which is mapped to U+2592 ▒ in other code pages such as code page 437.[4] The reference glyph for SV240000 differs in showing a chequerboard pattern[3] rather than SF150000's dithered shade.[4] U+1FB95 ▚ , in the much more recently added Symbols for Legacy Computing block, is explicitly a chequerboard shade.[5] In the specification for IBM Japanese Host code, SV240080 (i.e. SV240000 with the fullwidth attribute set) is mapped to U+25A6 ▦ ; however, the reference glyph given there for SV240080 differs from that of SV240000.[6]
b. The Unicode code chart for the range U+23BA through U+23BD (the scan lines before and after this character) explicitly notes that "scan line-5 is unified with the box-drawing graphic character 2500".[7]

References

1. Digital (1984). "Table 2-4: DEC Special Graphics Character Set" (https://vt100.net/docs/vt220-rm/table2-4.html). *VT220 Programmer Reference Manual* (2nd ed.).
2. Mascheck, Sven; Le Breton, Stefan; Hamilton, Richard L. "About the 'alternate linedrawing character set' " (https://www.in-ulm.de/~mascheck/various/alternate_charset/). *~sven_mascheck/*.
3. IBM. *Code Page 01090* (https://web.archive.org/web/20150708115205/http://www-03.ibm.com/systems/resources/systems_i_software_globalization_pdf_cp01090z.pdf) (PDF). Archived from the original (http://www-03.ibm.com/systems/resources/systems_i_software_globalization_pdf_cp01090z.pdf) (PDF) on 2015-07-08. Retrieved 2020-01-08.
4. IBM. *Code Page 00437* (https://web.archive.org/web/20150708111522/http://www-03.ibm.com/systems/resources/systems_i_software_globalization_pdf_cp00437z.pdf) (PDF). Archived from the original (http://www-03.ibm.com/systems/resources/systems_i_software_globalization_pdf_cp00437z.pdf) (PDF) on 2015-07-08.
5. "Symbols for Legacy Computing" (https://www.unicode.org/charts/PDF/U1FB00.pdf) (PDF). Unicode Consortium.
6. "IBM Japanese Graphic Character Set, Kanji: DBCS–Host and DBCS-PC" (ftp://ftp.software.ibm.com/software/globalization/gcoc/attachments/CP00300.pdf) (PDF). IBM. 2002. C-H 3-3220-024 2002-11.
7. "Miscellaneous Technical" (https://www.unicode.org/charts/PDF/U2300.pdf) (PDF). Unicode Consortium.

External links

- Video of real VT100 and animation made with DEC Special Graphics (https://www.youtube.com/watch?v=g8h2SenYOKc&t=377)

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