

UNHA-1038



Bell Laboratories

Subject: UNIX Recommended Hardware Configurations

Date: September 26, 1975

From: G. C. Vogel
MF-75-8234-109

MEMORANDUM FOR FILE

The attached table lists recommended hardware configurations for running UNIX as it is supported by Dept. 8234 (Program Generic PG-1C300-01 Issues 1 and 2) and supersedes the document "UNIX Minimum Hardware Configurations" dated November 4, 1974. Items appearing in boldface type are considered essential for operating the standard UNIX system and receiving support.

All of the peripherals listed are supported by drivers in the Program Generic. Drivers for a variety of other peripherals are available from users.

A console terminal and user terminals are also required but not listed explicitly because there is such a wide variety of acceptable (full duplex, upper and lower case ASCII) terminals to choose from.

Gerald C. Vogel

G. C. Vogel

MH-8234-GCV-nroff

Copy (with att.) to
UNHA
Dept. 8234 Members
M. Almquist
G. L. Baldwin
L. D. Green
M. Mugglin
H. Zydney

UNIX SUPPORTED HARDWARE CONFIGURATIONS

Processor	11/40 Processor	11/45 Processor	11/70 Processor
	KT11-D Memory segmentation unit.	KT11-C Memory segmentation unit.	
	KE11-E Hardware multiply, divide and extended instruction set unit.	KW11-L Line frequency clock (programmable clock may be substituted)	
	KW11-L Line frequency clock (programmable clock may be substituted)		
Memory (recommended minimum) 128K word maximum	48K words	48K words	64K words
Disks	At least ONE		
	ANY PROCESSOR		
	RJS03[04]/RS03[04] Fixed head disk drive and control unit. Expandable up to 8 drives: RS03 (256K words) or RS04 (512K words). 4 or 8 μ sec/word transfer rate, 8.5 msec average access time.		
	RPI1/RP03 20 million word disk pack drive and control unit. Expandable up to a total of 8 RP03 disk pack drives. 7.5 μ sec/word transfer rate, 42 msec average access time.		
	RJP04/RP04 44 million word disk pack drive and control unit. Expandable up to a total of 8 RP04 disk pack drives. 2.5 μ sec/word transfer rate. 28 msec average access time.		
	RK11/RK05 1.2 million word disk cartridge drive and control unit. Expandable to a total of 8 RK05 DECpack disk drives. 11 μ sec/word transfer rate, 70 msec access time.		
	RF11/RS11 Obsolete disk.		
	11/70 PROCESSOR ONLY		
	RWS03[04]/RS03[04] Fixed head disk drive and control unit. Expandable up to 8 drives: RS03 (256K words) or RS04 (512K words). 2, 4, or 8 μ sec/word transfer rate, 8.5 msec average access time.		
	RWP04/RP04 44 million word disk pack drive and control unit. Expandable to a total of 8 RP04 disk pack drives. 2.5 μ sec/word transfer rate. 28 msec average access time.		

Magnetic Tape	At least ONE
	ANY PROCESSOR
	TM11/TU10 9-track magnetic tape transport and control unit. Expandable to a total of 8 TU10 transports. 45 in/sec, 800 bpi (NRZI).
	TJU16/TU16 9-track magnetic tape transport and control unit. Expandable to a total of 8 TU16 transports. 45 in/sec, program selectable 800 bpi (NRZI) or 1600 bpi (phase encoded).
	TC11/TU56 Dual DECTape transport and control unit. Expandable to a total of 4 TU56 dual transports, within the included cabinet. 288K character storage per reel.
	II/70 PROCESSOR ONLY
	TWU16/TU16 9-track magnetic tape transport and control unit. Expandable to a total of 8 TU16 transports. 45 in/sec, program selectable 800 bpi (NRZI) or 1600 bpi (phase encoded).
Line Printers	ANY PROCESSOR
	LP11 80 or 132 column line printer and control unit. 64 and 96 character sets. Speeds from 230 to 1200 lines/minute.
Paper Tape	ANY PROCESSOR
	PC11 High speed paper tape reader/punch and control unit. 300 characters/sec reading, 50 characters/sec punching.
Asynchronous Interfaces	ANY PROCESSOR
	DC11 Programmable asynchronous serial line interface. All control leads from the Bell 103, 202 or equivalent (except data set ready) are brought into the unit.
	DL11 or KL11 Serial line interface. 8-bit character size, 2 stop bits.
	DH11/DM11 Programmable asynchronous 16 line multiplexer and mounting panel. 16-line modem control multiplexer for program operation of control leads for 103, 202, or equivalent data sets.
Synchronous Interface	ANY PROCESSOR
	DPI1 Obsolete interface.
Auto Dial Interface	ANY PROCESSOR
	DN11 Interface to Bell 801 ACU.