

Est. Cost of PDP-10 to fully replace GE-645 system
(from 4/68 price list)

Basic System: 1 CPU, 256K core memory, I/O Controller,
Drum, Disk, Tapes, Teletype channels, clock

1. CPU: 104000 base price of PDP-10 CPU
 *2 to add page registers/associative memory/branch registers, and
 208,000 extra instructions (fully compatible?)

2. Memory 16K word Controller 72000
 3 extra parts 4500
 76500
 to get to 256K *16
 1,224,000

Question: can CPU address that much memory?

3. Swapping Drum or Disk 1/2 million word disk 32,500
 to get to 4 million *8
 260,000

adapters @ 17000 *2 to modify for groups (for paging) 2 I/O adapters 68,000
 Data channel 12,000
 340,000

4. System Clock. (Not available - special order @ ~ 10000)

5. I/O Controller

	modified CPU est. ~	120,000	
for 48 lines	{	6 TTY line controllers	30,000
		6 Data set controllers	30,000
	TTY Control Unit	11,000	
	3 Sync channel adapters	15,000	
	3 AHS channel adapters	15,000	
		<u>15,000</u>	} special order items
		<u>221,000</u>	

6. I/O equipment

20 x 10 ⁶ Word Disk system	220,000
6 Magnetic Tape handlers + controllers	90,000
Card reader	15,000
Punch	30,000
Printer 1200 lpm	50,000
	<u>405,000</u>

Missing:

1. Mag tapes are 36 kcc rather than 120 kcc.
2. Printer has 64 characters rather than 96 char.
3. No MG set
4. 2 CPU's + drum + IOC use up all memory ports
5. No Dial-out channels for typewriter I/O.
6. Central configuration control not possible
7. Cannot expand memory beyond 256 k

Summary

1 CPU	208,000
256k core	1,224,000
Paging Drum	340,000
System Clock	10,000
GLC + adapters	221,000
Disk and I/O eqpt.	<u>405,000</u>
	\$2,408,000.

C/W GE rental (n.b. RACE rental not included here)

78,000/month

*40 = \$3,100,000 min est.

*50 = \$3,900,000 max est.