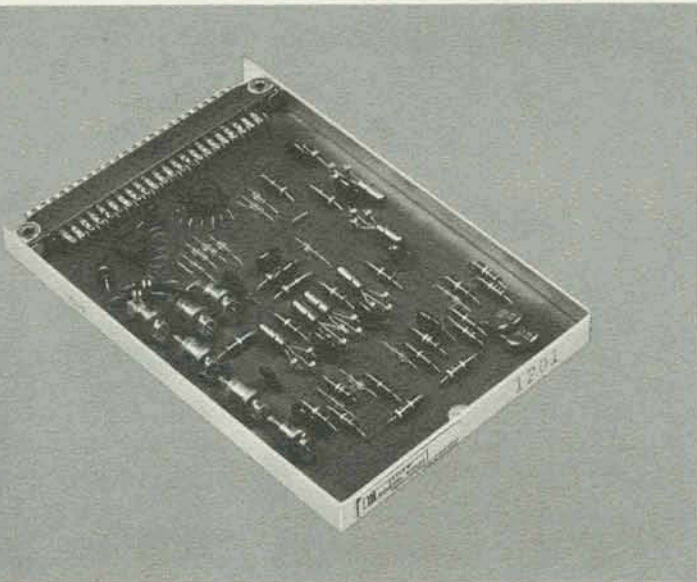


PROGRAMMED DATA PROCESSOR

DEC

programmed data processor



Flip-Flop Type 1201, one of the standard DEC System Building Blocks used in PDP-1.

The Programmed Data Processor -1 (PDP-1) is a fast, general purpose digital computer. It is a single address, single instruction stored program machine operating in parallel on eighteen bit one's complement binary numbers. Two special arithmetic instructions, multiply step and divide step, are the iteration steps for multiply and divide. Multiply takes approx. 350 microseconds and divide about 600.

The Programmed Data Processor is assembled with Digital Equipment Corporation's reliable and well proven System Building Blocks. The PDP-1 is fast and competent yet relatively inexpensive because of the unique combination of speed and versatility of these Building Blocks.

input-output

STANDARD EQUIPMENT

Flexowriter for reader, punch and input-output typewriter.

or

Separate input-output typewriter, punch and photoelectric tape reader.

OPTIONAL EQUIPMENT

Cathode-Ray-tube display
Magnetic tape
Real time clock
Analog equipment
Special equipment as required

PDP-1 with 1024 words of memory and standard input-output: Approx. \$85,000

PDP-1 with 4096 words of memory and standard input-output: Approx. \$110,000

PDP-3 — a 36-bit, very high-speed machine featuring 25 microsecond multiplication:
Approx. \$220,000

The input-output system of PDP-1 is simple and flexible. If simultaneous operation of several devices is required, a special multiple sequence automatic interrupt system is available.

- 100,000 to 200,000 instructions per second
- Random Access Core Memory – 5 usec cycle
- Indirect Addressing – multiple step
- 12 shift instruction variations
- 10 conditional instructions
- Flexible Input-output
- All solid-state logic circuits

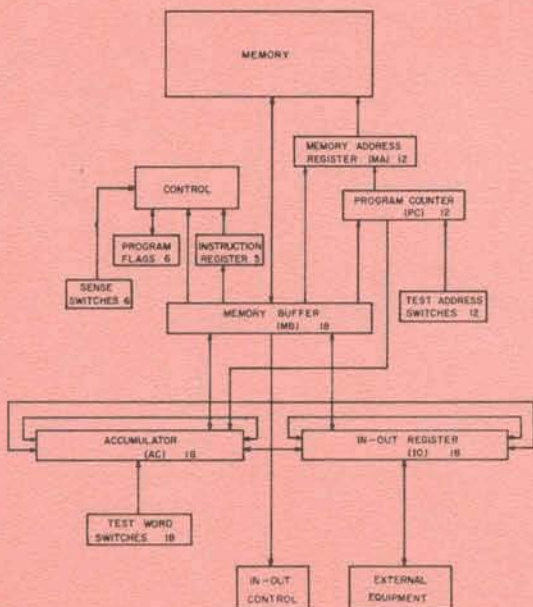
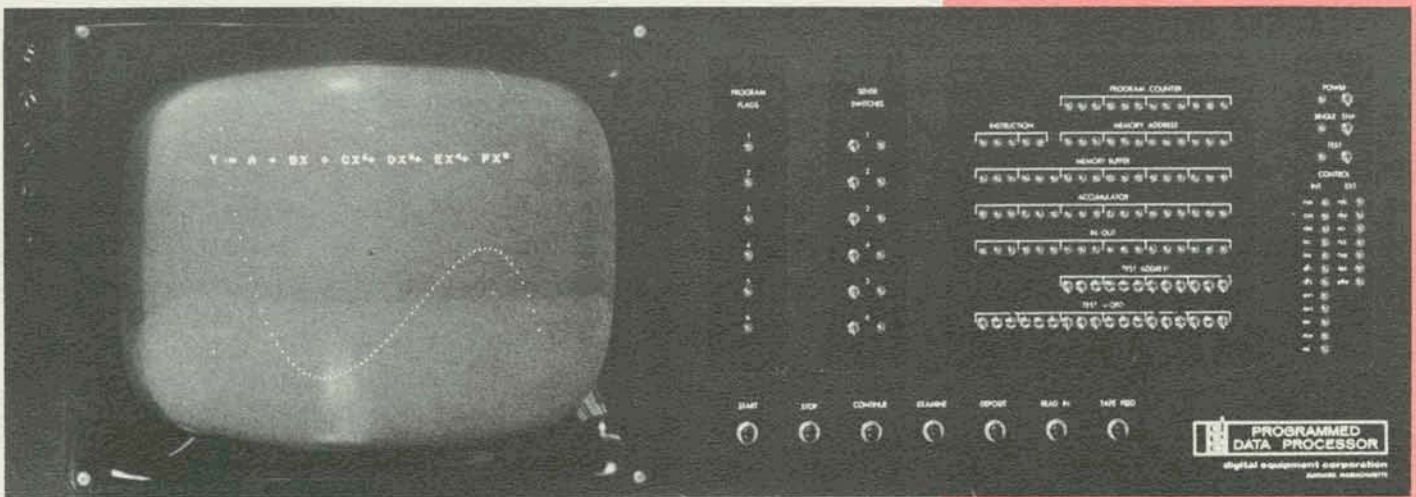


FIGURE 1
PDP-1 SYSTEM BLOCK DIAGRAM

INSTRUCTIONS

All memory reference instructions (add, dac, jmp, etc.) may use an indirect address. The address parts of iot, opr, shift, and skp are used to specify variations of the instruction.

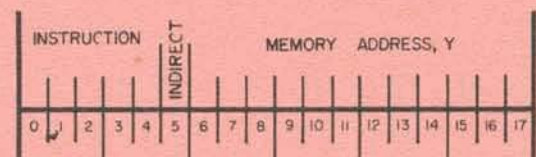


FIGURE 2
PDP-1 INSTRUCTION FORMAT

