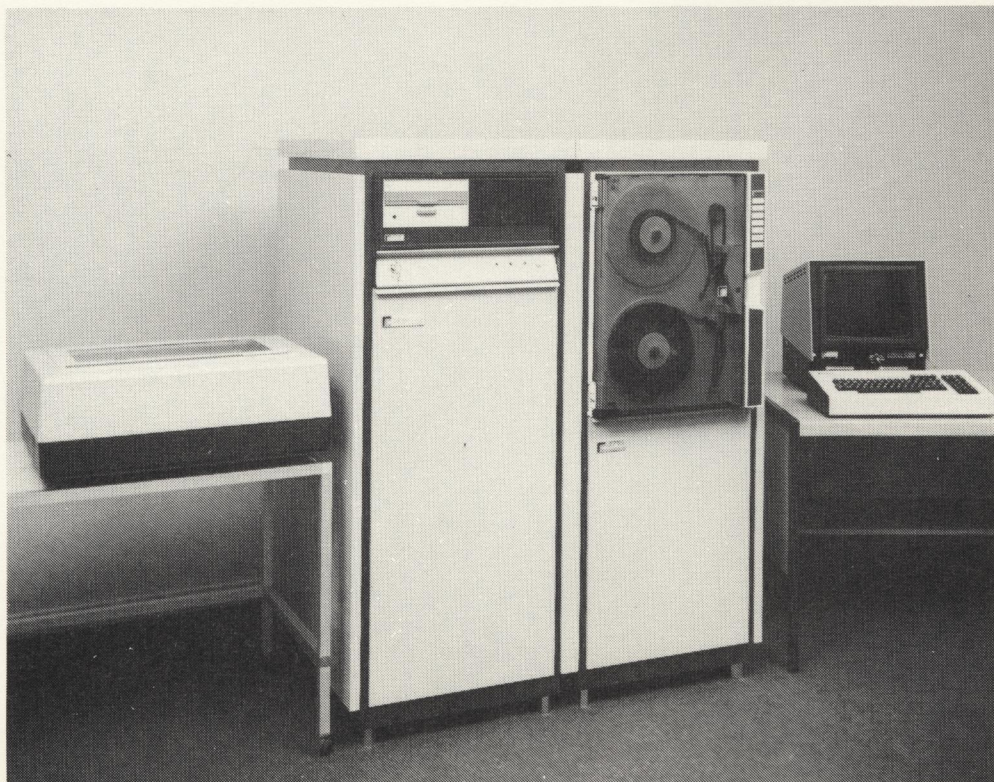




RC 3803 S Processing Unit

- 16-BIT WORD LENGTH
- MEMORY BYTE PARITY CHECK
- 128 KB SEMICONDUCTOR MEMORY
- DMA CHANNEL
- REAL-TIME CLOCK
- INCLUDES CONTROLLERS FOR CONSOLES (TTY)
AND PAPER TAPE READER/PUNCH



The outline of an RC3600 Processing System



GENERAL

The RC3803S is a 16-bit, four accumulator, microprogrammed computer.

The CPU provides indexed, base page, relative and indirect addressing modes and can directly address 128 K bytes of memory. Each word in the memory has two parity bits which are checked during each memory read cycle and generated during memory write cycles.

The wide capabilities of the RC3803S are obtained by special instructions for improved utilization of the RC3600 Software Systems. For instance, special instructions are included for direct fetch and store of single bytes and for move of byte strings in the 0-64 K bytes memory area. Furthermore a number of functions that usually are performed by software is microprogrammed in the RC3803S thus increasing the performance.

A direct memory access (DMA) channel is provided to enable rapid data transport between memory and peripheral devices.

The real-time clock feature of the CPU generates a sequence of pulses that is independent of the timing of the processor.

Included with the RC3803S is a semiconductor memory with a capacity of 128 K bytes as well as controllers for two consoles (TTY interface), one paper tape reader and one paper tape punch.

SPECIFICATIONS

Memory capacity:	128 K bytes, semiconductor.
Memory speeds:	Access time: 350 ns, cycle time: 500 ns - applies to 16-bit words (18 bits with parity).
DMA transfer rate:	1.1 M bytes/sec., max.
Standard features:	Real-time clock, two console (TTY) controllers, paper tape reader controller, paper tape punch controller.
Program load features:	9-track magnetic tape, 8-channel paper tape, 80-column punched cards (for RC3671C/72C), Flexible disc, Disc cartridge or disc pack, Image load (ROM module).
Power requirements:	220 V AC, 50 Hz, 300 W.
Temperature, amb.:	10-40°C (50-104°F).
Humidity:	20-80% relative, non-condensing.
Heat dissipation:	1080 kJ/h (260 kcal/h, 1025 BTU/h).
Mounting:	19-inch cabinet, the processing unit occupies 17.7 cm (7 in) in height and the weight is 22 kg (48 lb).