

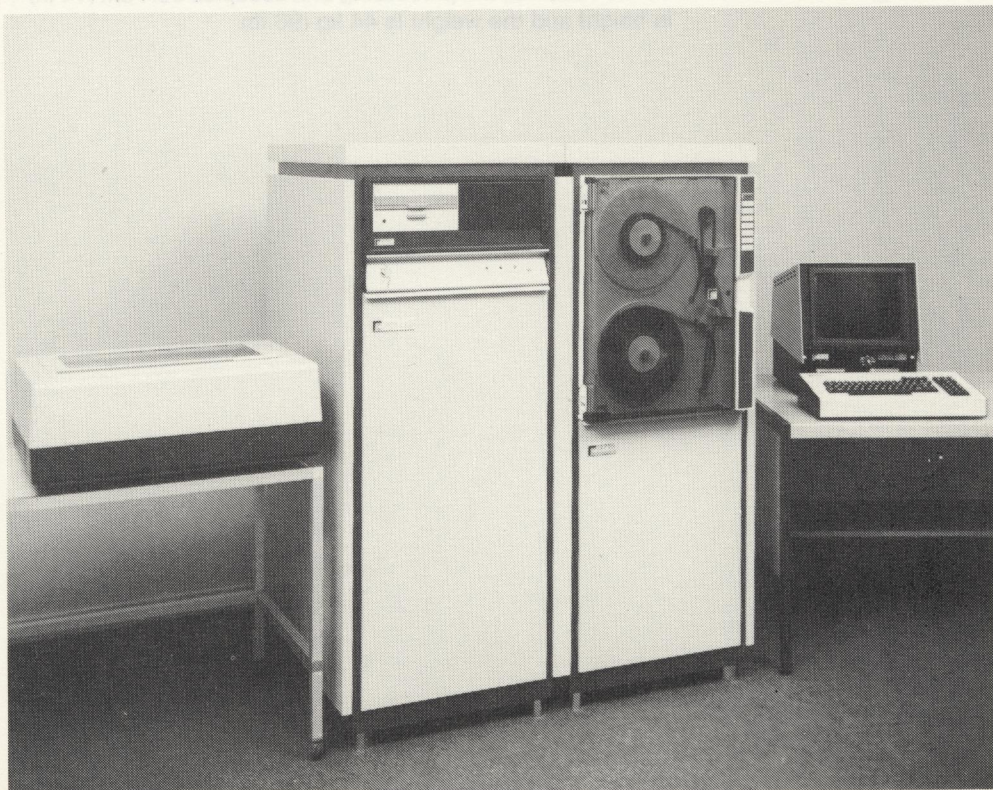


RC 3803 Processing Unit RC 3608/09 Memory Modules

- 16-BIT WORD LENGTH
- MEMORY BYTE PARITY CHECK
- 32 KB AND 64KB MEMORY MODULES
- DMA CHANNEL
- REAL-TIME CLOCK
- INCLUDES CONTROLLERS FOR CONSOLE (TTY)
AND PAPER TAPE READER
- AUTOMATIC RESTART

SPECIFICATIONS

Memory capacity
Memory cycle time
DMA transfer rate
Standard features
Program load features
Power requirements
Temperature and
Humidity
Foot dimensions



The outline of an RC3600 Processing System.



GENERAL

The RC3803 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 RC3803 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 RC3803 thus increasing the performance.

A direct memory access (DMA) channel is provide 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 RC3803 are controllers for one console (TTY interface) and one paper tape reader. The controller chassis can additionally accommodate 4 controller boards.

The RC3803 applies core memory. The memory modules available are the RC3608, which has a capacity of 64 K bytes (750 ns), and the RC3609, which has a capacity of 32 K bytes (650 ns). Memory modules can be combined freely up to a capacity of 128 K bytes.

SPECIFICATIONS

Memory capacity:	32-128 K bytes, achievable by any combination of the modules RC3608 (64 K bytes) and RC3609 (32 K bytes).
Memory cycle times:	RC3608: 750 ns, and RC3609: 650 ns - applies to 16-bit words (18 bits with parity).
DMA transfer rate:	1.1 M bytes/sec., max.
Standard features:	Real-time clock, automatic restart, console (TTY) controller, paper tape reader 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, 600 W.
Temperature, amb.:	10-40°C (50-104°F).
Humidity:	20-80% relative, non-condensing.
Heat dissipation:	2160 kJ/h (520 kcal/h, 2050 BTU/h)
Mounting:	19-inch cabinet, the processing unit occupies 35.4 cm (14 in) in height and the weight is 44 kg (96 lb).