

7301 Memory System

DESCRIPTION

The 7301 Memory System is a modular, high-capacity memory package designed for mass storage of data in a variety of random-access computer applications. These units provide a completely self-contained rapid-access memory subsystem for use by system builder, computer manufacturer, and data processing user. Each 7301 includes all-silicon electronic circuitry for reading, writing, track selection, and generation of timing signals. All input and output signals interface with the computer system at integrated circuit logic levels.

The basic 7301 is designed for installation in a standard 19-inch cabinet.

RELIABILITY

The memory device is shock-mounted within a hermetically sealed enclosure which is filled with dry, inert gas. This controlled environment completely protects the unit from dust, dirt, moisture, or any other contaminating elements, and provides the hydrodynamic gas bearing for the flying heads.

HEAD-PER-TRACK ORGANIZATION

The unique non-contact head-per-track design of the Series 7301 provides for fast access—8.5 ms average access time—high device reliability, and environmental stability.

The combination read/write heads are organized in groups of 64. Each group services one disc surface. The heads are actuated into flying position pneumatically and are mechanically restrained away from the disc surface, in the non-operating condition. The heads never touch the recording surface and are basically insensitive to shock and vibration. No head adjustment or calibration is required. The head blocks are completely interchangeable.

MODULAR DESIGN

The modular system of multiple discs and heads allows the capacity of the 7301 to be tailored to individual requirements. By specifying the number of discs and heads for your application, you buy only the initial capacity and expansion capability that you need. Additional heads are easily added in the field.

APPLICATIONS

The 7301 systems are available for a variety of data organizations and interfaces. Controller logic units, the interface between the memory device and computer, can be provided per customer request. DDC provides complete technical design and applications assistance to meet your requirements.

DIGITAL DEVELOPMENT CORPORATION

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SPECIFICATIONS

Discs	2 max.
Data Tracks	256 max.
Max. Rated Capacity (millions of bits)	11.52×10^6
Bits/Disc	5.76×10^6 max.
Bits/Surface	2.88×10^6 max.
Bits/Track	45,000 max. 33,000 std.
Tracks/Surface	64
Bit Transfer Rate	2.7 MHz max.
Speed	3600 RPM standard 1800 RPM optional
Average Access Time	8.5 ms
Timing Signals	4 standard (plus spares)
System Design Life	10 years
Motor Power	115 VAC, 1 ϕ , 50/60 Hz
Ambient Operating Temperature	0° to 115° F
Ambient Operating Humidity	5% to 95%
Standard Power Supply Voltages	+18V, -12V
Standard I.C. Logic Levels	0V and +5V
Over-all Height (in.)	19.25 max.
Max. Weight (lb.)	170
Max. Power Requirements	95 watts

