CONTROL DATA® CYBER 70™ SERIES MODEL 73 COMPUTING SYSTEM

The CONTROL DATA CYBER 70 Series/Model 73 is a general-purpose computing system which provides multi-programming and multiprocessing capability for scientific, commercial, and data-management applications. The Model 73 is also suitable for communications-oriented applications supporting large networks of interactive terminals or where real-time operations are required.

In addition to its general-purpose capability, the Model 73's central processor unit (CPU) is designed for high-speed computation and has a unified arithmetic unit with 24 operating registers. Compare and move instructions are included as part of the instruction repertoire. Also, a second CPU can be included in a systems configuration.

Up to 20 programmable peripheral processor units (PPU's), each with its own 4K, 12-bit-word, 1-microsecond cycle memory, handle peripheral and input/output operations. Twelve to twenty-four data channels are serviced by the peripheral processors. Data channels are bi-directional, and each has a maximum data rate of two million characters per second.

A wide selection of central memory (CM) and extended core storage (ECS) options are available to the Model 73 user. Central memory is organized in logically independent banks of 4096, 60-bit words with available capacities ranging from 32K to 131K words.

ECS is arranged to form logically independent multi-phased banks. The transfer rate between ECS and central memory is up to 100 million characters per second where at least 500K words of ECS is available. ECS is available in capacities from 125K words to 2 million words. ECS can be shared by separate CYBER 70 Systems.

The following peripheral equipment is available for use with the CDC® CYBER 70 Series/Model 73:

Magnetic Tape Transports	Console Displays
Line Printers	Interactive Terminals
Rotating Mass Storage	Remote Batch Terminals
Graphic Terminals	Paper Tape Readers
Card Readers	Paper Tape Punches
Card Punches	

Interfacing equipment used with mass storage devices and communication subsystems has core memory and is programmable, allowing distribution of functions to these subsystems.

CDC's SCOPE Operating System and KRONOS Timesharing System each operate the Model 73. Both systems also support the extensive 6000 product set, which includes COMPASS, FORTRAN RUN, FORTRAN EXTENDED, COBOL, ALGOL, SORT/MERGE, BASIC, APT (numerical control for machine tools), OPHELIE (mathematical programming), and a comprehensive set of basic data management software.

SPECIFICATIONS

High-Speed Central Processor:

- Instruction issue rate: For one CPU, 1.2 million instructions per second (MIPS)
- Instruction issue rate: For two CPU's, 2.0 million instructions per second (MIPS)
- Unified arithmetic unit with 24 operating registers
- Compare and move instructions
- Central exchange jump
- Central memory access priority
- Integer multiply
- Real-time clock

Programmable Peripheral Processors:

- 4K words (12-bit), 1 microsecond read/write memory
- Flag register

Central Memory (options):

- 32K, 49K, 65K, 98K, or 131K, 60-bit words, 1 microsecond read/write time

Extended Core Storage:

- 10 million word-per-second data transfer rate;
- Distributive data path (DDP) — 480 bit data path connecting the Input/Output channels to ECS. The DDP is controlled by the peripheral processors. One data path is standard in an ECS configuration with expansion to four paths per DDP unit for simultaneous data transfer. Multiple DDP units (with up to four data paths per unit) can be configured in a CYBER 70 System.