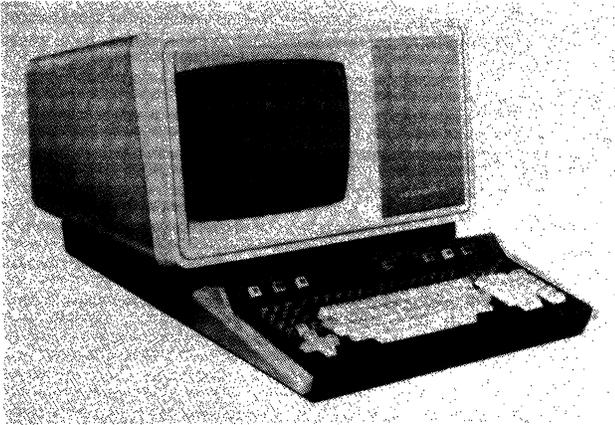


Megadata System 700



The Megadata System 700, depicted above, may be configured as a stand-alone unit, or in a cluster of up to eight stations including a cluster control station.

MANAGEMENT SUMMARY

Megadata has experienced considerable success with its System 700, which it has marketed since 1976. The custom tailored system is offered as either a stand-alone terminal, or in a clustered configuration of up to eight stations. Megadata will provide the System 700 as either a turnkey system with packaged applications, peripherals and communications designed for a customer's specific requirements, or as a user-programmable system. Each unit features an integral microprocessor, an Intersil IM 6100, and from 4K to 64K 12-bit words of memory.

Peripherals are available from Megadata, or the user can supply his own. System 700 can be equipped with three interfaces: a communications or parallel channel interface and two device interfaces for a printer, a diskette, an industry-compatible magnetic tape drive, and a paper tape punch/reader. Single or dual drive diskette units are available, OEMed from Orbis or Shugart; hard disk units from Pertec; low-speed printers (10 to 30 cps) from Extel; medium- and high-speed printers from NEC, Centronics, and Wang; and the paper tape reader/punch from Facit.

Megadata offers an assembly language similar to that used with the DEC PDP-8E. User programs created on the System 700 can be loaded from local storage or can be down-line loaded from the host computer. A bootstrap loader is inherent to each System 700 terminal.

Communications protocol can be custom tailored via PROM implementation to virtually any computer environment, such as the IBM System/360 or 370, UNIVAC, Burroughs, and Honeywell computer systems. Emulation of Hazeltine terminal protocol is also available.

The displayable character set is adaptable to virtually any language and symbol set via a programmable character ▷

A truly user-programmable terminal system which may be employed as a stand-alone unit, or in a cluster of up to eight stations. Sold as a custom-tailored and turnkey system, typical applications include data entry/retrieval, text editing and graphics.

PROM and RAM memory may be expanded to 64K words per station. A single communications line controller can operate half- or full-duplex, asynchronously or synchronously. A single station may emulate several different terminals under the switch-selectable control of the operator. Both ASCII and EBCDIC character sets are supported.

Available for purchase only, prices for a single keyboard/display station range from \$3,500 to \$12,000. Quantity discounts are available.

CHARACTERISTICS

VENDOR: Megadata Computer and Communications Corporation, 35 Orville Drive, Bohemia, New York 11716. Telephone (516) 589-6800.

DATE OF ANNOUNCEMENT: February 1976.

DATE OF FIRST DELIVERY: February 1976.

NUMBER INSTALLED TO DATE: Over 4,000.

SERVICED BY: Megadata and third party.

CONFIGURATION

System 700 is a stand-alone or clustered keyboard/display terminal that contains an integral 12-bit microprocessor with 4K to 64K words of PROM and RAM memory and features a detachable keyboard. Available peripheral devices include single- and dual-drive diskette units, hard disk units, a medium-speed and a high-speed serial printer. Interfaces are available for attaching industry-compatible tape drives, diskette drives, and printers. A parallel data channel rated at 25K char./second is available for direct connection to an external device.

In a clustered arrangement, a cluster control unit is required, to which the other terminals are cable-connected. The control unit may be a terminal station, with keyboard and monitor, or a separate processor unit with only logic and memory boards, and cable and communications interfaces. Up to eight stations, including the controller, may be configured in a cluster arrangement.

TRANSMISSION SPECIFICATIONS

Asynchronous or synchronous half- or full-duplex at transmission rates of from 50 to 9600 bps asynchronous, and synchronous to 19,200 bps. A data-rate switch provides switch selection for eight user-specified data rates. The transmission code is 8-level ASCII or EBCDIC as specified. The terminal can be equipped with an RS-232C, CCITT ▶

Megadata System 700

➤ generator. As many as 256 symbols can be displayed. Character resolution (display clarity) can be defined by the user from a broad range of matrix parameters. And limited graphic presentation can be implemented in an option, which features point plot and vector modes with a resolution of 256-by-256 (65,536) dots.

Touch Screen, an innovative feature, allows the user to point his finger (touch the screen) to select pertinent data and eliminates the need for a light pen.

Special configurations are available including the System 700/TS Touch Screen Terminal; the UPS-7 User Programmable System; the System 700/TE, a text editing terminal for the publishing and newspaper industries; the System 700/NW, a specialized terminal for news services; the System 700/CT, a specialized terminal for banking, airlines, and international message switching systems; and the 700/VETS, a graphics-oriented system. □

➤ V.24, or Teletype-compatible 20 or 60 ma dc current loop interface.

DEVICE CONTROL

System 700 is controlled via an integral microprocessor under the direction of PROM-resident firmware and RAM-resident user programs. Programs can be loaded from user-defined media or they can be downstream loaded from the host computer via a communications facility. User programs are created in an assembly language similar to that used with the DEC PDP-8 family of minicomputers. In UPS-7 systems, the user may compile application programs on the local keyboard; otherwise, programming is loaded from local storage media or over communications lines.

COMPONENTS

PROCESSOR: The Intersil IM 6100, a 12-bit microprocessor with a 3.048 microsecond memory cycle time. The microprocessor executes the instruction set of the DEC PDP-8/E and features a PDP-8-compatible assembler.

DISPLAY UNIT: Data is displayed via a 15-inch (diagonal measurement) CRT with a viewing area 8 inches high by 10

inches wide. The standard display arrangement is 24 lines of 80 characters each; and is optionally expandable to 32 lines of 128 characters each (depending on dot matrix pattern requirements).

The basic character set includes 64 displayable symbols, and is expandable to 256 displayable symbols. The programmable character generator permits display of virtually any character symbol set or language. Data is displayed in green. Each alphanumeric character is formed within a standard 7-by-8 dot matrix. Optional dot matrix parameters include 7x9, 8x10, 8x12, 10x15, 12x15, and 10x23. Each graphic symbol is displayed within a standard 10-by-10 dot matrix; optional parameters include 10x12, 10x15, and 12x6. An optional dot vector generator provides point plot or vector graphic modes with resolution to 256x256 dots.

Display highlighting is a standard feature and includes full or half intensity, blanking, reverse video, blinking, underscore, and strike through.

The cursor is displayed as a steady-state underscore. Cursor options include blinking, a block symbol, and addressability.

A color monitor is optional.

KEYBOARD: A 55-key, typewriter-style detachable keyboard. The keyboard can include a function key cluster of up to 35 keys to the right of the main keygroup, a cluster of up to 21 function keys to the left of the main keygroup, and a row of up to 15 function keys located over the main keygroup. The keyboard is available with a total of 126 keys including up to 71 programmable function keys plus a row of 12 programmable status indicators located above the keys.

PRICING

System 700 is available for purchase only, and prices range from \$3,500 for a basic terminal to about \$12,000. A cluster control unit ranges in price from \$6,400 to \$9,400. Quantity discounts are provided and range from 5 to 7 percent for 10 units to 25 percent for over 100 units. The installation charge for Megadata installed terminals is \$300 per man-day plus expenses for installations including acceptance testing, which typically requires 2 men for 3 full days. This is subject to variation depending on customer location. A separate maintenance contract is available for purchased equipment.

Megadata declined to provide detailed pricing, stating that development expenses in custom-tailoring its systems vary significantly from customer to customer. ■