

Canon

COMPUTER SYSTEMS

Hardware Guide

AS-100

16-bit microcomputer



Canon AS-100 Computer System Unlimited Potential.

Canon has created something very special for your office. We call it the AS-100 Computer System. And as with all our products, we've taken the utmost care in planning and manufacture to make sure that it meets your high standards of performance.

How'd we do it? We started with a user-friendly philosophy. Then we designed the most innovative, power-packed hardware we could. Next we combined this with a logical, easy-to-use software architecture that shows off the AS-100's strengths perfectly.

The result is a computer system for professionals that is so friendly you may have to see it to believe it. The AS-100 offers you:

- A full-color system at an affordable price.
- Compact, component design for configuration flexibility.
- Total hardware and software compatibility for optimum efficiency.
- Simple, precision operation.

Between Canon's superior technology and user-friendly philosophy, we've put together a system with unlimited potential for organizations that expect awesome results.

Powerful 16-Bit CPU

The AS-100 incorporates the popular 16-bit microprocessor 8088 as its central processing unit. The result is high speed data processing and a sharp reduction in job handling time. One of the 8088's major assets is that it was designed to control a wide memory area. This means that the memory itself can be expanded up to 512K-bytes to facilitate mass data processing.

Quick-Response Graphic CRT Displays

The display acts as the intermediary between the operator and the AS-100 to achieve total interactive operation. And with the AS-100 System you have a choice between full-color and green monochrome display units. Both feature high resolution and quick response, 12-inch screen and built-in graphic capability.

The color CRT features a color palette for easy color control. This adds both speed and accuracy to the color selection process, assuring the most effective color renderings.

User-Friendly Keyboard

The AS-100's spacious adjustable keyboard serves as the main input device. Its sleek design and variable angling add to operator ease and comfort. The flexible coiled cord gives you the freedom to move around and you can even hold it in your lap during heavy data entry if you want to.

Twelve user-definable function keys increase operational efficiency by eliminating many errors due to misspelling or misoperation. On the alphanumeric, typewriter-style keyboard, all keys are situated to attain maximum speed during routine operations. There's also a handy ten-key numeric entry pad for quick, blind-touch input. In addition, a pointing device has been prepared to support the graphic functions.



Computer Systems --- Amazing Results.



Large-Capacity Magnetic Storage Devices

You'll want to match your magnetic storage needs based on the rest of the hardware configuration, the kind of communication network you have, and the type of software that you use. But no matter what your requirements, Canon has the storage device for you. Here are your alternatives.

- 5-inch double-deck mini-floppy disk drive unit: Accommodates two double-sided, double-density, double-track 5-inch mini-floppy disks. Each media has a storage capacity of 640 K-bytes for a total storage unit capacity of 1.28 M-bytes.
- 8-inch, double-deck floppy disk drive unit: Accommodates two double-sided, double-density, 8-inch standard floppy disks. 1 M-bytes can be stored on each disk for a total external storage capacity of 2 M-bytes.
- 5-inch Winchester-type hard disk unit: Accommodates one 5-inch Winchester-type hard disk and one 5-inch mini-floppy disk drive to realize high-speed access and bulk data storage. It's total storage capacity is 10.64 M-bytes unformatted (8.14 M-bytes formatted).

High-Speed Graphic Printers

Canon has two high-speed graphic printers for you to choose from, each to compliment the particular CRT display being used. Both are compact enough to be placed on top of the display unit, so they don't take up any valuable office space.

The A-1210 color printer has 7-color printing capability using Canon's quiet, ink-jet technology. It's compact and lightweight and so is its price. It was made to be used with graphic color display unit to achieve a full-color system that incorporates a color hardcopy function at a reasonable cost.

Made for versatility, the A-1200 wire dot printer can print various types of characters—normal, condensed and enlarged. It can also accommodate three kinds of plain paper to keep pace with all your printout needs—roll, fan-folded, and cut-sheet paper.

Data Communication Interfaces

The AS-100 not only works independently as a stand-alone computer, but it can also be linked into a local area network for file and peripheral sharing. This adds up to considerable savings in-house while maximizing the efficient use of both human and physical resources.

The on-line communication interface works hand in hand with the corresponding software so that the AS-100 can also serve as a telecommunication terminal for mainframe computers. This kind of open-ended data exchange over existing telephone lines makes for totally integrated, high-speed data processing.

Other Peripherals and Options

Again, with system flexibility in mind, Canon offers a number of other peripheral devices and options. Here are just some of those currently available.

- A-1002 Real Time Clock Set: Battery-supported real time clock.
- A-1011 Extension Board: Necessary when hard disk, RS232C, parallel data or communication interfaces are connected.
- A1020/1021/1022 Optional Memory Boards: 128/256/384 K-byte memory extension boards.
- A-1500 RS232C I/F: Additional serial data interface.
- A-1502 Parallel Data I/F: Additional Centronics-type interface.
- A-1503 Communication I/F: Synchronous input/output interface for data communication with mainframe computers.

* Peripheral availability varies from country to country.

Canon AS-100 System Hardware Specifications

CRT Display Unit (CPU) AS-100M/C

| | |
|---------------------|---|
| CPU | Processor: 16-bit microprocessor 8088 Clock: 4MHz |
| Main Memory | LSI: MOS-LSI 64K-bit dynamic RAM Capacity: Maximum 512K-bytes 128/256/384K-bytes optional memory boards |
| CRT Display | Size: 12 inches Display capacity: 80 characters × 25 lines (640 × 400 dots) Display color: Green (monochrome CRT) 8-colors out of 27-colors (color CRT) |
| Power Source | AC 115V 50/60Hz 125W (M) 140W (C) AC 120V 60Hz 1.5A (M) 1.8A (C) AC 230V 50Hz 125W (M) 150W (C) AC 240V 50/60Hz 125W (M) 150W (C) |
| Size | 400mm (W) × 344mm (H) × 429mm (L) (15-3/4" × 13-1/2" × 16-7/8") |
| Weight | 19.5 kg (43 lb.) ... Monochrome CRT 23 kg (51 lb.) ... Color CRT |

Keyboard A-1111

| | |
|-------------------|--|
| Face Angle | 4.5° to 8.5° adjustable |
| Size | 480mm (W) × 185mm (D) × 32mm (T) (18-7/8" × 17-1/4" × 1-1/4") |
| Weight | 2.2 kg (4.8 lb.) |

Mini-Floppy Disk Drives A-1300

| | |
|----------------------------|--|
| Type | Double-sided, double-density, double-track 5" mini floppy disk drive (2 drives) |
| Media | Canon specified mini floppy disk MD2-512DD Capacity: 640K-bytes/disk Recording density: 5922 BPI |
| Data Transfer Speed | 250K-bits/sec. |
| Recording Method | MFM (Modified Frequency Modulation) |
| Access Time | Seek time: 4msec/track Head settling time: 15msec Latency: 100msec |
| Size | 80mm (W) × 344mm (H) × 370mm (L) (3-1/8" × 13-1/2" × 14-5/8") |
| Weight | 6.3 kg (14 lb.) |

Floppy Disk Drive A-1330

| | |
|----------------------------|---|
| Type | Double-sided, double-density 8" floppy disk drive (2 drives) |
| Media | Canon-specified floppy disk Capacity: 1M-bytes/disk Recording density: 6816 BPI |
| Data Transfer Speed | 500K-bits/sec. |
| Recording Method | MFM (Modified Frequency Modulation) |
| Access Time | Seek time: 3msec/track Head settling time: 15msec Latency: 83msec |
| Power Source | AC 115V 50/60Hz 50W AC 120V 60Hz 0.7A AC 230V 50Hz 50W AC 240V 50/60Hz 50W |
| Size | 180mm (W) × 344mm (H) × 397mm (L) (7" × 13-1/2" × 15-5/8") |
| Weight | 15 kg (33 lb.) |

* Information presented in this brochure is based on specifications available November 1982 and is subject to change without notice.

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