

SHARP

MZ-80A

Personal Computer

Compact Personal Computer...Designed for Any Environment, Always Ready to Run.



```
0 1000 GOTO 1000
1010 H=1
1020 H=VAL(LEFT$(IT,2))
1030 H=H+1
1040 H=INT(H/10)*10+H-H/10
1050 H=INT(H/10)*10+H-H/10
1060 H=INT(H/10)*10+H-H/10
1070 H=INT(H/10)*10+H-H/10
1080 H=INT(H/10)*10+H-H/10
1090 H=INT(H/10)*10+H-H/10
1100 H=INT(H/10)*10+H-H/10
1110 H=INT(H/10)*10+H-H/10
1120 H=INT(H/10)*10+H-H/10
1130 H=INT(H/10)*10+H-H/10
1140 H=INT(H/10)*10+H-H/10
1150 H=INT(H/10)*10+H-H/10
1160 H=INT(H/10)*10+H-H/10
1170 H=INT(H/10)*10+H-H/10
1180 H=INT(H/10)*10+H-H/10
1190 H=INT(H/10)*10+H-H/10
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1480 H=INT(H/10)*10+H-H/10
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1580 H=INT(H/10)*10+H-H/10
1590 H=INT(H/10)*10+H-H/10
1600 H=INT(H/10)*10+H-H/10
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1870 H=INT(H/10)*10+H-H/10
1880 H=INT(H/10)*10+H-H/10
1890 H=INT(H/10)*10+H-H/10
1900 H=INT(H/10)*10+H-H/10
1910 H=INT(H/10)*10+H-H/10
1920 H=INT(H/10)*10+H-H/10
1930 H=INT(H/10)*10+H-H/10
1940 H=INT(H/10)*10+H-H/10
1950 H=INT(H/10)*10+H-H/10
1960 H=INT(H/10)*10+H-H/10
1970 H=INT(H/10)*10+H-H/10
1980 H=INT(H/10)*10+H-H/10
1990 H=INT(H/10)*10+H-H/10
2000 H=INT(H/10)*10+H-H/10
```

Electronic Magnificence. Dynamic Applications from a Ready-to-Run System.



For this fresh, new Personal Computer of tremendous potential, Sharp has combined all its fine electronic technologies which are especially suited to information engineering. It's a real marvel of precision.

The CRT. The keyboard. The cassette-based data storage. All are incorporated in one complete system that leads the operator, either professional or amateur, into an incredible new computer world. Flexible system expansion and varied program applications together guarantee satisfaction both in data management and personal enjoyment.

The MZ-80A. The Personal Computer you've been asking for.

The Versatile Sharp MZ-80A

Versatile Software

The MZ-80A CPU is loaded with a 48K-byte dynamic RAM. It allows direct access to all data. The MZ-80A employs BASIC in the tape mode. PASCAL software system is also available by simply replacing tapes. The MZ-80A can, with its floppy disk system, respond to higher-level software, such as disk BASIC and FDOS (including BASIC compiler).

CRT Display

The CRT provides a 9-inch, high-focus, monochromatic display. It displays 25 lines 40 characters wide. Advanced functions include a scrolling display, rolling, and screen editing.

Keyboard Arrangement

The ASCII standard alphabet (upper- and lower-case) is arranged like a typewriter keyboard. A numeric keypad makes data entry smooth and operation simple.

Other Features:

1. The memory for display has a capacity of 2K bytes (equivalent to two screen pages) and allows instantaneous scrolling.
2. The built-in clock circuit.
3. The built-in sound circuit produces three octaves and enables you to confirm the data input audibly.

Peripheral Equipment

You can make even more use of the MZ-80A by expanding the system. An expansion unit, printer, floppy disk unit, and many other peripherals are available. Expansion is extremely easy. You can add peripherals one by one as you need them to increase capacity.

Expansion Unit (MZ-80AEU)

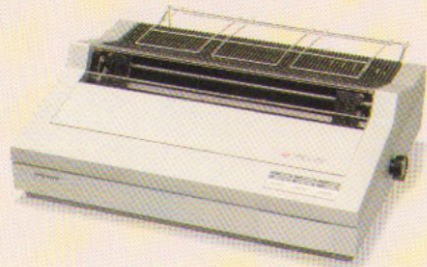
The MZ-80AEU connects the CPU with the terminals of other equipment. It allows connection with up to four peripherals.

Character/Graphic Printer (MZ-80P4/80P5/80P6)

The MZ-80P5 prints 80 standard-size characters per second, using fanfold paper ten inches or less in width. Its tractor feed system prevents paper slide and provides clear printouts of letters, numbers, and graphics.

Floppy Disk Unit (MZ-80FB)

The MZ-80FB uses a 5.25-inch, dual-sided, flexible diskette. Due to its double-head, double-density, and two-drive function, its 560K-byte memory allows high-speed access to a large amount of data.



MZ-80P4

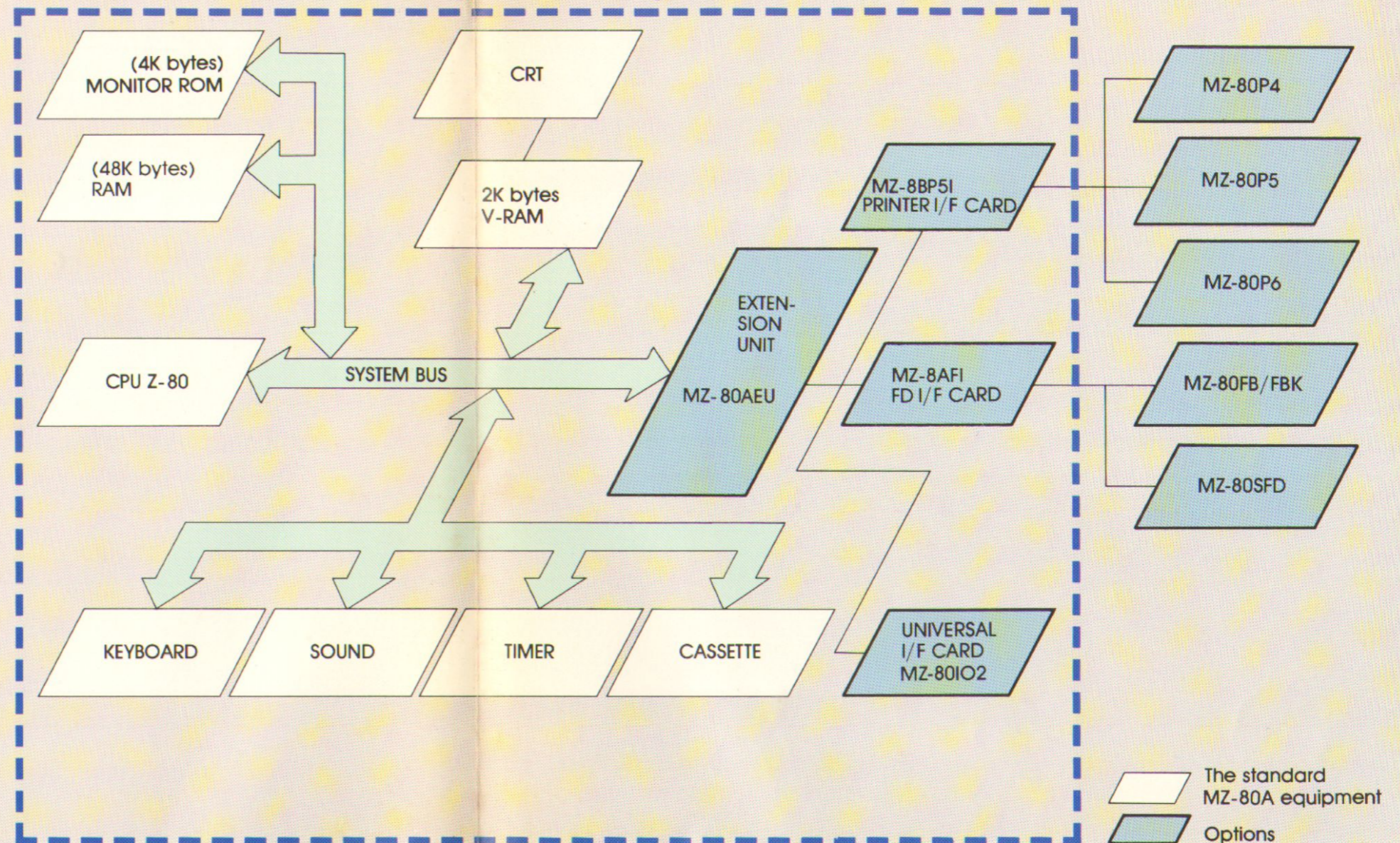


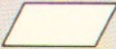
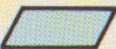
MZ-80P5



MZ-80P6

MZ-80A System Diagram



 The standard MZ-80A equipment
 Options

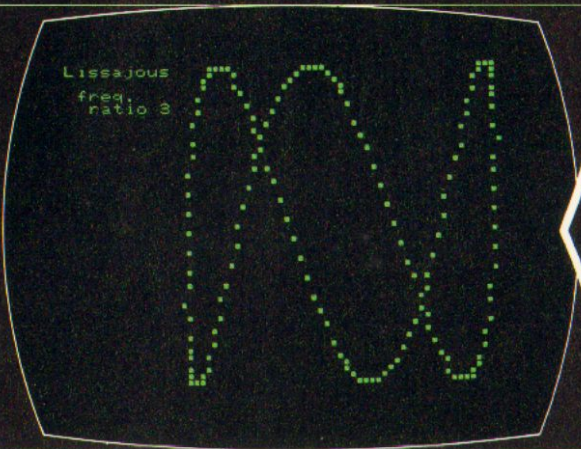
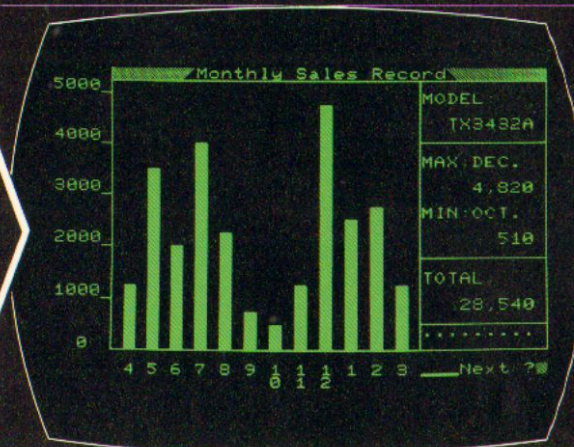
Versatile Applications, from Business to Home Use

You can go a step further and program your own software by learning various computer languages.

[These are a few examples of possible applications.]

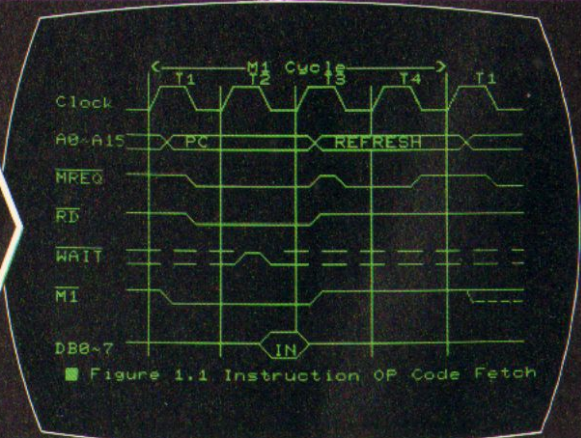
Business

- Marketing analysis
- Stock management
- Invoicing
- Sales/purchase ledger
- Costing
- Payroll calculations



Education

- Mathematics, physics, chemistry
- Languages
- Advanced scientific calculations
- Computer linguistics



Science/Industry

- Data analysis
- Data transmission
- Estimation
- Electrical-device control
- Simulation



Hobbies/Home Use

- Games
- Home budget management
- Music reproduction
- Name/address/telephone lists

SPECIFICATIONS

MZ-80A

| | |
|--------------|--|
| CPU | Z-80 |
| Memory | 4K-byte ROM; 48K-byte RAM (optional expansion inside the board, up to 48K bytes). |
| Display | 9-inch (23-cm), monochromatic CRT; 8 × 8 dot matrix; 40 characters × 25 lines. |
| Cassette | Manual control; standard audio cassette tape. Data transfer (Sharp PWM system): 1,200 bits/sec. |
| Sound Output | Max. 400mW (440 Hz) |
| Keys | ASCII keyboard; upper-/lower-case alpha-bet; graphic symbols; numeric keypad. |
| Editing | Cursor control (up, down, left, right, home, clear); insertion and deletion keys. |

| | |
|-------------------|--|
| Power Source | AC 220V 50Hz, 240V 50Hz |
| Power Consumption | 36W |
| Temperature | Operating: 0°—35°C Storage: -15°—60°C |
| Humidity | 80% or less |
| Weight | Approx. 10 kg |
| Dimensions | Width: 440 mm Depth: 480 mm Height: 260 mm |
| Other Functions | Built-in clock and music |

OPTIONAL PRINTERS

| printer specifications | MZ-80P4 | MZ-80P5 | MZ-80P6 |
|------------------------|---|---|--|
| Printing Method | Serial impact dot matrix | | |
| Feed Method | Variable sprocket; Friction | Variable sprocket | Variable sprocket; Friction |
| Kinds of characters | 230 | | |
| Character Make-up | 9(W) × 8(H) dot matrix (normal-size characters) | | |
| Number of Digits | 136/68 per line 160/80 per line | 80/40 per line 136/68 per line | |
| Printing Speed | 150 cps (normal-size characters) | 80 cps (normal-size characters) | |
| Head Sweep Direction | Bi-directional; Logical seeking | Character: Bi-directional Bit image: Uni-directional (rightward) | |
| Recording Paper | Fanfold: 5'—15' Sheet: 5'—15' | Fanfold (4—10" wide) | Fanfold (4—10" wide), Sheet (8.3—8.5" wide) |
| Power Source | Local voltage | | |
| Power Consumption | 80W | 75W | |
| Temperature | Operating: 5°—35°C Storage: 0°—50°C | Operating: 5°—35°C Storage: -20°C—50°C | |
| Dimensions (W × D × H) | Approx. 530 × 464 × 178 mm | Approx. 377 × 352 × 105 mm | |
| Weight | Approx. 15 kg | Approx. 7.2 kg | |
| Other Functions | <ul style="list-style-type: none"> • Software-controlled full graphic function • Programmable number of lines per page • Battery-operated memory of HOME position (MZ-80P4 only) | | |

Minimum Peripherals for Printer System

| Main Unit | Printer | ROM | Cable | I/F Card |
|-----------|---------|----------|----------|----------|
| MZ-80A | MZ-80P4 | MZ-8AP4R | MZ-8BP4C | MZ-8BP5i |
| | MZ-80P5 | MZ-8AP5R | MZ-8BP5C | |
| | MZ-80P6 | | | |

Floppy Disk Unit (MZ-80FB)

Two drives per unit; 5.25" dual-sided, double-density; 70 tracks; soft-sector; 16 sectors per track.

| | |
|-----------------------|---|
| Memory Capacity | 280K bytes per diskette. |
| Power Consumption | 40W (AC 220V, 50Hz) or 45W (AC 240V, 50Hz) |
| Operating Temperature | 4°C—25°C |
| Humidity | 20%—80% |
| Dimensions | 200(H) × 205(W) × 320(D)mm |
| Weight | 7.9 kg |
| Accessories | A power cord, a braid wire, and an instruction manual |
| Options | Cable for MZ-80FB Cable for MZ-80FBK I/O card for floppy disk |

Cassette-based BASIC

| | |
|-----------|---|
| Command | LOAD, SAVE, VERIFY, AUTO, LIST, LIST/P, RUN, CONT, NEW, MON |
| Statement | LET, GOTO, GOSUB, RETURN, ON...GOTO, ON...GOSUB, IF...THEN, IF...GOTO, IF...GOSUB, FOR...TO...STEP...NEXT, READ...DATA, RESTORE, MUSIC, TEMPO, DEF FN, SET, RESET, WOPEN (T), ROPEN (T), CLOSE (T), INPUT, INPUT/T, GET, PRINT, PRINT/T, PRINT/P, TAB, DIM, STOP, END, REM, INP, OUT, LIMIT, PEEK, POKE, USR, CLR, COPY/P, PAGE/P, SIZE, CSRH, CSRV |
| Operation | +, -, *, /, ^, =, >, <, <>, =>, =< |
| Function | SIN (X), COS (X), TAN (X), ATN (X), EXP (X), INT (X), LOG (X), LN (X), ABS (X), SGN (X), SQR (X), RND (X) |
| String | LEFT\$, RIGHT\$, MID\$, CHR\$, STR\$, ASC, VAL, LEN, TI\$, STRING\$, CHARACTER\$, SPACE\$ |
| Format | TAB, CURSOR |

Design and specifications subject to change without notice.

SHARP

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