The Small Print

You can't judge a book by its cover — but you can tell a lot about a micro by its technical specification

Keyboard

The keyboard is specially designed to be easy and pleasant to use. Its keys have the standard typewriter-style layout. The character on any key can be displayed repeatedly by keeping the key depressed. Capitals and ordinary letters can be displayed and a separate group of keys (numeric keypad) is provided for entering numbers

Display

The ASCII (American Standard Code for Information Interchange) character set is a standard set of letters, numbers and symbols used by many computers. On some computers the screen displays these characters in 80 columns and 25 rows. The picture can be shown on a television or a special monitor

Memory

The numbers give memory capacity in kilobytes, or thousands of bytes. ROM (Read Only Memory) contains the facilities needed for the fundamental operation of the computer, usually including a language such as BASIC. RAM (Random Access Memory) is for storing the user's programs and data

Interfaces

There are special sockets through which a printer, communications equipment, a cassette recorder and cartridges can connect to the computer. A cartridge is a special ROM which can contain a program, a language or even a new O/S (operating system)

CPU

The CPU is the Central Processing Unit — the silicon chip that is the heart of the computer. This one, a Zilog Z80 microprocessor, is one of the most common. The clock that times all its operations can measure as accurately as 2.2 million times a second

BASIC

The computer's resident language provides commands for using the sound and graphics facilities. It checks instructions given to it to ensure that they are correct: if they are wrong it produces an error message. Screen dump reproduces the screen on the printer. Extra BASIC commands are provided to ensure that programs are written with good 'structure' —meaning that they are easy to read and correct

Sound

Individual notes or chords can be played over a range of five octaves, and the sound signal can be played through a hi-fi system

Peripherals Available

The units that can be attached to the computer include a cassette recorder, floppy disk drive and a hard disk drive. All three store programs and data. A dot matrix or a letter quality printer, a plotter and a digitiser for graphical output and input, can be used for producing words and pictures, and joysticks can be attached for games. A modem is a device for allowing computers to communicate by telephone

Graphics

The displays created by Teletext and Viewdata can be shown on the screen which has 256 rows each containing 640 dots for displaying graphics. Perspective views of three dimensional objects can be created and shown

Languages Available

These computer languages can be used instead of BASIC; each is well suited to a particular kind of application. ASSEMBLER is a kind of programming language that is more difficult to learn (than BASIC for example) but it makes programs 'run' much faster

Features of "TYPICAL" Computer

Memory	16 Kbytes ROM, 32 Kbytes RAM, capable of addressing 48 Kbytes RAM
Display	Can display ASCII character set 25 rows each with 80 character positions, outputs to domestic TV & monitor
CPU	Z80 running at 2.2 MHz
Keyboard	Ergonomic design, QWERTY keyboard, repeat facility, upper & lower case numeric keypad
Interfaces	Printer interface, communications interface, cassette port, cartridge slot
BASIC	Sound and graphics commands, syntax checking, error messages, screen dump, structured features
Graphics	Teletext and viewdata compatible, max. resolution of 640 x 256, 3-d effect
Sound	Music synthesiser, 5 octaves, hi-fi output
Peripherals available	Cassette unit, floppy disk drives, hard disk drive, printers, plotter, digitiser, joystick, modem, speech synthesiser
Languages available	FORTH, PASCAL, LOGO, LISP, PROLOG, ASSEMBLER