# Hardware Focus

# ZX81 PRICE

£39.95 (special offer with the 16K

# RAMpack — £45)

SIZE

# 175×168×43mm

WEIGHT

## 300g

CLOCK SPEED

# 1MHz

MEMORY

8K ROM containing the BASIC interpreter and operating system. 1K RAM of which 123 bytes is taken up for the system variables, the rest being shared by your BASIC program and the screen display. The RAM can be expanded by 16K for less than £30

### VIDEO DISPLAY

Black and white, 32 × 24 rows of text, 64 × 44 graphics. The bottom two rows are not for use as a normal display but show what is being typed into the computer

## INTERFACES

Cassette I/O, power input and TV output are standard connectors. The edge connector at the back accepts other peripherals and extra memory

LANGUAGES SUPPLIED Sinclair BASIC

OTHER LANGUAGES AVAILABLE

FORTH, Assembler for Z80 machine code

#### COMES WITH

Power supply adaptor, TV lead, cassette lead, documentation

## KEYBOARD

40 pressure-sensitive pads, each able to produce one of several things: a BASIC command word, an alphanumeric character or a graphic symbol

# DOCUMENTATION

The single manual is a very clear and concise introduction to using this computer. It assumes no knowledge whatever about computers, has lots of examples, exercises and summaries at the end of each chapter, but is devoid of interesting programs. The chapters from 23 onwards describe the computer in technical detail and provide hints on using machine code and a full list of all the system variables used by the operating system

The ZX81 makes use of a standard Z80 microprocessor

CPU

#### **Edge Connector**

The edge connector at the back of the circuit board that all the other peripherals and memory plug into

#### RAM

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The board is designed to allow the use of several different kinds of chips depending on which type are available to Sinclair at the time of production. So the RAM may be one big chip or, as shown here, two smaller ones

#### ROM

Contains all inbuilt software: the character generator for the screen display, the BASIC language and the cassette loading and saving operating system. If the Sinclair ROM were to be read by another Z80-based computer, its contents would not look like instructions for the Z80. This is because some of the data lines to the ROM have been shuffled around. This may have been to make copying difficult, or simply to ease the layout of the circuit board

## **Keyboard** Connector

The two rows of metal pins at the front right of the board are for connecting the keyboard to the circuit board. These are the row and column lines of the keyboard