

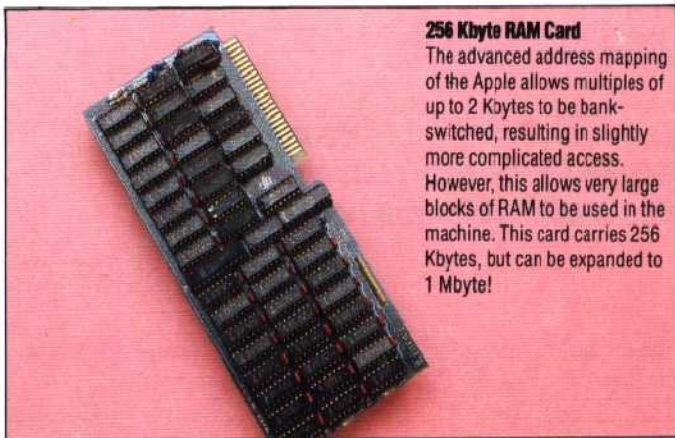
**Memory Management Unit**

One of the two ULAs, which constitute the major difference between the Apple II and the Apple IIe. This one controls the 80-column screen as well as the second 64 Kbyte bank of RAM

**Power Connector**

**256 Kbyte RAM Card**

The advanced address mapping of the Apple allows multiples of up to 2 Kbytes to be bank-switched, resulting in slightly more complicated access. However, this allows very large blocks of RAM to be used in the machine. This card carries 256 Kbytes, but can be expanded to 1 Mbyte!



**Slot 1**

This is normally occupied by a parallel printer interface

**Slot 7**

Special video signals are available in this slot only, so video-related cards such as light pens and colour modulators are often found here

**Game Port DIL Socket**

One of the most innovative features of the Apple was the game port, which gave a minimal but useful form of analogue input

**Cassette Input**

**Cassette Output**

**Composite Video Output**

**Auxiliary Video Connector**

**Input/Output Unit**

The ULA that handles the addressing of the auxiliary connector

**Game Port D-Connector**

The normal 16-pin socket for the game port is too fragile for everyday use, so the Apple IIe is fitted with a small D-socket in parallel

**APPLE IIe**

**PRICE**

£845 plus VAT

**SIZE**

460 × 385 × 115mm

**CLOCK SPEED**

1 MHz

**MEMORY**

16 Kbytes ROM

64 Kbytes RAM

Expandable to 128 Kbytes or more with bank-switching

**VIDEO DISPLAY**

24 lines of 40 characters, monochrome only. Low resolution graphics of 48 × 40 in 16 colours. High resolution graphics of 192 × 280 in 6 colours

**INTERFACES**

Cassette, composite video, 7 expansion slots, game port

**LANGUAGES SUPPLIED**

Applesoft BASIC

**OTHER LANGUAGES AVAILABLE**

Most of the common alternative languages, and some rarities, are available

**COMES WITH**

Installation and BASIC manuals, TV lead

**KEYBOARD**

62 high-quality keys

**DOCUMENTATION**

The accompanying documentation is of a very high standard, though the advanced material needed for a full understanding of the machine has to be purchased separately and it is rather expensive. A huge range of books catering to all levels of interest is available, and the machine is probably the most comprehensively covered in this respect



**General-Purpose I/O Card**

Sometimes a card can have so many possible functions that a controller-ROM would restrict the user and become a liability. This card, which has two 6522 versatile interface adaptors, is such an example. It has 40 separately controllable I/O lines, two shift-registers which are used for converting data from parallel to serial form, and four 16-bit timers