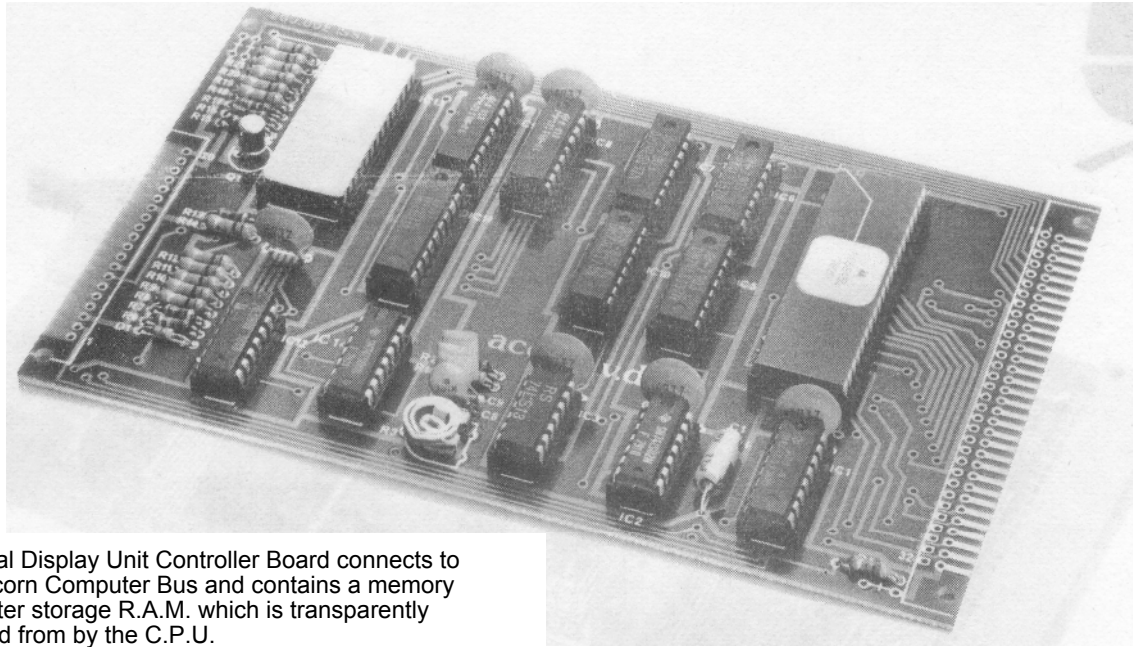




Acorn VDU



The Acorn Visual Display Unit Controller Board connects to the Standard Acorn Computer Bus and contains a memory mapped character storage R.A.M. which is transparently written to or read from by the C.P.U.

An MC6845 programmable controller I.C. provides all the synchronisation signals to drive a 625 line 50 fields per second V.D.U. together with read addresses for the character R.A.M. Characters are then fed to an SAA5050 character generator IC which produces the necessary dot patterns to create the characters to refresh the V.D.U.

The SAA5050 produces Teletext standard characters and has Red, Green and Blue drive outputs giving coloured characters or graphics.

The R.G.B. and sync outputs may be used to drive a colour encoder and modulator for a U.H.F. Television; also provided is a 1 volt/75 ohm composite sync and video output which can directly drive a Monochrome Monitor on which the different colours will appear as different scales of grey.

Also provided are listings for programs which set up the MC6845, display 25 instructions in hex on the V.D.U. (with

double or treble byte instructions on a single line) and allow the drawing of graphics or characters on the V.D.U. These programs may be loaded and run using the Acorn System 1 Monitor. A new monitor R.O.M. will shortly be available for linking the V.D.U. and an ASC 11 keyboard to Acorns' 4K Fast BASIC.

The versatility of the programmable MC6845 and the SAA5050 combination may be employed to give other screen formats e. g. 80 characters x 16 lines and double height characters. Thus the Acorn V.D.U. should prove to be of great value to experimenters and producers of specialist display systems.

The V.D.U. controller P C B is supplied in kit form with a full set of I.C. sockets. It is easily assembled using a small soldering iron and useful hints on assembly may be found in the Acorn Micro-computer System 1 Technical Manual. The board operates from a single +5v supply from which it draws not more than 500 mA.



Acorn System 2

The Acorn System 2 computer is contained within a 19" rack and consists of the following Eurocards (100mm x 160mm).

6502 CPU

The 6502 Micro processor, zero page RAM, two I/O chips (one for the system keyboard) and the Cassette Operating System ROM are on this board.

VDU Interface

This board drives a TV monitor in monochrome or colour giving teletext characters and graphics from a 1K memory mapped character RAM.

Memory Board

Carrying 4K of RAM (a further 4K may be added) and two ROM's this board provides program text space and an integer BASIC Interpreter ROM. A second ROM containing a floating point package and scientific functions may be added.

Cassette Interface

A CUTS interface to any audio cassette recorder is on this keyboard. This is the same board as is used on top of System 1 but the hex keyboard and 7 segment display are no longer required.

These boards are connected in the rack by an 8 slot backplane using two part DIN connectors.

The System 2 kit provides a highly cost effective computing system with the addition of a parallel ASCII keyboard, a TV monitor and a 5v @ 3A power supply. Further refinements are the addition of front panels with industrial connectors and a case for the 19" rack.

The Acorn systems are primarily aimed at the industrial, laboratory and business system markets but they are also very suitable for use by the amateur enthusiast. Further boards in the Acorn range are a serial and parallel interface board, an 8 channel/10 bit ADC, a PROM blower and a PAL colour encoder/UHF modulator.

With the addition of a mini-floppy disc drive module and a DOS PROM, the computer is upgraded to System 3