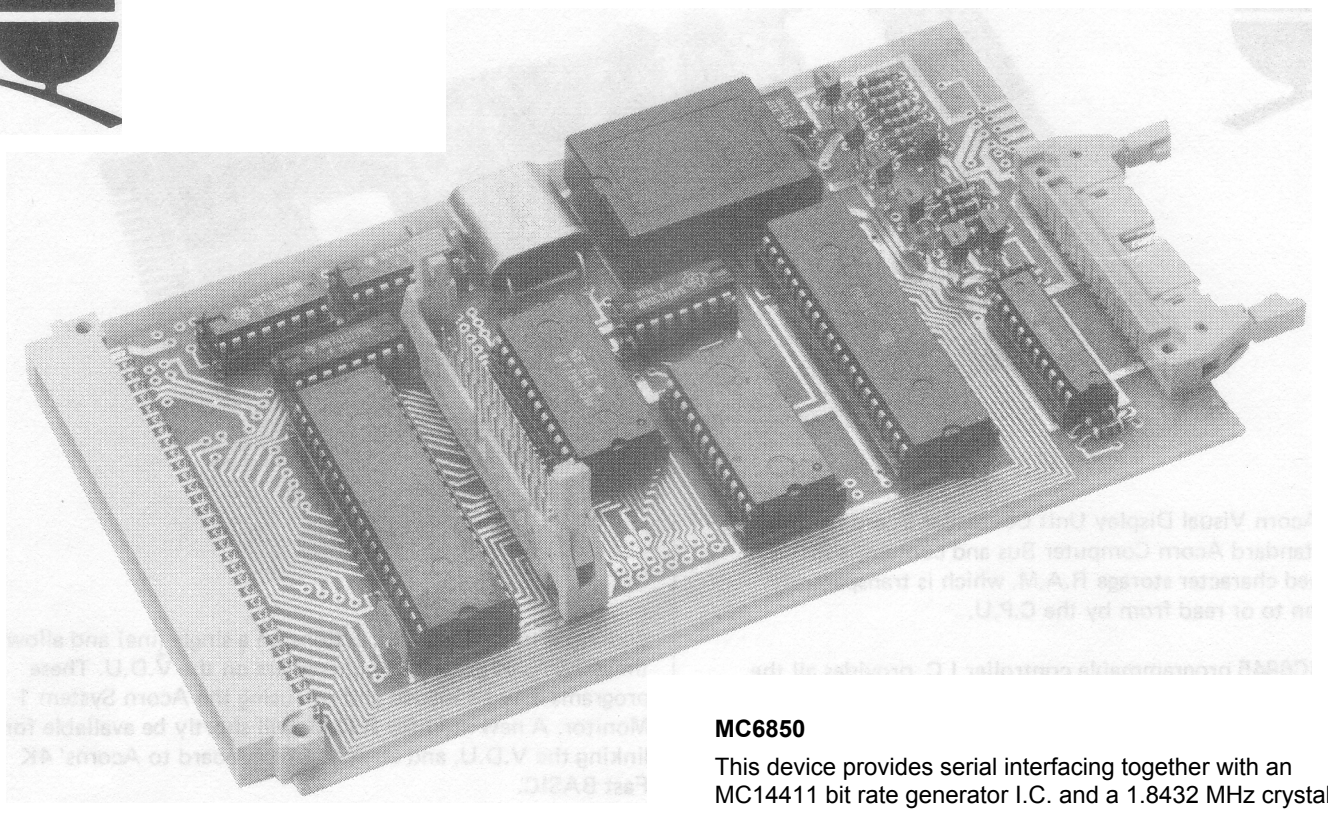
Acorn Universal Interface



This board connects to the standard Acorn bus and provides interfaces via the three integrated circuits listed below:--

6522

This device has two, ten bit parallel, TTL level, I/O ports (i.e. 8 individually programmable data bits plus 2 control bits each) and a pair of interval timers for providing real time interrupts. One port connects to side B of the Acorn bus, the other going via a high current buffer to the front of the board where a 26 way connector may be fitted. This connector is pin compatible with the Centronix or Anadex printers.

INS 8255

This device provides three ports of TTL level parallel 1/0 via a 34 way connector. Two of these ports are 8 bits wide and may each he programmed to be either all input or all output whilst the third port which is also 8 bits wide, has its direction programmed in two groups of 4 bits.

MC6850

This device provides serial interfacing together with an MC14411 bit rate generator I.C. and a 1.8432 MHz crystal which enable standard baud rates in the range 75 to 9600 baud to be selected. Edge connectors on the front of the board provide a 20mA Teletype connection and an RS232C connection. The 20mA serial input is via an optical isolator giving ground isolation between inter-connected Acorn systems. The RS232C interface requires a ± 12 volt supply which may either be connected via the front edge connector or can be provided by an on-board 5v to ± 12V converter module. The serial data is also available at TTL levels and the control lines 'Clear to send' and 'Request to send' are available at RS232C or TTL.

As supplied the board is memory mapped at page OC (i. e. in block zero) and the buffered 6522 port provides connection for the system printer as required by both the Cassette and Disc operating systems. Program examples of inputting and outputting serial data will be supplied so that users can write software to use these as peripheral terminals.

With the addition on board of a 74LS138 the board can be mapped into pages in any block allowing many boards to be used as experimental interfaces or for provision of extra printers etc.