

REVIEW - DELPH CONVERTER BOARD

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I must at the outset of this review declare an interest. I have been slightly involved in the testing of the product and wrote the instructions so I will limit this review to an indication of what the product will do.

For some time now there have been companies willing to convert FAT40 CBM machines to 8032 machines. Now Delph Electronics have provided the means to convert a 'thin' 40 (9" screen) into an 8032. The hardware consists of a neat PCB which fits above the ROMs on the existing 4032 (or 3032 upgraded to BASIC4) motherboard. The board plugs into the existing 'E' ROM socket and other connections go to the memory expansion connectors and the character generator. All connectors are provided and are simple to make. The character generator from the CBM is placed in the board. The software is a new 'E' ROM which is provided with the board.

Having connected the board your 'thin' 40 will behave exactly like an 8032 with all its functions and more. Because of differences between the CBM and business keyboards the latter's new keys, such as 'Repeat' and 'Escape' are accessed in a different way. However the software has been written to ensure that all the graphic characters of the CBM are still accessible from the keyboard, something that the 8032 cannot do.

All the functions of the 8032 are made available. The 80 column display is very crisp. LISTings can be paused and restarted. Screen windows can be set. Tabs can be set on the screen. Automatic indication of line end will be given via the bell (if user port sound is provided). All the additional screen editing commands are available. i.e. INST/DEL Line, ERASE Begin/End, SCROLL Up/Down, SET

Top/Bottom, Text/Graphic mode, Set/Reset Tab. A repeat key toggle is provided so that 'repeat' operates either on cursor control and space keys only, or on all keys.

One nice touch is that by use of the technique of multiple key press detection (See Vol.5 No.1 p.81) all the additional screen editing commands are available from the keyboard. Something that is not completely possible on the 8032.

The basic board is fitted with the capability of replacing the character generator with a 4K version. A software switch between either of the 2K character sets is provided. The 'E' ROM of the basic board is fully decoded allowing a 4K 'E' ROM to be used provided locations reserved for I/O ports are not used.

A number of versions of the board exist. Apart from the basic board described above a version exists which includes a 4K 'E' ROM, 4K character generator and RAM for an additional screen display (located at \$8800-\$8FFF). The extra 2K of character generator is used to store a mid-resolution character set which allows a plotting density of 160 x 200. Simple POKEs are used to switch between either the normal character generator or the mid-resolution characters. The additional screen memory can be used to store a second screen display or a mid-resolution plot. Part of the extra 2K in the 'E' ROM has been used to provide a 'flash' routine which very quickly alternates between the two screen displays with or without change of character set as well. This allows for example the possibility of a graph plot and annotated text to be mixed on screen.

The cost of the basic board is £ 149 plus VAT, the enhanced version £ 160 plus VAT. Contact John Bickerstaff, Discounts Officer, for special ICPUG prices.