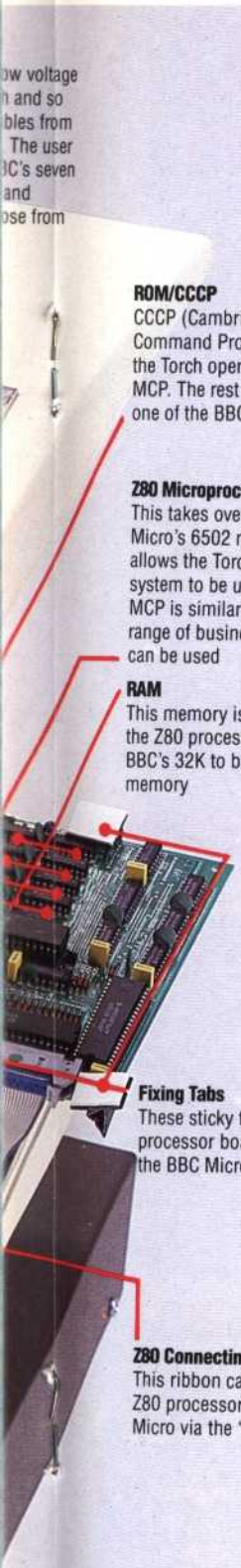

display modes can be selected with MODE and all the VDU and *FX commands are there. *KEY is still used to define the function keys. Four of the function keys are pre-defined with a selection of useful commands.

There are many other commands that deal with loading and manipulating files on disk. Apart from being able to load machine code programs by simply typing their names, the system offers a command to load special files that build up pictures on the disk using the BBC operating system. PRINT outputs a text file to a printer, while TYPE outputs it to the screen. COMMAND uses a file as a series of commands for the computer in a similar fashion to EXEC in BBC BASIC.

There are several other utility programs that are kept on a system disk that accompanies the Disk Pack and are loaded into the machine by typing the relevant name. These include a routine to change the font (design) of the characters on the screen, a music writing utility, a machine code debugger, a disk editor, and a utility to allow the Torch to read Acorn disks and vice versa. The latter is very useful as the formats used for the two systems are different. This utility allows you to, say, produce a text file using a BBC BASIC program to input text and then to edit it with a CP/M word processing program.

Although the Torch disk format is different from the Acorn format, it uses the same strange convention of treating the two disk drives as being four different disk drives.

Despite all these enhancements, the system may still be used as a standard BBC Micro. Typing *BASIC makes the system ignore all the extras supplied by the Disk Pack. Strangely, the BBC Micro that you are left with is set up to use cassettes and not disks. Despite the fact that it is now fully equipped to use the disk drives of the Disk Pack, without using MCP, the user must specify that the disk filing system is required. When in BBC BASIC you can change back to using the Z80 at any time by turning the machine off and on, or by typing *MCP.

The BBC Micro is a home computer with many facilities, but it *is* only a home computer. For business use a lot more is required of a micro than the BBC alone can offer. When a Torch Disk Pack is added to your BBC Micro, you still have the home computer there, ready for use at a moment's notice, but, in addition, your computer has all the extras needed to turn it into a real business machine.

Fitting The Disk Pack
Fitting a Torch Disk Pack to a BBC Micro is quite a complicated task. Your computer must be a BBC Micro Model B, fitted with a disk drive interface. As the BBC's power supply is no longer required, all seven push-on connectors from this to the BBC's main circuit board must be removed. These are then replaced by a cable from the power supply in the disk pack.

A ribbon cable from the Disk Pack fits into the BBC's disk drive interface. The ROM containing the MCP operating system is then plugged into a spare ROM socket in the BBC

CHRIS STEVENS

Free Software
The Torch Disk Pack comes with several software packages, supplied at no extra cost. A suite of business software is provided – Perfect Writer (a word processing program), Perfect Speller (a spelling checker program), Perfect Filer (a database program) and Perfect Calc (a spreadsheet program).

In addition to these packages, a version of BBC BASIC is provided that will run on the second Z80 processor. All commands are the same as the version in ROM in the BBC with the exception of the built-in 6502 assembler of the BBC. As the second processor is a Z80 and not a 6502, there is a Z80 assembler included in Z80 BBC BASIC. The bonus is 48K of free memory, no matter which display mode is being used. The BBC Micro has a mere 9K free in some display modes and never has more than 28K free

DFS Chip
A number of chips must be added to the BBC's circuit board to enable it to use a disk drive. Most dealers will fit them for around £100. These chips are not included with the Torch Disk Pack and so must be bought separately. Such upgrades are not intended specifically for the Torch and they contain a chip called the DFS that is not actually used by the Torch. However, it's well worth having, because the DFS (disk filing system) is the operating system used by Acorn. This means the Torch Disk Pack can be used as a pair of disk drives to run BBC Micro disk software on the 6502 processor.

The Torch and Acorn disk formats are not compatible so MCP programs cannot read Acorn disks and vice versa. A program is supplied with the Torch that translates between the two formats

Business Options
The first computer Torch produced was a business machine costing £3,395. Torch also produces versions of the business machine that uses the Unix operating system. This is known as the 700-Series (shown in the photograph). There is also a 300-Series of terminals that link Torch computers in a network