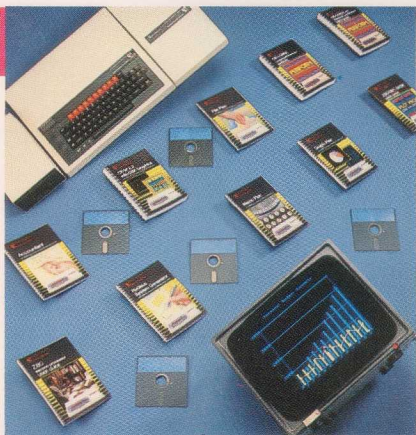# Z80
SOFTWARE

British Broadcasting Corporation
Microcomputer System
Z80 Second Processor

PROFESSIONAL COMPUTING

Connect up a Z80™ and your BBC Microcomputer becomes a complete business micro, with all the computing power a professional needs. The Z80 unit contains a second microprocessor which will work alongside the BBC Micro-computer's own processor. Together, they make a formidable team.

To put your new computer into action, the Z80 pack includes a set of programs that cover all the major business applications, and that make the most of the system's impressive capabilities. With Z80 systems, big businesses can distribute work stations among all their decision makers. And small businesses can afford the computing power that will help them grow bigger.

SOFTWARE

The software in the Z80 pack includes:
·   three office productivity programs, MemoPlan™, FilePlan™ and GraphPlan™
·   a program called Accountant to run business or club accounts
·   the award-winning system generator, Nucleus, that writes software which you can tailor to your own needs, even if you have no programming experience
·   three programming languages, CIS COBOL™, Professional BASIC and BBC BASIC, to take advantage of Z80 processing power.

MANUALS

We also provide all the information you need to make the most of your Z80 system. Our manuals give you:
·   what you need to know to get started straight away
·   instructions you can easily refer to as you use the software
·   guidance on the best ways of getting the programs working for you.
We've aimed to give advice as well as instructions – to explain the 'why' as well as the 'how' of professional computing. We even give some practical, down-to-earth advice on computerising a business.

With several of the programs, you can give instructions simply by pressing one of the BBC Microcomputer's red function keys – and we've included a set of quick-reference cards, specially designed to clip on to the keyboard, to remind you what each key does.

CAPACITY

The Z80 is a disc-based system, which means that it can comfortably handle the large amounts of data that you work with in business and professional computing. Each disc normally holds about 400K – roughly 200 A4 pages of text, or 1500 card-index records.

RANGE

The Z80 software covers the full range of common microcomputer applications – accounting, word processing, financial modelling, database management.

The pack also includes software seldom offered with microcomputer equipment. For instance there's a program that itself writes programs: Nucleus, the system generator. And we've included three sophisticated programming languages: CIS COBOL, Professional BASIC and a Z80 version of the BBC Microcomputer's own BASIC.
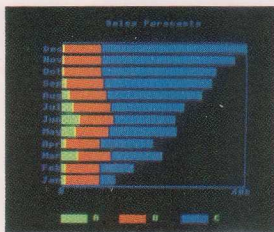
DEPTH

The pack has been carefully designed to offer not just one approach to a given task, but a choice of solutions.

For example, you can use FilePlan to set up a simple database – storing and sorting customer records, or your address book. It's easy to set up, extremely flexible, and simple to update as you go along.

If you prefer something more closely adjusted to your own needs, you can use Nucleus to design a tailor-made system.

You could even go a step further, and have a program written to your own specification with CIS COBOL, a language particularly good at handling large amounts of data.

Many of the programs can be added to later. If your main interest is word processing, for example, you may want to upgrade MemoPlan by adding its big brother, DocuPlan. The idea of the Z80 pack is to give you sound, straightforward software for every application, together with the opportunity to develop in depth your own special area of interest.

INTEGRATION

Finally, the Z80 software, though made up of separate programs, has been designed to work together in solving your problems.

You can write a circular with MemoPlan, and send it out to each of the customers on your FilePlan index. Each letter will look as though it's been individually typed.

You can use Nucleus to prepare customised printouts of your Accountant figures. Or you could type them into GraphPlan, and display them as a set of graphs.

You can write a program with MemoPlan and run it under Professional BASIC.

You can use the system to do your filing – storing your MemoPlan letters on disc, retrieving documents and re-reading them, even comparing two on your screen at once. And CP/M will keep track of them, displaying a list when you want one, and erasing files you no longer need.

IN THE OFFICE

Whether you run a business or a club, or just want to get yourself better organised, these five programs will do most of the work for you.

MEMOPLAN

With a word processor everyone becomes an expert typist. Mistakes can be corrected on the screen, and when you print what you've typed, it's perfect. You can store your letters and documents on disc, to give you instant, paper-free filing.

MemoPlan has two unique features:
· it lets you work on more than one document at a time, jumping between them, and even displaying two on the screen at once
· it automatically stores your work safely on disc as you go along.

Splitting the screen and looking at two documents together makes it much easier to rewrite notes into full reports, to prepare contents lists and indexes, and to move blocks of text between documents.

You can use MemoPlan to prepare circulars and address labels, and then, with FilePlan, read in automatically names and addresses from your records. It's also easy to include a GraphPlan spreadsheet, so that a letter to your bank manager, for example, can show your latest financial details.

Unlike many word processors, MemoPlan lets you print one document and edit another at the same time. The program can handle documents up to about 80 pages long.

FILEPLAN

FilePlan is a personal filing system – it works rather like an automated card index. You'll be able to use FilePlan to keep your address book, stock records, and mailing lists. You can keep as many different indexes as you need, and each can hold up to 1500 records, stored automatically on disc.

When you've entered data, you can edit it and sort it, find particular records, or pull out a set of records. FilePlan lets you enter any kind of data, and you can write your own screen messages that will guide you when you're typing your data in.

GRAPHPLAN

A major step in the business micro revolution was the invention of the spreadsheet – a program that allows you to put your financial data into a grid on the screen, manipulate the numbers, and see the results. In effect, you're creating a model of your finances, and experimenting to find out the effects of the various options open to you.

GraphPlan is a spreadsheet with an exciting difference: it can turn those rows of numbers into graphs, presenting an instant picture – in colour, if you have a colour monitor – of how your finances stand.

The program has a wide range of built-in maths and statistics commands, so you can carry out most kinds of calculation without having to enter your own formulas.

GraphPlan can handle large spreadsheets, with spaces for 1000 numbers. Your data and graphs can be stored on disc and printed out, in colour if you have a plotter.

ACCOUNTANT

is a simple but flexible book-keeping program for small businesses. It's been designed to provide you with the management information you want – and your accountants with the figures they need, set out just how they'd like to see them.
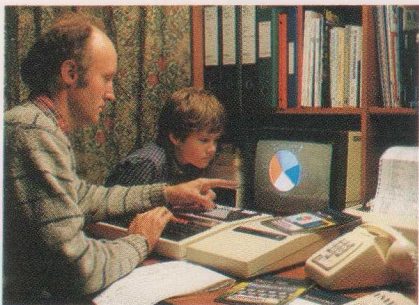
It will replace your sales daybook, purchase daybook and cash book. You enter into it your day-to-day transactions; it posts each item to a nominal ledger.

With Accountant you can:

· analyse sales, purchases and cash
· analyse VAT in a way that helps you fill in your VAT forms
· produce management and budgeting reports.

Your financial information will be as secure as it is now, or even more so: the program lets you set up passwords, so that only you and your authorised users can gain access to the figures.

Accountant is designed to provide an easy transition from manual to computerised book-keeping. When you're ready to automate other areas of your book-keeping, you simply add extra ledgers or stock control and payroll systems. Since Accountant includes a nominal ledger – the heart of a fully computerised accounting system – you shouldn't ever need to type in any of your original figures again.

NUCLEUS

With Nucleus you can write your own computer programs – even if you have never written a computer program before. For experienced programmers, Nucleus takes much of the time-consuming routine work out of software development.

You'll use Nucleus to write programs tailored to your own special needs: programs which use the computer to handle large amounts of data, and which automate laborious tasks that up to now you've had to do manually.

Nucleus is particularly useful for:

· developing your own database to keep records of customers, suppliers, or stocks and shares
· designing extra elements for Accountant – a sales ledger,for example, and printing reports specially designed to suit the needs of your business.

The Nucleus system is made up of two main sections: one sets up the filing arrangement you've chosen and the other prints out your information. You can produce printouts in several forms, for example:

· reports, which set out the information in columns
· address labels
· letters, with standard text you type in, and information from your Nucleus files automatically inserted
· documents, like profit-and-loss statements or invoices, which combine text with tabular data from Nucleus files.

Like Accountant, Nucleus has a password system, so that you can keep your information secure.

FOR PROGRAMMERS

The Z80 pack gives you a range of programming languages:
- CIS COBOL for data-handling programs
- Professional BASIC, the BASIC dialect most commonly used in business software
- BBC BASIC, the leading version of BASIC in education.

CIS COBOL

COBOL is the language that has proved itself over the last twenty years in handling commercial work on large mainframe computers. Its particular strength is in manipulating data.

Micro Focus's CIS – compact, interactive and standard – COBOL is the leading microcomputer version of the language. CIS COBOL makes it easy to write interactive programs, designing screen layouts that help users when they're entering data. The Z80's COBOL includes FORMS2™ to help in screen design.

We've also added a second programming aid, the award-winning debugging tool ANIMATOR™, which takes you step by step through your COBOL program on the screen.

PROFESSIONAL BASIC

Professional BASIC is an interpreter. It runs programs written in a dialect of BASIC similar to those of the industry-standard BASICs developed by Microsoft and Digital Research. These are the dialects most commonly used for business software.

We designed Professional BASIC to be a simple, straightforward interpreter, with speed of execution as our primary aim. We've also added new features to make programming easier: for example, functions that convert upper case to lower case, and that find strings of text within other strings.

Finally, if you need advanced file-handling, you can enhance your Professional BASIC with a keyed-access system.

BBC BASIC

is the advanced version of BASIC that was developed for the BBC Microcomputer. BASIC is by far the most popular microcomputing language, probably because it's particularly easy to learn and use; and BBC BASIC is one of its most powerful and sophisticated dialects. That's why it's the most widely used BASIC in schools. In particular, BBC BASIC offers:
- the DEF keyword, so that you can define procedures, and develop structured programs
- powerful graphics commands.

The BBC BASIC in the Z80 pack is a special version for the Z80 processor, and includes a Z80 assembler. You'll find that almost all programs written in BBC BASIC will run just as well.

THE Z80's OPERATING SYSTEM

Every computer needs an operating system – in effect, a program to supervise its programs. CP/M, the operating system we've provided, is by far the most popular and well established system for 8-bit business micros.

Its job is to supervise your computer's vital but more routine operations – running its communications with your disc drives and keyboard. You're then free to run the office or accounting software, or to work with the programming languages.
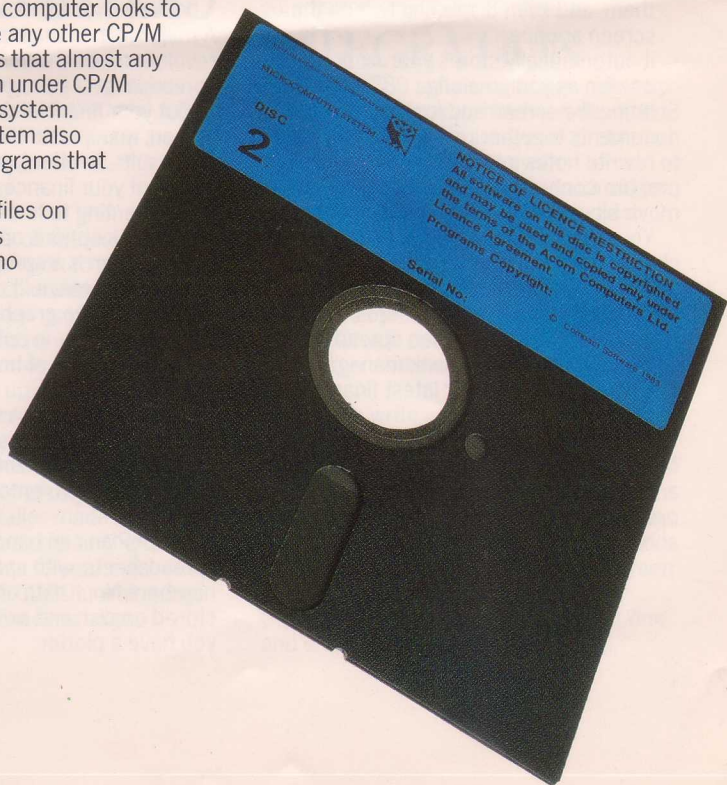
CP/M acts as a host to the software you want to run. It's been set up to know and cater for your computer's special features, so that the computer looks to the software just like any other CP/M machine. This means that almost any software that will run under CP/M will run on your Z80 system.

The operating system also includes a set of programs that enable you to:
· keep track of the files on each of your discs
· delete those you no longer need
· rename files
· copy files.

There are also programs that prepare discs for use, and that make copies of whole discs.

The Z80's CP/M has an extra feature, GSX™. This is a graphics extension that makes it possible for most CP/M programs that use screen graphics (charts and diagrams, for example) to take advantage of your Z80 system's graphics capabilities, without having to be specially set up for the BBC Microcomputer.

ACORN COMPUTER