The Options Board
This is mounted on struts above the main circuit board and contains the high resolution graphics system of the computer

RGB/TTL Port
This port permits the computer to be attached to an external colour monitor

DIP Switches
The particular address of the computer within a network system can be set by adjusting eight of these switches. Additional DIP switches allow the speaker and the RESET button to be turned on and off

RF Modulator
This device provides the signal to drive an ordinary television set

Video Chip
This static RAM chip is used to process the screen display

Character Generator ROM
Contains the text and graphics characters used by the 480Z

that Research Machines's intention was to develop a computer that would satisfy those school users who do not need the rugged flexibility of the 380Z, yet need an adaptable all-purpose machine. In this, the company has certainly succeeded. It is, however, a disappointment to find so little innovation in the machine, and the large size of the computer remains a mystery. By retaining the Z80 chip, the company has decided that the availabiity of software at a modest price outweighs any advantage obtained by choosing a more modern 16-bit processor. It must be said, on the other hand, that the bundled software in the schools pack is certainly a bargain. Yet at a time when the IBM PC is becoming the standard for business machines, the choice of the Z80, rather than the Intel 8088 chip (which school children will actually be using in the business machines of the next decade), seems a little short-sighted.

Schools Pack

The bundled software in the schools pack given away with the 480Z is excellent value for money. There are 12 disk-based packages provided, each one certain to give maximum educational value.

Four languages are included in the package. SBAS is a version of structured BASIC, and is regarded as a superb implementation. The language contains a wide range of control structures for program flow, including WHILE...ENDWHILE, CASE...ENDCASE and IF...ENDIF. There is also provision for procedures, and global and local variables. The machine also supports an extensive implementation of PASCAL, which would equip a student with a full working knowledge of the language. The documentation provided with the language, like most Research Machines manuals, is not exactly light reading, but is detailed and thorough. LOGO is also given in an excellent version, although some of the commands are not standard. For example, this version uses the command BUILD, instead of TO, for creating procedures. There is a partial implementation of LOGO, as well, called ARROW. For low-level programming, ZASM provides Z80 Assembly language for the development of machine code programs.

To assist in the development of typing and word processing skills, four different programs are provided. Touch'n'Go is designed to develop touch-typing skills. WORD is a beginner's word processing course, intended to teach pupils the principles and techniques used in word processing. For a full implementation, WordStar is also provided with the bundle. TXED is a text editor that can be used either for word processing or program development.

Quest-D is a database that has been specially designed to teach the principles of data information storage and retrieval. More specialised is SIR (Schools Information Retrieval), which is designed to catalogue the library resources in a school and to teach the techniques of librarianship.

Finally, Telesoftware is a viewdata system that is particularly useful when used in conjunction with the network capabilities of the 480Z. It also enables the user to dial Prestel

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LINK 480Z