

DISK-BASED SYSTEMS- GUIDE TO TYPICAL CONFIGURATIONS

Research Machines 380Z disk-based computer systems may be ordered with various combinations of memory, interfaces, add-on boards, and peripherals. The systems below are a guide to some typical configurations. Where appropriate some suggested options are listed for individual systems.

If using this guide to place an order, additions or omissions may be specified, e.g. 'System 2b plus High Resolution Graphics'. A typical omission might be the 12 inch video monitor, since some users might prefer to use a television set exclusively. However, systems 5b and 6b both require the video monitor to take advantage of Varitext. It is also worth noting that we have a range of videos available, details of which are available from the Sales Office.

For information on cassette-based systems please refer to the Link 480Z datasheet.

SYSTEM 2b

£2020.00

A dual double-sided mini floppy disc system suitable for education, research, or general software development of medium sized programs in various languages. System 2b will handle the majority of educational programs currently available with a throughput several times faster than a cassette based system.

System 2b consists of:

Research Machines 380Z with 32K bytes RAM and keyboard

MDS-2 dual double-sided mini floppy disc system

12 inch NEC video monitor

RS232 high speed serial interface

Parallel interface (User I/O Port cable)

Connecting cable (TV to 380Z)

Dust cover for 380Z

CP/M Disc Operating System

RML Extended BASIC

Full documentation

Note: System 2b is also available with a single disc drive fitted but it must be borne in mind that copying a large file to a new disc would be laborious in this case. However, if a system with dual drives is within easy access, this can be used for copying and a single drive system will provide the user with most of the advantages of disc systems at minimum cost.

System 2b with single disc drive

£1754.00

SYSTEM 3b

£2620.00

A dual double-sided mini floppy disc system specifically configured for laboratory or industrial data logging and control. System 3b includes the Parallel Interface/Real Time Clock Development Board which provides 48 TTL level lines of programmable I/O, four eight-bit Counter Timer channels and provision for up to 35 wire wrap sockets.

Some example software is included which shows how the board may be used for data logging or timing under interrupt in conjunction with high level languages such as BASIC. (See PIO/RTC data sheet for additional information).

The High Resolution Graphics board provides a black and white output to a video monitor. Resolution is 319 × 192, allowing background and three grey levels, or 160 × 96 allowing background and fifteen grey levels. The board incorporates its own 16K bytes of RAM and uses no 380Z CPU addressing space. Colour output can be obtained by adding an RGB board for use with an RGB video monitor or a PAL board for use with a colour television set. (See HRG data sheet for additional information).

Suggested options

System 3b consists of:

Research Machines 380Z with 56K bytes RAM and keyboard

MDS-2 dual double-sided mini floppy disc system

12 inch NEC video monitor

RS232 high speed serial interface

Parallel interface (User I/O Port cable)

PIO/RTC interface development board

High Resolution Graphics board

Connecting cable (TV to 380Z)

Dust cover for 380Z

CP/M Disc Operating System

RML Extended BASIC with graphics support

PIO/RTC software package

RML Interactive Text Editor without formatter*

RML Z80 Assembler

Full documentation

16 channel A/D board, RGB or PAL board, IEEE 488/PIO board, ROM board, Fortran, Algol.

* A version of the Text Editor with formatter is available. The formatter option allows limited word processing to be done using the editor. For a more comprehensive word processing system use the WordStar package.

SYSTEM 4b

£2676.00

A dual double-sided mini floppy disc system with the maximum 56K bytes of memory, specifically configured for software development, educational purposes, or educational evaluation.

System 4b includes the popular High Resolution Graphics Board which is described under System 3b. Also included is a dual cassette controller and both disc and cassette software, so software can be efficiently developed on disc for cassette-only computers.

The RS232 serial interface is suitable for using the computer on line to a central mainframe via an acoustic coupler. The cassette software has been included for a nominal copying charge.

System 4b consists of:

Research Machines 380Z with 56K bytes RAM and keyboard

MDS-2 dual double-sided mini floppy disc system

12 inch NEC video monitor

RS232 high speed serial interface

Parallel interface (User I/O Port cable)

2 × cassette recorders with cables

Dual cassette controller

High Resolution Graphics board

Connecting cable (TV to 380Z)

Dust cover for 380Z

CP/M Disc Operating System

Disc RML Extended BASIC with graphics support

Disc RML Interactive Text Editor without Formatter

Disc RML Z80 Assembler

Disc RML CESIL Interpreter

RML Extended BASIC cassette with Graphics support

RML Interactive Text Editor cassette

RML Z80 Assembler cassette

RML CESIL Interpreter cassette

Full documentation

SYSTEM 5b

£3784.50

This is a system with dual double-sided eight-inch disc drives, providing an on-line storage capacity of one megabyte. The system is housed in two enclosures, one for the computer and the other containing the disc drives complete with their own power supply and cooling fan. The system is ideal for software development and data processing in Cobol, BASIC, Fortran, Algol, and Z80 Assembler language.

The Varitext VDU option is fitted to the computer. This allows software switching between the 80 and 40 character modes, a user-definable character set, windowing, smooth scrolling, inverse video, and a wide range of cursor controls, plus many more features. The WordStar word processing package is included in this configuration.

One of the points to note is that IBM 3741 compatible floppy drives can be read and written, allowing interchange of software and data with other computers that have 3741 standard floppy discs.

System 5b consists of:

- Research Machines 380Z with 56K bytes RAM and keyboard**
- Varitext VDU option**
- FDS-2 dual double-sided 8 inch full floppy disc system**
- 12 inch NEC video monitor**
- RS232 high speed serial interface**
- Parallel interface (User I/O Port cable)**
- Connecting cable (TV to 380Z)**
- Dust cover for 380Z only**
- CP/M Disc Operating System**
- Disc RML Extended BASIC**
- Disc RML Interactive Text Editor without Formatter**
- WordStar word processing package**
- Full documentation**

Suggested options

Z80 Assembler, RML Algol, Fortran IV, Cobol, Pascal, and document quality printer.

SYSTEM 6b

£3792.00

A dual double-sided eight-inch full floppy disc system specially configured for laboratory or industrial data logging and control. The system incorporates the Varitext VDU option, parallel interface/real time clock, development board which provides 48 TTL level lines of programmable I/O, four eight-bit counter timer channels, and wire wrap space for up to 38 wire wrap I.C. sockets.

Although not included in this configuration, other boards of special interest are the 16 channel, 10-bit resolution A/D board, and a full implementation of IEEE 488. Software available includes RML Algol and Fortran IV. These languages are about six to ten times faster than BASIC; variables can be six digits floating point or integer; calls can be made to any number of machine language subroutines; and any number of variables can be transferred to and from these routines.

System 6b consists of:

- Research Machines 380Z with 56K bytes RAM and keyboard**
- Varitext VDU option**
- FDS-2 dual double-sided eight inch full floppy disc system**
- 12 inch NEC video monitor**
- RS232 high speed serial interface**
- Parallel interface (User I/O Port cable)**
- Connecting cable (TV to 380Z)**
- Dust cover for 380Z only**
- PIO/RTC interface development board**
- CP/M Disc Operating System**
- Disc RML Extended BASIC**
- Disc RML Interactive Text Editor without Formatter**
- Disc RML Z80 Assembler**
- Disc RML PIO/RTC software package**
- Full documentation**

Suggested options

A/D board, IEEE 488 Interface Board, High Resolution Graphics Board, Algol, Fortran.

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