The Bytemaster

meet the digital group

INTRODUCTION

If you are seriously considering the purchase of a microcomputer system for professional, business, or personal use . . . or just beginning to feel the first twinges of interest in a a fascinating hobby . . . the Digital Group is a company you should get acquainted with.

The Digital Group produces a unique, high-quality product line — a complete microcomputer system designed from the inside out to be the most comprehensive, easy-to-use and adaptable system you'll find anywhere.

The Digital Group was one of the first pioneers of computer systems designed for individuals. And, aside from the inevitable pioneer's back full of arrows, we've learned a lot about what our customers require in a computer system (and why). As a result, the Digital Group represents some approaches and attitudes that are a bit unusual in today's microcomputer market.

- The Digital Group is one of the few companies that is still actively interested in supporting the kit builder.

- We want the computer hobbyist's buiness and are one of the few remaining system manufacturers to actively maintain a committment to the development of products for the computer hobbyist — and yet, when you're ready, you can expand your Digital Group System to a fully professional state-of-the-art system that will compete head-on with the other guy's "small-business" systems.

- The Digital Group does not believe in the "when you outgrow your computers, throw it away" philosophy of the "applicance computer" companies. We have been reasonably effective in protecting our customers from the effects of a high rate of technological change. As we have brought new designs to market, we have provided upgrade kits when possible to help shield our customers from technological obsolescence.

- To our knowledge, we are the only system manufacturer that offers bare memory boards for our customers who wish to use surplus IC's.

The Digital Group remains committed to continue extending the flexibility of your system.

The Advantages

Here are a few advantages of our product line:

- Digital Group systems are complete and fully featured, so there's no need to purchase bits and pieces from different manufacturers. We have everything you need, but almost any other equipment can be easily supported, too, thanks to the universal nature of our systems.

- Our systems are specifically designed to be easy to use. With our keyboard and video-based systems, you have a system that is quick, quiet, and responsive. To get going, merely power on and go!

- Multiple System Bases: You can start with an audio cassette based system, upgrade to digital cassette or to mini-floppy or standard size floppy disk based systems.

More

Many options, peripherals, expansion capabilities and accessories are available for Digital Group Systems. We've included a sampling of the highlights of our line in this brochure. They include printers, floppy disks, memory, I/O, monitors, graphics interfaces, digital cassette mass storage, prototyping cards, maintenance aids, and others. Extensive software support is also provided at many levels. Software packages include Operating Systems from the entry level to the most sophisticated, multiple Basics, Assemblers, Disassemblers, Text Editors, games, ham radio applications, software training cassettes, system packages, and more.

As you can see, the Digital Group has a lot to offer: state-of-the-art designs, a totally complete sytems philosophy, top-level quality, extensive software, and the promise that our products will not become rapidly obsolete, even in this fast-moving, high-technology field.

Sounds neat — now what?

Please read the further details on the sampling of our products we've included in this brochure. If what you see interests you, please call us or drop us a note for more information on how our products can meet your requirements. We think you'll be pleased with what you get back.

The Digital Group, Inc.
P.O. Box 6528
Denver, CO 80206
(303) 777-7133

DIGITAL GROUP SYSTEM ARCHITECTURE

Printers

Mainframe

Storage Components

- Double Density Standard Disk
- Standard Disk
- Double Density Mini-Disk
- Mini-Disk
- Digital Cassette Tape
- Audio Cassette

- Spinwriter
- TI - 810
- Centronics 779-2
- 96 Column Printer

- Monitor
- Mainframe
- Keyboard
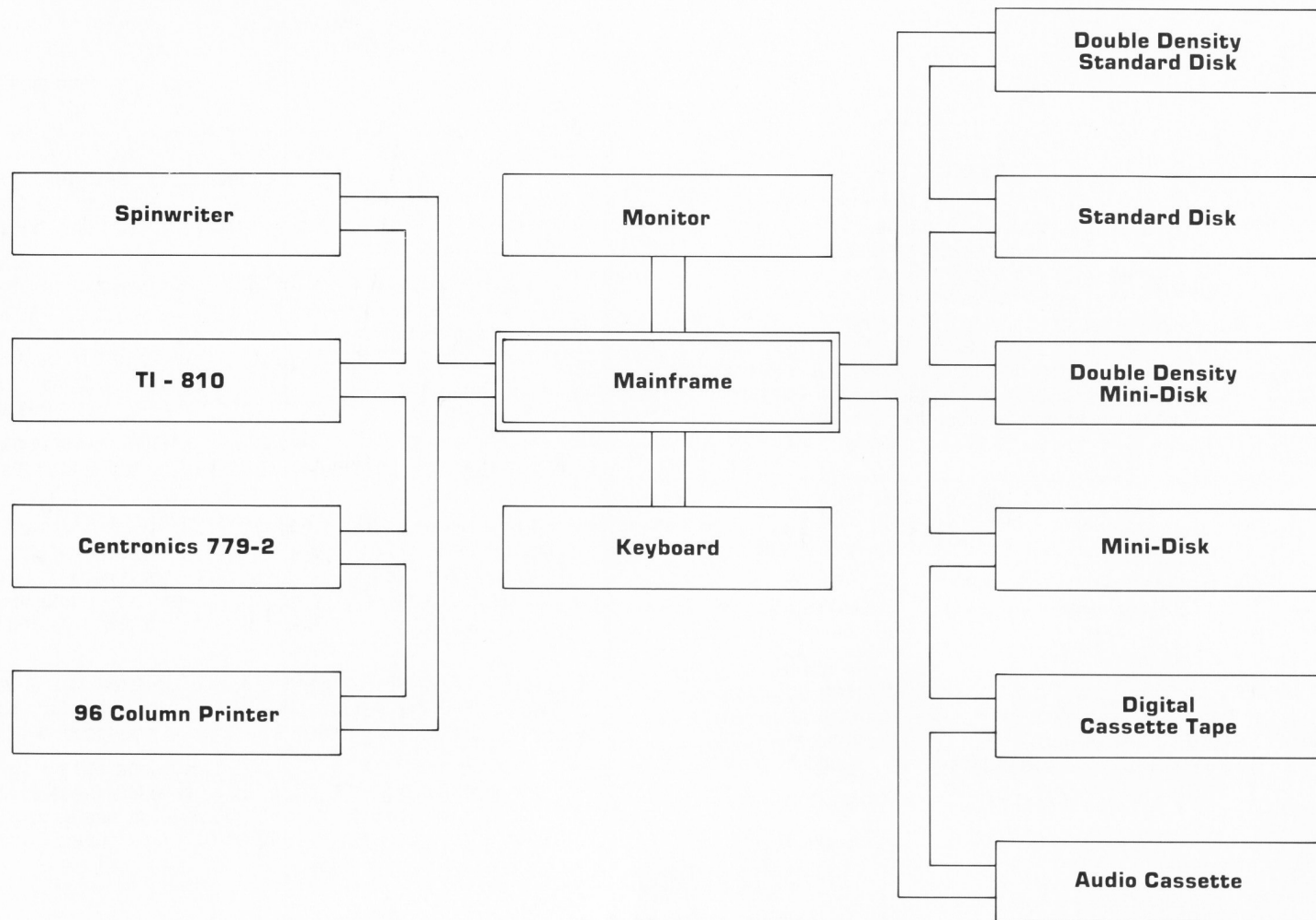
DIGITAL GROUP SYSTEM ARCHITECTURE:

Mainframe Components:

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                    ┌──────────────────────────┐
                    │ High Resolution Graphics │
                    │ 256 x 256      GRAPH-2   │
                    └──────────────────────────┘
               ┌──────────────────────┐
               │  4K Eprom Memory     │                          ┌──────────────────┐
               │  1702-F              │                          │ Additional I/O   │
               └──────────────────────┘                          │ IO-F             │
          ┌──────────────────┐   ┌──────────────────────┐        └──────────────────┘
          │ 8K Static Memory │   │ Video Interface      │   ┌──────────────────┐   ┌──────────────────────┐
          │ MEM-8C           │   │ 96 x 20     TVR-96   │   │ Ham Interface    │   │ Communications Int.  │
          └──────────────────┘   └──────────────────────┘   │ HAM-1            │   │ 4 Channel            │
       ┌──────────────────┐  ┌──────────────────────┐       └──────────────────┘   │ COMM-4               │
       │ 32K Static Memory│  │ Video and Cassette   │   ┌──────────────────┐       └──────────────────────┘
       │ MEM-32           │  │ 64 x 16     TVC-64   │   │ Digital Cassette │   ┌──────────────────────┐
       └──────────────────┘  └──────────────────────┘   │ PHI-F            │   │ Disk Interface       │
    ┌──────────────────┐  ┌──────────────────────┐       └──────────────────┘   │ Single Density       │
    │ 32K Dynamic Mem. │  │ Z-80 Central         │   ┌──────────────────┐       │ Dss/DSM-INT1         │
    │ MEM-32D          │  │ Processing Unit      │   │ Input/Output     │       └──────────────────────┘
    └──────────────────┘  │ Z-80-CPU             │   │ 4 in and 4 out   │   ┌──────────────────────┐
                          └──────────────────────┘   │ IO/F             │   │ Disk Interface       │
                                                      └──────────────────┘   │ Double Density       │
                                                                             │ DSS/DSM-INT1D        │
                                                                             └──────────────────────┘
```

Memory Components   **CPU and Video**   **Input/Output Components**

Motherboard Supports:
1. CPU position (dedicated)
1. Video and Cassette position (dedicated)
6. Input/Output positions
3. Memory positions

Power

Motherboard   MB-6

Dress Cabinet

Basic Box

**Custom Mounting
or
No Cabinet**

Digital Group Z-Board

The Digital Group is pleased to announce the Z-Board - a full computer on a single board with 6 major functions - more useful functions standard than on any other board currently available! This is not an "appliance computer" such as Radio Shack's and the like - you can really sink your teeth into this one! The Z-Board is especially suited to run direct-entered machine code or externally generated assembler language programs for the utmost in efficiency and performance per dollar. And the Z-Board was designed from top to bottom by Dr. Robert Suding.

The CPU:

The Z-Board has a fast Z80A CPU running at 3.58MHz with all those powerful Z80 instructions that come in handy for controlling just about anything. The Z80A has available memory on-board of up to 2K RAM and 4K ROM.

External expansion is available for the Z-Board. In addition to uncommitted ports, all major Z80A CPU lines are brought out to a single expansion socket for extending its capabilities. This provides an expansion capability for either cartridge type approaches or possible attachment to the many other special purpose devices on the market.

Video Interface:

Color or Black and White Graphics is supported with resolution up to 128 by 64. Up to 8 colors are available. There is a tradeoff between color versus graphic density. The worst case is 128 by 64 graphics which supports 2 colors. Alphanumerics may be mixed with graphics on the screen on a character by character basis.

Alphanumerics are supplied with 16 lines of 32 characters. The character set consists of uppercase alpha, numbers, punctuation, and special symbols.

The video is memory mapped for high-speed motion capabilities.

Direct Video Output is supported for interfacing to b/w or color monitors (an external video amplifier is required - not included). Provisions for an RF modulator circuit are supplied on board for user attachment to standard tv sets.

Now you can implement your own controller application with the Digital Group Z-Board and draw labelled color pictures to help your users quickly understand what your system is doing and saying!

Calculator:

For less than 200 bytes of interfacing software, your Z-Board has all the power of a complete scientific floating point calculator. The calculation speed isn't overwhelming but the functions available and the memory savings are.

RPN notation is standard with a full 8 digits plus 2-digit exponent supported.

Sample Functions:

+	Pi
-	y raised to the x
★	e raised to the x
div.	Trig functions
	Log functions

Time-of-Day Clock:

Many times, your Z-Board will want to know what time it is in order to determine if it should take some time-dependent action such as turning on your sprinklers, etc. With the Time-of-Day clock on the system this becomes routine. There are 6 digits available so that you can time events to the second. There is also an alarm function which can be used to interrupt the processor at a predetermined time.

The clock runs on a 12-hour basis and provides an AM/PM indicator. Backup battery provisions are also available (requires user implementation).

Digital to Analog and Analog to Digital Capabilities:

Sad to say, the real world very often is not inclined to be digital. Therefore, we have included a digital-to-analog and an analog-to-digital capability for those times when your computer needs to talk to devices (such as temperature sensors) that don't understand digital.

The digital-to-analog convertor has 8 bits of resolution (Motorola 1408P8 or equivalent).

The analog-to-digital converter is a DVM chip with plus or minus 1999 counts of resolution.

Input/Output Ports:

With a fully-loaded Z-Board there are still 2 8-bit Input ports and 2 8-bit output ports that are uncommitted. These are particularly handy for communicating with other systems and devices that do converse digitally.

If you are willing to eliminate some of the other capabilities of the computer, more ports can be made available - up to 6 input ports and 5 output ports for those applications that need a large number of ports (and not much else).

Software:

Z-Board base-level software is supplied in a 1K 2708 EPROM. The functions provided are:
Dump Memory
Program Memory
Video Editor
Keyboard Support

Additional routines are provided for basic support for each of the devices on the computer. The routines are provided in object and source code. We've also included a routine to down-load object programs from Digital Group mainframe-based systems via a port-to-port interface. That means it's really easy to use the Oasis Macro Assembler or any of our other Assemblers to create programs for the Z-Board. **Note:** The Z-Board in its present configuration will not run high-level languages such as Maxi-Basic.

Additional equipment needed for operation:
Power Supply
and, depending on the type of installation:
TV Set (color or b&w) or Monitor (requires external video amplifier.) and
Inexpensive keyboard (like George Risk 756 or eq.) or Digital Group System (to download from)
Access to a 2708/2716 EPROM programmer would also be handy.

Z-Board Specification Summary:

Z80A at 3.58 MHz (Standard Color TV Frequency)
2K RAM (Up to 1K used for Video)
2K-4K ROM (2 each 2708 or 2716 - 1K supplied)

Video Interface:
32 characters by 16 lines
Color & B&W Graphics - up to 128 by 64
Up to 8 colors
Alphanumerics mix with graphics (selectable by characters)
Direct Video Output possible
Provisions for Color RF Modulator Circuitry on board

Calculator - 8-digit Scientific

Time-of-Day Clock 6 digit with interrupt (alarm)

2 Uncommitted 8-bit Input Ports
2 Uncommitted 8-bit latching Output Ports

A to DVM Converter - /- 1999 counts

D to A Converter - 8 bit

Software:
1K Operating System EPROM
1K Device Support Routines

Significant Expansion Capabilities Designed In

Power Requirements:
5V at 3A, &- 12V and -5V at less than 1A

Size:
12" by 6" plus connector

The base card edge connector is a 40 pin dual readout with 80 pins total on .1" centers (supplied).

The expansion connections are via a dual 25 .1" center connector (supplied).

Introductory Pricing:

Order Code	Kit	Assembled	Wt
Z-BOARD1	$345.00	$445.00	3

These prices are available for a limited time only.

And this is only the beginning. Coming very quickly for the Z-Board will be a special motherboard, power supply, EPROM programmer, and much more!

series 5 - z-board

THE BYTEMASTER

The Bytemaster has:

Components
- ☐ A 9-inch professional data display (CRT) with more than 20 mHz bandwidth
- ☐ A video interface with 16 lines of 64 characters, full upper and lower case, Greek & symbols
- ☐ Either 18K or 34K memory (64K optional)
- ☐ The powerful Z-80 CPU
- ☐ Four 8-bit parallel input ports and four 8-bit parallel output ports
- ☐ A solid-reliable 12 amp power supply
- ☐ An audio cassette interface - 1100 Baud
- ☐ A detached keyboard with number pad — solid-state, capacitance design for positive feel & reliability
- ☐ Mini-disk or digital cassette

System Base
- ☐ Either a mini-disk with up to 184,320 formatted characters of storage, or
- ☐ A digital cassette with up to 750,000 characters of storage

Software - supplied
- ☐ Either DISKMON if mini-disk is selected, or
- ☐ PHIMON if digital cassette is selected

Features
- ☐ An automatic power up system start — no toggling
- ☐ The cabinet is mounted on a heavy duty metal yoke for ease of operation
- ☐ Professional metal cabinets
- ☐ Tested, proven system design

The Bytemaster, which will support up to 64K of memory, has been designed with expansion in mind. It is fully wired to support the following optional maximum configuration:
- ☐ 4 digital cassette drives, and either
- ☐ ★4 mini-disk drives or ★★4 double density standard-disk drives
- ☐ Printer
- ☐ External monitors
- ☐ Plus the keyboard and data display that come with the Bytemaster

The Bytemaster's motherboard is pre-wired for an additional 4 parallel output ports and 4 parallel input ports so that they can be added with a single additional I/O card. And one memory space is left for additional peripherals that will be announced.
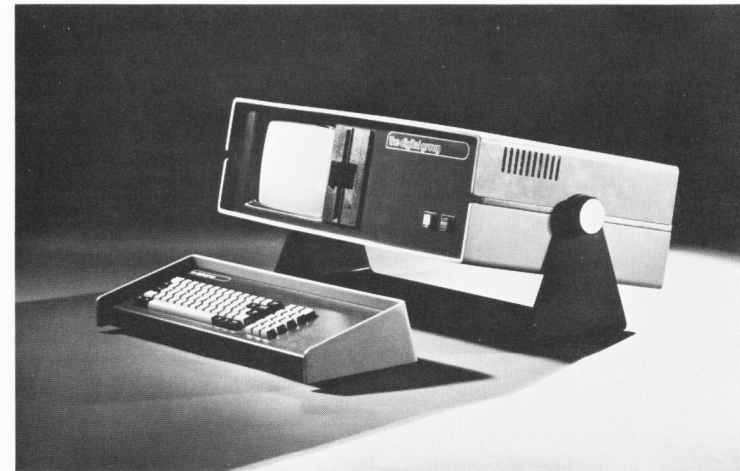
Bytemaster System Configuration

Order Information

Description	Order Code	Kit	Assembled
Standard-Disk, 18K	MASTER-0-A	1,695.00	1,995.00
Standard-Disk, 34K	MASTER-0-B	1,895.00	2,345.00
Digital Cassette, 18K	MASTER-1	1,945.00	2,415.00
Digital Cassette, 34K	MASTER-2	2,245.00	2,665.00
Mini-Disk, 18K	MASTER-3	2,345.00	2,815.00
Mini-Disk, 34K	MASTER-4	2,545.00	3,065.00
Oasis Special Bytemaster	MASTER-5	4,195.00	4,875.00

+ 2nd I/O card - $95
+ Ham Board - $295 = $3750 + Mini Software - $500+?
+ Votrax - $295

★ - this includes the internal mini-disk drive
★★ - the internal mini-disk drive will not function if this configuration is used

BYTEMASTER OASIS SPECIAL

Many of our new system orders have been for an Oasis based Bytemaster with 2 standard floppies and 64K. Even we can respond when hit between the eyes - here's the "Oasis Special", a new configuration.

Features:
Bytemaster - no internal disk storage
64K memory — ~~(32K) in sys~~
2 Double-Density Standard /floppies (DSS-Comp2D)
OASIS, with O-BASIC, Text Editor, EXEC language,
    SCRIPT

+ Basic, Games, APL, Pascal, Assm *(~110 disks) of software*

Description	Order Code	Kit	Assembled	Wt
Oasis Special Bytemaster	MASTER-5	4,195.00	4,875.00	89

- 500.00
~~4375.00~~ @ 2½ price = $25.00

Development 1

The Development 1 system provides a base for developing applications to operate on the Digital Group component systems. The system includes most of the peripheral components in the Digital Group line.

The features are Z-80 CPU, 34K total memory, 64-character by 16-line video, 9" monitor, capacitance keyboard, two Phideck tape units, two double density standard floppy disk drives, printer, and DISKMON.

The components include: MAIN3, KEY1-COMP, MON9D-COMP, PHI2-COMP, DSS-COMP2D, PT96-COMP, and DISKMON.

Order Information

| Code	Kit	Assembled
DG-SYS5A	4,745.00	5,795.00

OEM 1

The OEM 1 system is in response to the most popular configuration request we have received from our OEM-oriented customers. Its features include: MASTER-4 without mini-floppy — a special 34K version of the Bytemaster without any internal media mounted in it; 2 double density standard disks and the Centronics Printer.

Its components are MASTER-O-B, (no mini-disk, 34K0, DSS-COMP2D, PT-TRAC1.

Order Information

Code	Assembled
DG-SYSOEM1	5,295.00
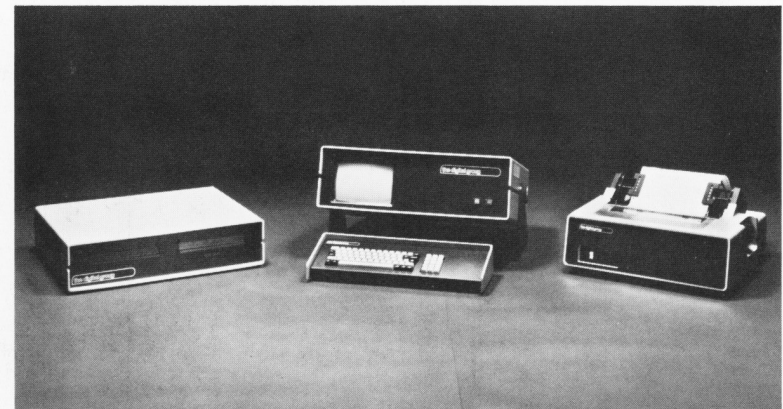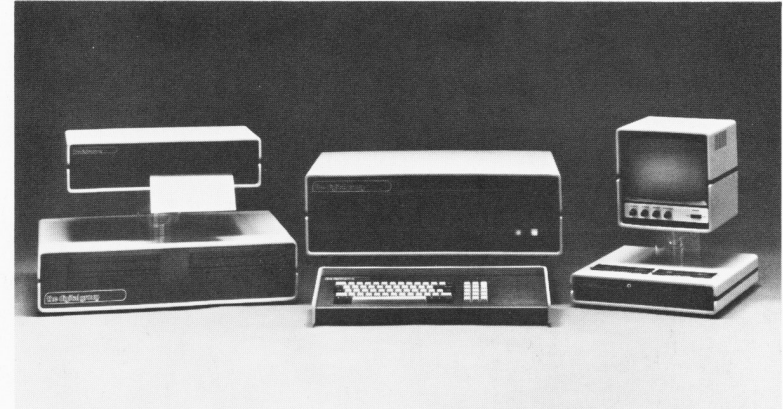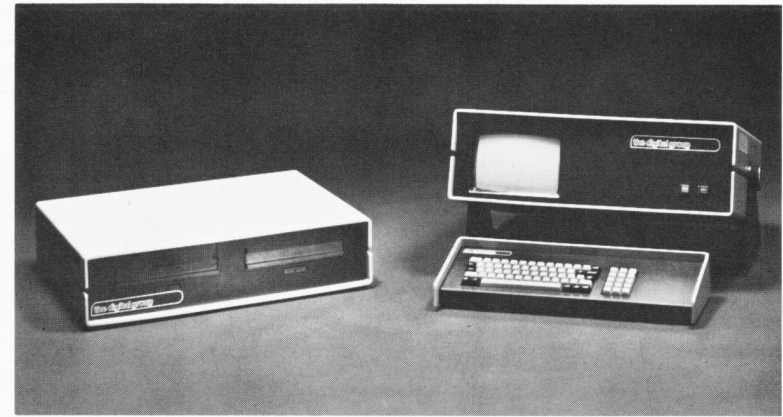
Mainframe

All mainframes have the Z-80 CPU with 64 x 16 video interface, four 8-bit input ports, four 8-bit output ports, audio cassette interface, 12 amp power supply, and audio load boot PROM — all mounted in our professional quality cabinet. The only variable which you need specify is the size of the memory.

Mainframe 1 - 10K total memory
Mainframe 2 - 18K total memory
Mainframe 3 - 34K total memory
Mainframe 4 - 50K total memory
Mainframe 5 - 64K total memory

All mainframes are available fully assembled and tested, or in kit form. Again, the mainframes are wired to support the growth of your systems without requiring additional wiring for those systems.

Order Information

| Code	Kit	Assembled
MAIN-1	1,095.00	1,475.00
MAIN-2	1,215.00	1,595.00
MAIN-3	1,395.00	1,795.00
MAIN-4	1,665.00	2,115.00
MAIN-5	1,845.00	2,295.00

Peripherals

All peripherals have an interface card that plugs into its assigned slot in any of the mainframes, connecting cables, the peripheral device(s) itself, as well as any power supplies that may be required — all packaged in our cabinets. You just specify the peripheral functions that you need.

Description	Order Code	Kit	Assembled
★Keyboard	KEY3-COMP	N/A	249.50
★★Video Monitor	MON9-COMP	N/A	249.50
2 drive Phideck	PHI2-COMP	545.00	675.00
4 drive Phideck	PHI4-COMP	845.00	995.00
Double Density:			
1 drive mini floppy	DSM-COMP1D	995.00	1195.00
2 drive mini floppy	DSM-COMP2D	1,395.00	1,595.00
Double Density:			
1 drive standard floppy	DSS-COMP1D	1,195.00	1,395.00
2 drive standard floppy	DSS-COMP2D	1,775.00	1,995.00
Printer	PT96-COMP	675.00	795.00
Printer-tractor feed	PT-TRAC1	N/A	1,295.00
TI 810	PT-TRAC4	N/A	2,040.00
Spinwriter	SPIN-1	N/A	2,650.00

★ - IO interface card is not included
★★ - TVC Board is not included

That's our component line. Easy to select from and easy on your budget. If you order several components at one time, we will make every attempt to ship your entire order. However, when parts are not available we will not make a partial shipment unless those parts assembled together will function. Multiple components are not integrated, but are tested independently of each other.
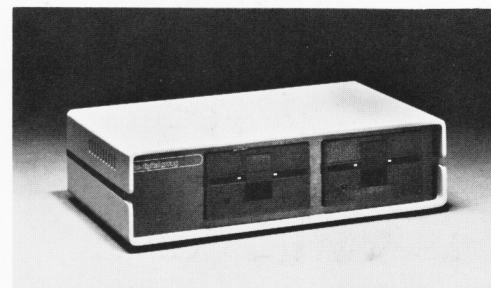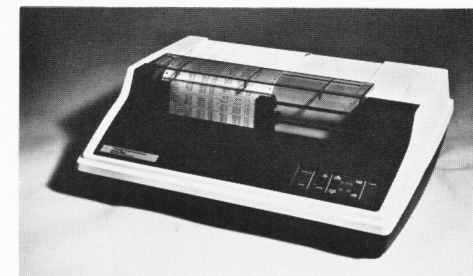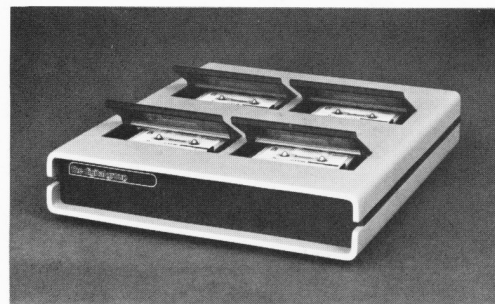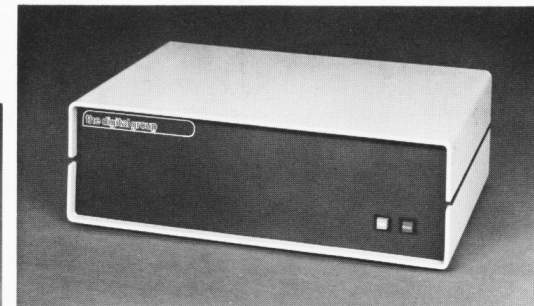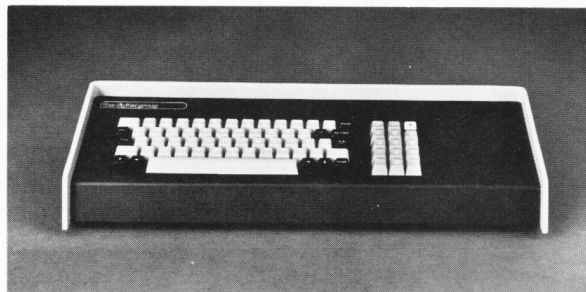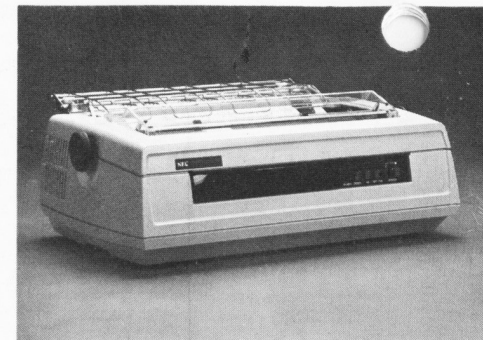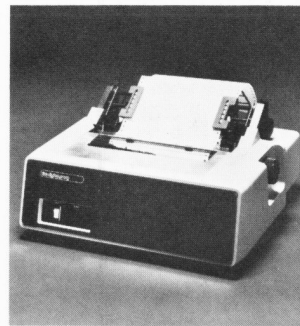
OASIS

Oasis is our most extensive and sophisticated disk operating system. In our opinion, Oasis is the only operating system that combines all of these features:

- Fully Integrated
  - You can operate almost any program from any other
  - All functions operate in a totally consistant fashion
  - User interface is also consistant - all commands and programs have identical syntax structure
- Full High-Level Exec Language Support
  - Supports complete control of system
  - Can selectively control application user's access to system functions
- Most Professional System Available
  - Experienced data processing people know how to use Oasis' capabilities almost instantly
- Completely and Thoroughly Documented
- ISAM Files are supported
- Device Independence
  - Easy to add devices without any impact on installed application

Oasis Components - Highlights:

Operating System
- Supports many devices ● Includes Peripherals Drivers ● Help Command

Utilities (implemented as commands)

Note: The following is only a sampling of the commands available in Oasis.
- ATTACH   Make a disk drive or other device available to Oasis
- BACKUP   Copy the entire contents of a diskette to another diskette
- COPYFILE   Copy a file or group of files to another file or group of files
- CREATE   Create a new direct or ISAM file
- DUMPDISK Display the contents of a file on the CRT or printer in hex or ASCII
- ERASE   Delete a file or files from a diskette
- FILELIST   Display the files and their attributes on the CRT, printer, or to a disk file
- FILT8080   Translates Intel 8080 assembly mnemonics to Zilog mnemonics
- GETCPM   Read a CP/M compatible sequential file into an Oasis compatible file
- INITDISK   Initialize a diskette format, directory, or label
- LIST   Display the contents of a file on the CRT or printer
- MEMTEST   Perform diagnosis of memory
- MOUNT   Allow a change of diskettes
- RENAME   Change the name or type of an existing file
- SET   Change Oasis system parameters
- SHOW   Display Oasis system parameters
- SYSGEN   Permanently save SET and ATTACH status

All the major functions of Oasis are also invoked as commands. They are BASIC, LINK, MACRO, ASSEMBLE, SCRIPT, EXEC, DEBUG, EDIT, and RUN.

File Management
- Keyed Access (ISAM) ● Random Direct ● Sequential ● Program
- Libraries

System Editor
- Allows creation and modification of: a) BASIC Programs b) Assembler c) EXEC Programs d) Text (manuals, letters, etc.)
- Macro Commands
- Global Search/Locate/Replace
- Move blocks of text/copy files
- Automatic Prompting
- Line, Word, & Character Insert, Delete, & Replace

Exec Language
- The programmer is able to specify initial program loads, define system command sequences and provide the user with a graceful means to implement complex and sophisticated system functions. The Exec Language is one of the most powerful capabilities in Oasis.

Extended Basic Interpreter
- Supports all file structures including keyed access (ISAM)
- Direct Cursor Control
- Chaining and Linking
- Multiple Statement on a Line
- Printusing
- Protected Fields
- Extensive String Functions
- Access to Device Handlers
- Machine Language Call with up to 255 characters passed
- Interacts with Exec Language
- Extended Precision
- Get Memory (PEEK) and Put Memory (POKE)
- Read Device (GET) and Write Device (PUT)

Selected Statement Highlights:
All statements may be executed in immediate mode (w/o line numbers).

Text Output Processor (Script)
- Produces a) manuals b) letters c) manuscripts d) documents
- Supports a) justification b) headings c) footings d) automatic page numbering
- Dynamically generates Tables of Contents, Chapters, Sections, etc.

Z-80 Macro Assembler
- Supports complete Z-80 instruction set ● Symbolic or Absolute Addressing ● Conditional Assembly ● Listing Control ● Symbol Table and Cross Reference ● Generate Absolute or Relocatable Code ● Macros

Debugger
- Disassembler ● Sets Break Points ● Modify or inspect registers ● Trace - Single Step Mode ● Symbolic Assembling ● Read and Wrote to Disk ● Hex Calculator Mode ● Search and Fill Memory ● Load and SavePrograms

Linking Loader
- Combines and edits modules to produce a single load module that can be brought into main storage for execution by program fetch
- Provides several processing facilities (such as overlays, output map and cross-reference listings) that are performed automatically or in response to control statements

PRICE LIST

Description	Order Code	Kit Price	Assembled Price	Wt.

SERIES 5 - Z-BOARD

Description	Order Code	Kit Price	Assembled Price	Wt.
Z-Board Computer	Z-BOARD1	$345.00	$445.00	4

SERIES 4 - BYTEMASTER

All systems in the Series 4 line include Z-80 CPU, 64 character video, built-in data monitor, keyboard & yoke cabinet, plus provisions for attachment of additional storage devices and a printer.

Description	Order Code	Kit Price	Assembled Price	Wt.
18K, set up for standard disks,DISKMON	MASTER-0-A	$1,695.00	$1,995.00	60
34K, set up for standard disks, DISKMON	MASTER-0-B	1,895.00	2,345.00	60
18K, Phideck storage, PHIMON	MASTER-1	1,945.00	2,415.00	65
34K, Phideck storage, PHIMON	MASTER-2	2,245.00	2,665.00	65
18K, double-density Mini-Floppy storage, DISKMON	MASTER-3	2,345.00	2,815.00	65
34K, double-density Mini-Floppy storage, DISKMON	MASTER-4	2,545.00	3,065.00	65
OASIS Special Bytemaster - 64K, 2 double-density standard disks, OASIS	MASTER-5	4,195.00	4,875.00	89
OEM Bytemaster System - MASTER-0-B, 2 double-density standard disks, Centronics 779-2	OEM-1	NA	5,295.00	160

SERIES 3 - SYSTEMS

A system in the Series 3 line can be ordered as a kit or a completely assembled, integrated and tested unit.

Description	Order Code	Kit Price	Assembled Price	Wt.
System 1: MAIN-2, Z80-OPSYS	DG-SYS1A	$1,615.00	$1,915.00	54
System 2: MAIN-2, 2 Phidecks, PHIMON	DG-SYS2A	2,215.00	2,715.00	79
System 3: MAIN-2, 2 double-density Mini-Floppies, DISKMON	DG-SYS3A	2,995.00	3,645.00	95
System 4: Main-3, 2 double-density Mini-Floppies, Printer, DISKMON	DG-SYS4A	3,875.00	4,695.00	112
Development 1: Main-3, 2 Phidecks, 2 double-density Standard Floppies, Printer, DISKMON	DG-SYS5A	4,745.00	5,795.00	131
Computational 1: Main-5, 2 Phidecks, PHIMON	DG-SYS6A	2,745.00	3,375.00	73
Ham System 1: Main-2, 8 additional I/O Ports, & Hamboard. Software (MAXI-BASIC, and ASSM II). (No Monitor.)	DG-SYSHAM	1,615.00	2,115.00	59

SERIES 2 - COMPONENTS

Mainframes:

All Mainframe components in the Series 2 line include the Z-80 CPU, 64 character video, four 8-bit input ports, four 8-bit output ports, new standard motherboard, 2 Amp power supply, dress cabinet, assembled dynamic memory, audio load PROM, and standard wiring.

Description	Order Code	Kit Price	Assembled Price	Wt.
Mainframe 1, 10K Total memory	MAIN-1	1,095.00	1,475.00	2
Mainframe 2, 18K Total memory	MAIN-2	1,215.00	1,595.00	54
Mainframe 3, 34K Total memory	MAIN-3	1,395.00	1,795.00	54
Mainframe 4, 50K Total memory	MAIN-4	1,665.00	2,115.00	54
Mainframe 5, 64K Total memory	MAIN-5	1,845.00	2,295.00	54

Peripherals:

All peripheral components in the Series 2 line include the appropriate interface card for the Digital Group mainframe, the device(s), the interface cables, power supplies and cabinets to make the components functional.

Single density disk subsystems:

Description	Order Code	Kit Price	Assembled Price	Wt.
Mini-Floppy - 1 Drive	DSM-COMP1	795.00	975.00	21
Mini-Floppy - 2 Drive	DSM-COMP2	1,195.00	1,395.00	35
Standard Floppy - 1 Drive	DSS-COMP1	995.00	1,195.00	21
Standard Floppy - 2 Drive	DSS-COMP2	1,575.00	1,795.00	35

Double-density disk subsystems:

Description	Order Code	Kit Price	Assembled Price	Wt.
Mini-Floppy - 1 Drive	DSM-COMP1D	995.00	1,195.00	21
Mini-Floppy - 2 Drive	DSM-COMP2D	1,395.00	1,595.00	35
Standard Floppy - 1 Drive	DSS-COMP1D	1,195.00	1,395.00	21
Standard Floppy - 2 Drive	DSS-COMP2D	1,775.00	1,995.00	35

Standalone Peripherals:

Description	Order Code	Kit Price	Assembled Price	Wt.
Keyboard - Capacitance with numeric pad	KEY1-COMP	NA	245.00	10
Keyboard - Extra function	KEY3-COMP	NA	249.50	10
9" Data Monitor	MON9D-COMP	NA	249.50	23
9" Data Monitor plus SYNC separator	MON9D-CP-S	NA	269.50	23
Phideck - 2 drives	PHI2-COMP	545.00	675.00	19
Phideck - 4 drives	PHI4-COMP	845.00	995.00	25

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Description	Order Code	Kit Price	Assembled Price	Wt.
96 column printer	PT96-COMP	675.00	795.00	23
Centronics 779-2 with tractorfeed	PT-TRAC1	NA	1,295.00*	70
Texas Instruments Model 810 with:				
Paddlecard Cable	PT-TRAC4PC	NA	2,040.00*	70
Bytemaster Cable	PT-TRAC4BT	NA	2,040.00*	70
Spinwriter with Paddlecard Cable	SPIN-1PC	NA	2,650.00*	70
Spinwriter with Bytemaster Cable	SPIN-1BT	NA	2,650.00*	70

* = Cash with order only

SERIES 1 - UNITS

System Packages:

Description	Order Code	Kit Price	Assembled Price	Wt.
Three board system with Z-80 CPU, IO-F, TVC-64, and MB-2 (2K total memory)	Z80-3BDA	495.00	595.00	8
Four board system with Z-80 CPU, IO-F, TVC-64, MEM-8C, and MB-2 (10K total memory)	Z80-4BDA	695.00	895.00	10

Memory Boards:
Note: Connectors are not included

Description	Order Code	Kit Price	Assembled Price	Wt.
1702A 4K EPROM board with 4K 1702A's (unprogrammed)	1702-F	299.00	345.00	2
8K memory board using high speed low power 2102's	MEM-8C	225.00	275.00	2
16K memory board using 4K statics (TMS4044 or equivalent)	MEM-16	345.00	NA	2
32K memory board using 4K statics (TMS4044 or equivalent)	MEM-32	595.00	645.00	2
16K memory board using 4K dynamics	MEM-16D	NA	295.00	2
32K memory board using 4K dynamics	MEM-32D	NA	495.00	2

Memory boards without memory IC's:
Note: Connectors are not included

Description	Order Code	Kit Price	Assembled Price	Wt.
1702A 4K EPROM board without 1702A's	1702-0	75.00	NA	2
8K memory board without 2102's	MEM-0	60.00	NA	2
32K static memory board without 4044's	MEM32-0	60.00	NA	2

Peripheral Boards:
Note: Connectors are not included

Description	Order Code	Kit Price	Assembled Price	Wt.
Audio Cassette interface - standalone	CAS-STD	39.50	65.00	2
Communications interface with 1 I/O channel	COMM-1	95.00	NA	2
Communications interface with 4 I/O channels	COMM-4	145.00	195.00	2
Mini-Floppy interface - supports 4 drives	DSM-INT1	199.50	249.50	2
Standard Floppy interface - supports 4 drives	DSS-INT1	199.50	249.50	2
Double-Density Floppy interface - supports 4 standards or minis	DSS-INTD	395.00	475.00	2
High Resolution Graphics	GRAPH-2	295.00	395.00 ✓	2
Ham interface board	HAM-1	195.00	295.00 ✓	2
I/O board with four 8-bit input ports and four 8-bit output ports	IO-F	65.00	95.00 ✓	2

Description	Order Code	Kit Price	Assembled Price	Wt.
Phideck interface - supports 4 drives	PHI-F	149.50	220.00	2
Video interface - 64 x 16 - includes audio interface	TVC-64	155.00	205.00	2
Video interface - 96 x 24	TVR-96	NA	295.00	2

Peripheral Mechanisms:

Description	Order Code	Kit Price	Assembled Price	Wt.
Mini-Floppy Disk Drive - MPI (double density) or equivalent	DSM-DRMPI1	NA	395.00	12
Mini-Floppy Disk Drive - MPI (dual side, double-density) or equivalent	DSM-DRMPID	NA	545.00	12
Standard Floppy Disk Drive - Shugart or equivalent	DSS-DRSH1	NA	595.00	14
Capacitance Keyboard with numeric pad, cursor control keys, and cable	KEY-1	NA	180.00	6
Phideck digital cassette tape unit	PHI-1	NA	149.50	4

Accessories - Cables/Connectors:

Description	Order Code	Kit Price	Assembled Price	Wt.
General purpose cable kit with crimp tool	CAB-1	55.00	NA	4
General purpose cable kit without tool	CAB-2	37.50	NA	3
Video monitor cable	CBL-VID	NA	6.95	1
Phideck cable pack - up to 4 drives - 6'	CBLPK-PHI	NA	34.95	2
Mini-Floppy cable pack - up to 2 drives	DSM-CBLPK2	NA	49.50	2
Mini-Floppy cable pack - up to 4 drives	DSM-CBLPK4	NA	84.50	3
Standard Floppy cable pack - up to 2 drives	DSS-CBLPK2	NA	49.50	2
Standard Floppy cable pack - up to 4 drives	DSS-CBLPK4	NA	84.50	3
Double density and dual sided Floppy cable - 4 drive	DSS-CBLPK4	NA	84.50	3
CPU Connector Set - five 22-pin dual, 3 PAD-STD, 2 PAD-PROT	22-CONN5	54.50	NA	2
Dual 22-pin w/w connector	22-WW	NA	4.00	1
Dual 36-pin w/w connector	36-WW	NA	5.00	1
Dual 50-pin w/w connector	50-WW	NA	6.00	1

Accessories - Boards:

Description	Order Code	Kit Price	Assembled Price	Wt.
Extender boards - complete 3 board set	EXT-3	55.00	75.00	3
I/O card with connectors	IO-PCC	47.50	NA	1

Motherboards (without connectors):

Description	Order Code	Kit Price	Assembled Price	Wt.
Mini-Motherboard - holds 1 CPU, 1 TVC, 1 Memory, and 1 I/O cards	MB-1	30.00	NA	1
Standard Motherboard - holds 1 CPU, 1 TVC, 3 Memory, and 4 I/O cards	MB-2	45.00	NA	1
Memory Expansion - adds 5 memory slots	MB-3	29.50	NA	1
I/O Expansion - adds 10 I/O slots	MB-4	45.00	NA	1
Heavy-Duty Standard Motherboard - holds 1 CPU, 1 TVC, 3 Memory, and 6 I/O cards	MB-6	75.00	NA	1
I/O prototyping card with connectors	PROT-IOC	47.50	NA	1
Memory prototyping card with connectors	PROT-MEMC	47.50	NA	1

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Description	Order Code	Kit Price	Assembled Price	Wt.
Cabinets:				
Mainframe - Basic Box	BB-STD	95.00	NA	9
Mainframe - Complete Basic Box	BB-COMP	145.00	NA	12
Phideck - 2 drive	CB-CAS2	65.00	NA	9
Phideck - 4 drive	CB-CAS4	65.00	NA	9
Mainframe - dress cabinet	CB-CPU	249.50	NA	27
Cabinet for KEY-1	CB-KEY1	59.50	NA	7
Cabinet for MON-9	CB-MON9	59.50	NA	6
Cabinet for one mini-floppy	DSM-CB1	95.00	NA	15
Cabinet for two mini-floppies	DSM-CB2	95.00	NA	15
Cabinet for one Standard Floppy	DSS-CB1	145.00	NA	20
Cabinet for two Standard Floppies	DSS-CB2	145.00	NA	20
Peripheral Plate	PP-1	29.95	NA	5
Power Supplies:				
Mini-Floppy - supports 2 drives	DSM-PWR2	85.00	110.00	5
Standard Floppy - supports 2 drives	DSS-PWR2	85.00	110.00	5
12V at 1 amp, -12V at 1 amp, -5V at 1 amp	PWR-0	45.00	60.00	3
+5V at 12 amps	PWR-12-5V	NA	135.00	9
+5V at 12 amps plus PWR-0	PWR-12	175.00	195.00	9
+5V at 18 amps	PWR-18-5V	NA	185.00 ✓	10
+5V at 18 amps plus PWR-0	PWR-18	220.00	245.00 ✓	10
Upgrades:				
Mini-Floppy expansion from 1 to 2 drives	DSM-EXP-12	445.00	445.00	10
Mini-Floppy expansion from 2 to 3 drives	DSM-EXP1	595.00	695.00	20
Mini-Floppy expansion from 2 to 4 drives	DSM-EXP2	995.00	1,145.00	34
Standard Floppy expansion from 1 to 2 drives	DSS-EXP-12	645.00	645.00	20
Standard Floppy expansion from 2 to 3 drives	DSS-EXP1	825.00	925.00	20
Standard Floppy expansion from 2 to 4 drives	DSS-EXP2	1,375.00	1,545.00	34
MEM-16 to MEM-32 using 4K statics	MEM16-32	295.00	NA	2
TVC card from 32 char/line to 64 char/line	TVC-64UPG	69.50	NA	2
8080, 6500, 6800 CPU card to Z-80 CPU	Z80-UPG	145.00	NA	2
Media/Supplies:				
Standard Floppy Disk - soft sector, Single side, single density:				
Single	DSS-F1S	NA	7.00	1
Package of 10	DSS-F10S	NA	55.00	3
Standard Floppy Disk - soft sector, Double side, double density:				
Single	DSS-F1SD	NA	9.00	1
Package of 10	DSS-F10SD	NA	80.00	3
Mini-Floppy Disk - soft sector, Single side, single density:				
Single	DSM-F1S	NA	7.00	1
Package of 10	DSM-F10S	NA	55.00	2

Description	Order Code	Kit Price	Assembled Price	Wt.
Mini-Floppy Disk - soft sector, Double side, double density				
Single	DSM-F1SD	NA	9.00	1
Package of 10	DSM-F10SD	NA	80.00	2
Audio Cassette:				
Single	CASSETTE1	NA	2.00	1
Package of 10	CASSETTE10	NA	18.00	3

SOFTWARE:

All software packages include documentation.

Codes for Distribution Media:

DM = Mini Disk
DDM = Double Density Mini Disk
DS = Standard Disk
DDS = Double Density Standard Disk

Description	Order Code	Dist. Media	Price	Wt.
Operating Systems:				
OASIS 5.3 with Text-Editor, Exec Language, O-Basic, and Script:				
--- Before May 30, 1979				
on Mini-Disk, double density	OASIS-MD	DDM	155.00*	5
on Standard Disk, single density	OASIS-S	DS	155.00*	5
on Standard Disk, double density	OASIS-SD	DDS	155.00*	5
--- After May 30, 1979				
on Mini-Disk, double density	OASIS-MD	DDM	249.50	5
on Standard Disk, single density	OASIS-S	DS	249.50	5
on Standard Disk, double density	OASIS-SD	DDS	249.50	5
Disk Operating System (DISKMON)				
on Standard Disk, single density	DISKMON-S	DS	45.00	2
on Standard Disk, double density	DISKMON-SD	DDS	45.00	2
Disk Operating System (DISKMON)				
on Mini-Disk, single density	DISKMON-M	DM	45.00	2
on Mini-Disk, double density	DISKMON-MD	DDM	45.00	2
Phideck Operating System (PHIMON)	PHIMON		30.00	1
Z-80 Operating System	Z80-OPSYS		7.50	1

* Until May 30, 1979

If you would like further information on The Digital Group equipment, please take a minute and let us know your area of interest. Then just return this sheet to us and we will be glad to help you.

Check any that apply:

- ☐ Z-Board
- ☐ Word Processing
- ☐ APL
- ☐ Standard Product Line
- ☐ OASIS
- ☐ Entry-level kits (Raw Computer!)
- ☐ All of the above

Name _____

Address _____

City _____ State _____ Zip _____