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## Z-CATALOG

### Z-System Software Catalog

Welcome! You are reading Alpha Systems Corporation's first catalog of software products available for CP/M-compatible and Z-compatible computers. If you have a computer presently running the CP/M or Z-System operating systems, or any computer with an Zilog Z80, or Hitachi HD64180 chip, the software we sell will run on your machine. We are sending this catalog out to everyone who has bought from us in the past, everyone who has requested information about our products, and all subscribers to our magazine, *The Z-Letter*.

#### 1. *What do CP/M-compatible and Z-compatible mean?*

Any computer which has an Intel 8080 or 8085, or the Zilog or Hitachi chips mentioned above, will run the CP/M operating system. We use the term *CP/M compatible* to describe these machines, which include some models of Kaypro, Osborne, Morrow, Ampro, Eagle, and Televideo computers, among many others. An Apple II can run CP/M with the addition of a special card that has a Z80 on it, and the Commodore 128 runs CP/M as well as the Commodore operating system it shares with the Commodore 64. Application software that runs under CP/M is also CP/M-compatible, such as the original versions of Borland's TURBO Pascal, MicroSoft's MBasic, Ashton-Tate's dBase II and MicroPro's WordStar, along with thousands of other programs.

In contrast, we reserve the term *Z compatible* for hardware that can run the Z-System, and applications that require the special features of the more advanced operating system to run. A computer with an Intel 8080, for instance, cannot run any version of the Z-System command interpreter ZCPR later than version 3.0, because later versions were written in the more extensive and more efficient command set of the Z80 chip. And most Z-System utilities will not run under plain old CP/M. So while almost all CP/M programs will run under the Z-System, programs written to use the features of the Z-System will not run under CP/M, which lacks those features. CP/M and Z-System compatibility is a one-way road, running from the earlier and simpler operating system (CP/M) to the later and fancier one (the Z-System).

## 2. *What is the Z-System?*

The Z-System is the state of the art in what are sometimes referred to as 8-bit operating systems. While there is considerable technical room for debate over which chips are 8-bit and which ones are 16- or 32-bit, even CP/M systems with 4 MHz Z80s (a measure of chip speed) routinely outperform traditional 16-bit systems such as the IBM PC. Finally, the Zilog Z280 is a 16-bit chip, and a version of the Z-System is under development for it, which will extend the term Z-compatible into the 16-bit domain.

Although it began as public-domain enhancements to CP/M 2.2, the Z-System today is a fast, efficient, powerful, and dynamic operating system with all the desirable features of MS-DOS, most of the features of UNIX, and many features found only on mainframe computers, such as dynamic allocation of operating system memory. The computer press concentrates on operating systems such as MS-DOS, the Macintosh operating system, and OS/2, largely due to the marketing clout of the huge companies that sell them, and thinks that CP/M is an obsolete operating system that died out years ago. While the fanfares have been blaring out release after release of slow, huge, inefficient and bug-ridden operating systems, a small band of software designers has been upgrading CP/M and the public-domain programs written for it into a fast, rich, efficient operating system that outperforms everything else in the microcomputer world. We call this treasure the Z-System.

Practically all active CP/M public-domain authors these days provide support for Z-System features in their programs. Due to the demonstrated popularity of the Z-System, industry leader MicroPro released a new CP/M version of WordStar last year; this version 4.0 included support for Z-System paths and named directories. Reportedly they sold over ten thousand copies of this version in two months.

## 3. *What is Alpha Systems Corporation?*

Alpha Systems Corporation has been in business since 1979, dedicated to the development of microcomputers using such chips as Intel's 8080, 8085, 8048, and 8051, Zilog's Z80, and Hitachi's HD64180. Since 1984, we have concentrated entirely on the software side.

Alpha developed the first Z-System offered by a computer manufacturer, for Ampro's Little Board Z80 computer. In 1985, the system software for the Micromint SB180, the first of the new breed of HD64180 computers, was developed here. Alpha also wrote the system software for the ON! computer, a radical Z80 computer designed from the ground up to be immune to power failures and electrical glitches.

In 1988, Echelon, Inc. closed its doors. Echelon was a small business based in Los Altos, California that had for many years served as the driving force behind Z-System development. In addition to ceaselessly proselytizing the virtues of the Z-System through *The Z-News*, its biweekly newsletter, Echelon maintained a network of bulletin boards that helped unify the Z-System community, and sold a large catalog of software licensed from many sources. With Echelon's retirement, Alpha has stepped into the breach and hopes to be able to serve the user community in much the same way. We have started our own newsletter, *The Z-Letter*, and with this edition of the Z-Catalog offer a selection of Z-System operating system modules and applications. Echelon has signed over its rights and trademarks to Alpha.

#### *4. Software availability and policies*

The software listed below is available from Alpha Systems Corporation, 711 Chatsworth Place, San Jose, California 95128. Our phone is (408) 297-5594. Please use one of the order forms in the middle of this catalog. Payment should be in U.S. dollars by a check or money order made out to Alpha Systems Corporation. Sorry, we cannot accept VISA or MasterCharge, at least for now. However, we will send orders C.O.D. through UPS.

Please specify your format as well as the kind of computer you have. If your computer is a fairly rare make but can read a common format such as Kaypro II or Ampro, it might be wise to specify the more common format as an alternate. We can supply software in most CP/M formats, including 8-inch disks and Apple II. If you do not specify a format, we will assume you want your software on Kaypro II disks.

Upgrades are available for \$10 upon return of your old disk. Make a backup copy of your disk, for safety's sake, then send the *original disk* to us along with a check or money order for \$10. The new version will be copied onto your original disk and mailed back to you.

### 5. Ordering laser-printer fonts

To order a downloadable font for your LaserJet-compatible laser printer, fill out the *back* of one of the order forms in the middle of this catalog. Space is provided for eight font orders, as that is the minimum order we can accept at this time. If you wish to order more than eight, copy the order form as many times as you need. The following information must be supplied for each and every font you wish to order:

1. **Typeface.** Which of the typefaces shown in item 14 of the price list do you wish to order? Put the number here.
2. **Height.** You may order fonts ranging from 3.0 to 720.0 points in size. Bear in mind that anything smaller than about 6 points is very hard to read. Also, if you have a LaserJet Plus or compatible, the largest characters you can print is between 30 and 40 points. A LaserJet II has no such limit. A point is about 1/72 of an inch.
3. **Width.** The normal width for a font is the same as the height. If that's what you want, put the same size here as you put in the previous space, or just leave this space blank. If you want a 12-point font with characters half as wide as the samples shown, you would put 12 under height and 6 under width.
4. **Slant.** You may order fonts with characters that lean, or slant, from -45 to +45 degrees, where negative numbers mean that the characters slant to the left. A font slanted to the right may be used as an italic font, although it is not actually the same thing. Note that lines written with a slanted font still march across the page normally; only the individual characters lean.
5. **Rotation.** You may specify that the characters in a font are to be rotated from 0 degrees (normal) to 360 degrees clockwise. Characters rotated 90 degrees lies down on their right sides; 180 degrees is

upside down; 270 degrees of rotation puts the characters down on their left sides. The difference between a letter rotated 45 degrees and one slanted 45 degrees is that the rotated character is the same shape as an unrotated one, where a slanted character is distorted as it leans. Again, the orientation of the lines of print is not changed, only the orientation of the characters in the line.

6. Flop? If you say **Yes** here, the characters will be in mirror-writing, that is, they will be rotated around their vertical axes.

7. Reverse? If you say **Yes** here, the font you receive will print white characters on black, instead of the normal black on white.

8. Portrait/Landscape refers to the orientation of the lines of type, rather than the individual characters. Portrait fonts print along the shorter dimension of the paper, while Landscape fonts print along the longer side. Think of portrait paintings, which are typically taller than they are wide, as opposed to landscape paintings, which are normally wider than they are tall.

9. Symbol set. Put here the name of an HP symbol set, or a range of characters in decimal or hexadecimal. If you leave this space blank, the font you receive will be US ASCII.

10. Fixed/Proportional. Specify whether you want the characters in your font to each take up the same space, like a typewriter, or proportional, so that narrow letters take up less space than wide characters. The resident fonts built into your LaserJet are fixed spacing; this catalog is done with proportional fonts.

11. Pitch. If you chose a fixed-spacing font, specify the pitch of the font. Pitch is measured in characters per horizontal inch; choose a number between 0.00 and 80.00 cpi. Elite is 12 cpi, pica is 10 cpi. Proportional fonts have no pitch, because each character takes up horizontal space proportional to its own width.

Generally, note that you **must** fill in typeface, height, portrait/landscape, and fixed/proportional for each font you order; if you choose a fixed font, you must specify the pitch. Leaving the other spaces blank is the same as specifying that you want the same width as height, no slant, no rotation, not flopped, not reversed, and US ASCII symbol set.

After you have filled out the back of the order form with the information about the fonts you want, be sure to list how many fonts on the front of the form. The price for these fonts is \$5 apiece, with a minimum order of 8 fonts (\$40).

## PRICE LIST

Software available from Alpha Systems Corporation  
As of 1 January 1989

### CP/M software

<i>Item</i>	<i>Price</i>
1. TURBO Pascal 3.0	\$60.00
This is the CP/M version of the compiler from Borland International that changed the standard for microcomputer Pascals. No longer available from Borland, but sold and supported by us by contract with Borland. Comes with a newly corrected edition of the Reference Manual suitable for insertion in a 5½ × 8½ binder.	

### Z-System operating-system modules

2. NZ-COM	\$70.00
Formerly, the only way to upgrade your CP/M 2.2 computer to the Z-System was to download the assembly-language source files from a bulletin board, decide what features you wanted, edit the source files, assemble them, load them into memory, and then save the results using DDT. NZ-COM spares you this. You run the MKZCM program, which combines the BIOS of your base CP/M system with the assembled ZRDOS 1.9 and ZCPR 3.4 segments included on this disk to make a dynamic Z-System for you automatically. Then you just type "NZCOM" to run your new system. Comes with a large suite of Z-System utilities and a manual by Jay Sage and Bridger Mitchell that takes you through the process step by step and introduces you to the Z-System. Highly recommended for all CP/M 2.2 users!	

# ALPHA SYSTEMS CORPORATION ORDER FORM

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Date \_\_\_\_\_ Telephone \_\_\_\_\_

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Street \_\_\_\_\_

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3. ZCPR 3.4 (Source) \$50.00  
The assembly-language source code for the latest version of the Z-System command interpreter is available for those who want to upgrade static, bootable Z-System machines such as the SB180 or SB180FX, for those who wish to customize their systems the old way, or for anyone who wants to customize the command interpreter itself.
4. Z3Plus \$70.00  
Z3Plus is like NZ-COM (see above), but specifically designed for CP/M Plus (CP/M 3.0) computers such as the Commodore 128. It installs on your CP/M Plus system in seconds. This makes it possible, for the first time, to migrate from CP/M Plus to the Z-System, a feat thought to be impossible. Z3Plus comes with ZCPR 3.4, and keeps the CP/M Plus BDOS and all of its facilities.

#### Z-Tools

(Software development utilities)

5. The Libraries (SYSLIB, Z3LIB, VLIB) [version 3.6] \$100.00  
These assembly-language subroutines furnish over 400 functions used to write ZCPR3 and ZRDOS utilities, making the re-invention of basic functions unnecessary in much the same way that high-level languages supply basic programming structures. The libraries work with 8080/Z80/NSC800/HD64180 targets. This package includes the relocatable objects in MicroSoft REL files, the online documentation (HLP files), the source code, and the manual.

#### Input/Output Package segments

6. I/OR \$40.00  
Our input/output recorder redirects output to/from console, to a printer, or to a default file, under the control of the ZCPR RECORD command. This allows you to send the output from a program to your printer or to a file, even if it's a CP/M program that has neither facility built into it. 15K segment, ZRDOS required.

7. **B/Printer** \$40.00  
This print spooler provides deluxe background single-file printing with no diminishing of your TPA size. 15K segment, ZRDOS required.
  
8. **NuKey** \$40.00  
This advanced function-key generator redefines keyboard keys with a special lead-in character. Different sets of key definitions may be saved as files and loaded for use with different applications and different terminals, allowing you to customize even programs that are not customizable and non-programmable terminals. Even multi-character function keys may be redefined!

#### Lasting-Value Software (Applications)

9. **Discat** \$40.00  
Our catalog program, Discat, efficiently maintains and catalogs floppy and hard-disk files for easy recall. Modular, menu-driven, fancy and easy to use, it comes with a loose-leaf, 67-page instruction manual.
  
10. **TERM III** \$100.00  
This telecommunications program provides full facilities for communicating with other computers, terminals, and information services, including wide and local area networking, automatic phone answering and message handling. It is modular and menu-driven, with extreme flexibility for automatic operations.

#### Documentation

11. **ZCPR3: The Manual** \$24.00  
This handbook for users of ZCPR3 and its utilities is a 351-page, typeset, bound book by Richard Conn. The section on installing ZCPR is now obsolete with the invention of NZ-COM for CP/M 2.2 systems and Z3Plus for CP/M Plus systems, and the information dates back to ZCPR 3.0 (ZCPR 3.4 is the current release). However, it is still an invaluable reference to the host of utilities available for the Z-System, and we recommend its purchase to all new users of the Z-System.

- 12. *ZCPR3: The Libraries* \$30.00  
 This manual describes VLIB, Z3LIB, and SYSLIB, three libraries of assembly language subroutines used to write Z-System utilities. It teaches structured, quick-program writing. Loose leaf, 310 pages. The cost of this manual is deductible towards later purchase of the source code and objects (see item 5 above). That is, you can buy this manual now and the source and objects will later cost \$30 less.

- 13. *The Z-Letter* \$24/12 issues U.S., \$32 foreign  
 Our newsletter serves to spread the news of new developments in the community of CP/M and Z-System users, such as new programs, new machines, etc. The availability of old CP/M software and newsletters for particular machines is also tracked in these pages. We also help newcomers get the most out of their machines. Articles and letters are most welcome. **Subscriptions** are accepted for 12 or 24 issues. The rate is \$24 for 12 issues, or \$48 for 24 issues, for subscriptions mailed to U.S., FPO, or APO addresses. Subscriptions to other addresses are \$32 for 12 issues, \$64 for 24 issues. **Back issues** cost \$2 apiece in the U.S., \$2.67 foreign. All back issues are kept in print. Issue 3 is currently in preparation.

Laser-printer fonts

- 14. *LaserJet fonts* \$5 per font, minimum order \$40  
 Alpha Systems Corporation is selling SoftFonts that can be downloaded to a LaserJet Plus, LaserJet II, or other laser printers that emulate either of these. You specify the typeface, size, orientation, fixed or proportional spacing, etc. (see *Ordering fonts*, above). We will send the fonts you have specified on a disk or disks. The fonts cost \$5 apiece, with a minimum order of 8 fonts, or \$40. If there are enough orders, we will expand the selection of typefaces in which fonts can be ordered. At present we will sell fonts in the following styles:

Font 1001 (Like Renaissance, Palatino)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z  
 a b c d e f g h i j k l m n o p q r s t u v w x y z  
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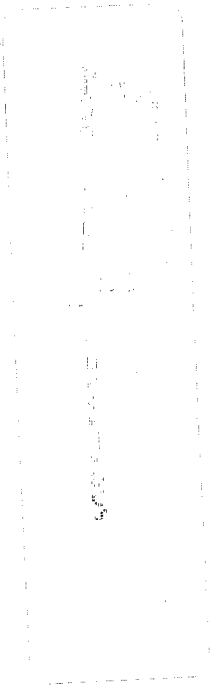
Font 1008 (Like Hobo)

**A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**  
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### Trademarks

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