

FlexOS 286 Installation Instructions

Read this first!

BEFORE YOU BEGIN, DO YOU HAVE THE HARDWARE YOU NEED?

You need the following hardware to run the executable version of FlexOSTM 286 provided in this kit:

- an IBM[®]PC AT or a 100%-compatible IBM AT clone¹ with a minimum 20Mb hard disk.
- a Quad density (1.2 Mb) 5^{1/4} inch disk drive
- a serial port with the same adress as COM1 under MSTM-DOS
- a Centronics[®] -compatible port with the same address as PRN under MS-DOS
- a minimum 1.1 Mb (2Mb is recommended) of RAM allocated as follows:
 - 512Kb on the mother board
 - 128Kb low (mapped by hardware switches to be contiguous with the mother board 512Kb)
 - 512Kb high (mapped by hardware switches to 1Mb)
- an IBM Color Graphics Adapter (CGA), monochrome mode only, or an IBM Enhanced Graphics Adapter (EGA), low resolution only

For debugging FlexOS or developing multi-user applications, you need a VT52-compatible serial terminal connected to the serial port.

¹It must have an E2 stepping of the 80286 processor (for DOS emulation).

STARTING FLEXOS

Insert the diskette labeled <u>Programmer's Toolkit</u> **PTK 1** in drive A and turn your computer on. If your computer is already on, insert diskette **PTK 1** in drive A and press Ctrl Alt Del.

FlexOS will then begin to load from the floppy diskette. When FlexOS has completed loading, it displays the logon prompt:

User Name:

Press Enter . FlexOS then displays the prompt:

Password:

Press Enter again to logon to the system. FlexOS will then display the system prompt (A>).



INSTALLING FLEXOS

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At this point, you are ready to install FlexOS on your system. The installation procedure is almost completely automated and takes only a few minutes.

You have three basic options for installing FlexOS on your system. Before proceeding with installation, you should study these options carefully to determine the one which best fits your needs.

- You can install only the FlexOS <u>system files</u> on a partition of the hard disk. This allows you to boot FlexOS from a floppy diskette while leaving another operating system (like DOS) bootable from the hard disk. If you want to install FlexOS this way, follow the instructions starting on page 3.
- 2. You can leave DOS bootable from the hard disk and make FlexOS loadable from the hard disk using the LOADFLEX command executed from DOS. If you want to install FlexOS this way, follow the instructions starting on page 5.
- 3. You can make FlexOS bootable from the hard disk as the <u>sole</u> operating system. If you want to install FlexOS this way, follow the instructions starting on page 7.

INSTALLING FLEXOS TO BOOT FROM A FLOPPY DISKETTE

The following instructions explain how to install FlexOS on a partition of your hard disk. Installing FlexOS in this manner allows you to boot FlexOS from a floppy diskette and leave DOS (or other operating system) bootable from your hard disk.

Before You Start

The procedure described below enables you to install the FlexOS Programmer's Toolkit (and System Builder's Kit, if applicable) files on your hard disk. Before you start the procedure, ensure that your hard disk has a minimum of 17 MB of free space. The <u>Programmer's Toolkit</u> files require 3 MB; the <u>System Builder's Kit</u> files require 4 MB. Also, you need 4 MB if you plan to load the <u>MetaWareTM High C</u> compiler files.

Procedure

You should follow this procedure exactly to ensure proper installation.

1. Leave diskette PTK 1 in drive A: and enter the command:

INSTALL

The INSTALL batch file on diskette PTK 1 automatically creates subdirectories on your hard disk and then copies files from the diskette into the appropriate subdirectories. As the batch file runs, it displays the instructions that are executing.

2. After the files from diskette **PTK 1** have been copied, remove it and insert diskette **PTK 2** in drive A.

NOTE: If you insert the wrong diskette, FlexOS prompts you to insert the correct diskette.

3. After the files from diskette PTK 2 have been copied, remove it and insert diskette PTK 3 in drive A. When the files from diskette PTK 3 are copied, the installation is complete.

- 4. Remove diskette PTK 3 from drive A.
- 5. Insert a blank, high-density diskette in drive A.
- 6. Transfer the bootable version of FLEXOS.SYS from the hard disk to the diskette in drive A by entering the following commands:

CD \BOOT

FORMAT A: -S -P

At the first prompt, enter "5". At the second prompt, enter "Y". When FORMAT prompts you to format another diskette, answer "N".

7. Remove the formatted diskette from drive A. Label it "FLEXBOOT".

Installing the System Builder's Kit

If you purchased a <u>System Builder's Kit</u>, you install its files in a manner analogous to those in the <u>Programmer's Toolkit</u>.

1. Place the diskette labelled <u>System Builder's Kit</u> **SBK 1** in drive A and enter the command:

INSTALL

The INSTALL batch file on diskette **SBK 1** automatically performs the installation of the files into the proper subdirectories.

2. After the files from diskette SBK 1 have been copied, remove it and insert diskettes SBK 2, SBK 3, and SBK 4 in succession until the installation is complete.

Results

You can now boot from the FLEXBOOT diskette. After booting, you can remove the diskette. FlexOS continues operation by finding all its files in the hard disk subdirectories.

You need to use the FLEXBOOT diskette each time you boot FlexOS. To boot DOS, remove the diskette from drive A and boot from the hard disk.

INSTALLING FLEXOS TO LOAD WITH LOADFLEX.EXE

The following instructions explain how to install the FlexOS system files in a DOS subdirectory on your hard disk and then load FlexOS from DOS with the LOADFLEX command. Installing FlexOS in this manner allows you to leave DOS bootable from your hard disk.

Before You Start

The procedure described below enables you to install the FlexOS Programmer's Toolkit (and System Builder's Kit, if applicable) files on your hard disk. Before you start the procedure, ensure the following:

- Your hard disk (or partition) has a minimum of 17 MB of free space. The <u>Programmer's Toolkit</u> files require 3 MB; the <u>System</u> <u>Builder's Kit</u> files require 4 MB. Also, you need 4 MB if you plan to load the MetaWareTM High C compiler files.
- Your hard disk boots DOS version 3.x (either MSTM-DOS or PC DOS)

Procedure

You should follow this procedure exactly to ensure proper installation.

1. Leave diskette PTK 1 in drive A: and enter the command:

INSTALL.

The INSTALL batch file on diskette **PTK 1** automatically creates subdirectories on your hard disk and then copies files from the diskette into the appropriate subdirectories. As the batch file runs, it displays the instructions that are executing.

2. After the files from diskette **PTK 1** have been copied, remove it and insert diskette **PTK 2** in drive A.

NOTE: If you insert the wrong diskette, FlexOS prompts you to insert the correct diskette.

3. After the files from diskette **PTK 2** have been copied, remove it and insert diskette **PTK 3** in drive A. When the files from diskette **PTK 3** are copied, the installation is complete.

4. Remove diskette PTK 3 from drive A.

Installing the System Builder's Kit

If you purchased a System Builder's Kit, its files are installed in a manner analogous to those in the Programmer's Toolkit.

1. Place the diskette labelled System Builder's Kit SBK 1 in drive A and enter the command:

A: INSTALL

The INSTALL batch file on System Builder's Kit diskette **SBK 1** automatically performs the installation of the files into the proper subdirectories.

2. After the files from diskette SBK 1 have been transferred, remove it and insert diskette SBK 2, SBK 3, and SBK 4 in succession until the installation is complete.

Results

FlexOS is now installed on your hard disk. When you boot the system, DOS is the operating system in control. The DOS command file LOADFLEX.EXE resides in the hard disk root directory, so when you enter the command:

LOADFLEX

DOS responds with the following message on the console screen:

LOAD FLEXOS ? (Y/N)

If you enter Y, FlexOS loads from the hard disk. If you enter N, DOS continues operation.

As an alternative, you may wish to edit the DOS (not FlexOS) AUTOEXEC.BAT file so that DOS automatically executes the LOADFLEX command each time you boot the system. Add the following command as the last line in AUTOEXEC.BAT:

LOADFLEX. EXE

INSTALLING FLEXOS TO BOOT FROM THE HARD DISK

The following instructions explain how to install FlexOS as the <u>sole</u> bootable operating system on your hard disk. When FlexOS is installed to boot from the hard disk, you can still boot another operating system (like DOS) from <u>floppy diskette</u>. If you choose this option, you must use the FlexOS utilities FDISK and FORMAT to partition and format the hard disk.

Note: If you want FlexOS and DOS to share partitions, do not:

- create more than 24 partitions. FlexOS supports more than 24 partitions, but DOS does not.
- create a partition larger than 32Mb. Writing to a partition larger than 32Mb under DOS can corrupt the File Allocation Tables (FATs), thereby rendering the data inaccesible.

Before You Start

The procedure described below enables you to install the FlexOS Programmer's Toolkit (and System Builder's Kit, if applicable) files on your hard disk. Before you start the procedure, ensure that your hard disk has a minimum of 17 MB of free space. The <u>Programmer's Toolkit</u> files require 3 MB; the <u>System Builder's Kit</u> files require 4 MB. Also, you need 4 MB if you plan to load the <u>MetaWare TM High C compiler</u> files.

Procedure

Follow this procedure exactly to ensure proper installation.

- Read Chapter 3, "Partitioning and Formatting a Hard Disk" in the <u>FlexOS Congfiguration Guide</u>. Be sure you understand the necessary steps involved in creating partitions on your hard disk before proceeding.
- 2. Leave diskette PTK 1 in drive A: and enter the command:

FDISK

Follow the menu-driven instructions to partition your hard disk.

If you create multiple partitions, ensure that FlexOS is the first partition and make it active. When you exit FDISK, be sure to reboot the system (press Ctrl Alt Del) to incorporate the changes.

3. Copy the FlexOS system image file to the root directory of drive C: by entering the command:

FORMAT C: -S

4. When the system image file has been copied and the system prompt A> appears, enter the command:

INSTALL

The INSTALL batch file on Programmer's Toolkit diskette **PTK 1** automatically creates subdirectories on your hard disk and then copies files from the diskette into the appropriate subdirectories. As the batch file runs, it displays the instructions that are executing.

5. After the files from diskette **PTK 1** have been copied, remove it and insert diskette **PTK 2** in drive A.

NOTE: If you insert the wrong diskette, FlexOS prompts you to insert the correct diskette.

6. After the files from diskette **PTK 2** have been copied, remove it and insert diskette **PTK 3** in drive A. When the files from diskette **PTK 3** are copied, the installation is complete.

Installing the System Builder's Kit

If you purchased a System Builder's Kit, its files are installed in a manner analogous to those in the Programmer's Toolkit.

1. Place the diskette labelled <u>System Builder's Kit</u> **SBK 1** in drive A and enter the command:

A: INSTALL

The INSTALL batch file on System Builder's Kit diskette **SBK 1** automatically performs the installation of the files into the proper subdirectories.

2. After the files from diskette SBK 1 have been transferred, remove it and insert diskette SBK 2, SBK 3, and SBK 4 in succession until the installation is complete.

Results

FlexOS is now installed on your hard disk. When you boot the system, FlexOS is the sole operating system. You can boot DOS (or other operating system) from floppy diskette.

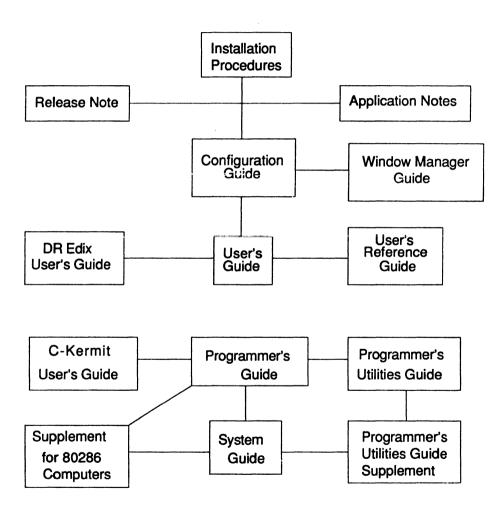
AFTER INSTALLATION

After installing FlexOS, read the <u>User's Guide</u> to familiarize yourself with the basic user interface, the <u>User's Reference Guide</u> for descriptions of the various system commands, and the <u>Window Manager Guide</u> to understand how FlexOS uses windows. Once you have become familiar with FlexOS in its <u>default</u> configuration, read the Configuration Guide if you want to change the system.

The <u>DR Edix User's Guide</u> describes the native FlexOS text editor. See <u>Running DOS Applications under FlexOS</u> to determine which DOS applications and functions are supported by FlexOS 286 and how to use them.

After you become familiar with the user interface and system commands, read the <u>Programmer's Guide</u> and <u>Programmer's Utilities Guides</u> for descriptions of the FlexOS application interface and program development tools. Before proceeding with program development, see the <u>System Guide</u> for information about the FlexOS driver interface and the <u>FlexOS Supplement for Intel 80286-based Computers</u> for processor-specific information. Also, be sure to read the <u>Release Notes</u> for any supplemental information, manual corrections and updates.

FlexOS Documentation



FlexOS Documentation List

User's Guide

The user manual that describes command line operations and file and directory conventions.

User's Reference Guide

The book that lists the system commands and provides a description of their function as well examples of their use.

Configuration Guide

This booklet tells you how to customize FlexOS to your computing needs.

Window Manager Guide

This booklet tells you how to use the Window Manager. This feature of FlexOS allows you to monitor processes in several windows at once.

DR Edix User's Guide

This book describes the operation of DR Edix, the FlexOS editor.

C-Kermit User's Guide

This booklet describes the operation of C-Kermit, the FlexOS communications utility.

Supplement for Intel 80286-based Computers

This booklet lists the processor-specific information for the Intel 80286.

Programmer's Guide

This book describes the FlexOS application programming interface.

System Guide

This books describes the FlexOS system architecture, the interface to hardware devices, and the system functions available to driver writers.

Programmer's Utilities Guide

This book describes the programming tools used to develop, test, and debug code for FlexOS. Included are the assembler, linker, librarian, and symbolic debugger.

Programmer's Utilities Guide Supplement

This book describes a set of UNIXTM-like utilities that are useful for programmers.

Release Note

This note contains general system information that became available at the time of release.

Application Note

This numbered leaflet deals with a single application-related issue. They are issued periodically to cover specific topics as they arise.

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