
Actel Installation Instructions



Windows® and UNIX® Environments

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PC Installation Instructions for the Actel Designer Series

This document describes the system requirements and installation procedures for the Actel Designer Series software on PCs running Windows® 98, Windows NT™ or Windows 2000

System Requirements

The following are the system requirements for the Actel Designer Series software on PCs:

- Pentium-200 microprocessor (minimum); Pentium-300 (recommended)
- Microsoft NT 4.0 Service Pack 5 and later
- Microsoft Windows 98 plus Y2K Service Packs, Windows 2000 Service Pack 1
- 256MB RAM (minimum)
- 400MB disk space

Installation on a PC

The following procedure describes how to install the Actel Designer Series software on a PC.

1. Insert the Actel Designer Series CD into your CD-ROM drive.

The CD Browser window appears.

If the CD Browser window does not appear, choose Run from the Start menu. Type the following command in the Open box:

```
d:\setup.exe
```

The “d” in the above command represents the drive letter of your CD-ROM. If your CD-ROM is not the “d” drive, substitute the letter of your CD-ROM for “d” above.

2. Follow the instructions on the screen.

3. You must restart your PC only if the Restart dialog box appears.

Installing Adobe® Acrobat Reader®

Actel provides online manuals in PDF format on the Actel Designer Series Software CD-ROM. To view or print these online manuals, you must have the Adobe Acrobat Reader software installed on your computer. If you do not already have Acrobat Reader installed, install it by running the Actel Designer Series installation program (“setup.exe”) from the Actel Designer Series CD-ROM and then clicking the Adobe Acrobat Reader installation button.

Testing the Installation

Start the Actel Designer Series software to verify correct installation by selecting Start -> Programs -> Designer R1-2001 -> Designer.

Warning Messages

During installation you may see one or both of the following warning messages.

```
Warning: Setup has detected that Designer is running. It is
strongly recommended that you terminate Designer before setup
proceeds.
```

```
Do you want to continue anyway? Y/N
```

Actel recommends closing all Designer sessions that may be running before continuing with installation.

```
Warning: You may not have enough disk space to complete the
installation.
```

```
Note: There is redundancy in the calculation of required disk
space if you install more than 1 of the following components -
--Designer, Actgen, APSW, Silicon Expert. Subtract 23MB from
the required space total for each additional component to get
the actual disk space required.
```

```
Do you want to continue installation? Y/N
```

Due to limitations of the installation software the calculation of required disk space may incorrectly report that there is insufficient disk space. Adjust the total required space using the method described in the warning message.

Obtaining a License

To obtain a license to run the Actel Designer Series software, log onto <http://register.actel.com> and request a license.

Setting up the License File to Run Designer

Your license setup depends on your type of license, Node Locked or Floating. Node Locked licenses are locked to a single machine, thus no server is needed. Floating licenses are not locked to a single machine and require some additional setup.

Node Locked

A node-locked license does not require a server; the license is installed on the same computer as the software. To set up your node-locked license, save the attachment of the email as 'license.dat' to your system. To finish setup, proceed to “Setting Up Environment Variables” on page 9.

Floating License

Your floating license setup depends on whether you have a single server or 3-server redundant license.

Single Server

To set up your system for a single server license on a PC, perform the following steps:

- 1. Save the attachment of the email as 'license.dat' to your system.**
- 2. Open license.dat using Notepad.**
- 3. Edit the SERVER line by replacing <put.hostname.here> with your machine's hostname.**
- 4. Edit the <path.to.actel.installation> in the DAEMON line.**
- 5. In a DOS shell run C:\<path.to.actel.installation>\bin\lmgrd -c <path_to_license.dat\license.dat>**
- 6. Proceed to “Setting Up Environment Variables” on page 9.**

3-Server Redundant

To set up your system for a 3-Server license on a PC, perform the following steps:

1. **Save the attachment of the email as 'license.dat' to your system.**
2. **Open license.dat using Notepad.**
3. **Edit each SERVER line by replacing <put.hostname.here> with each of your three machine's hostnames.**
4. **Edit the <path.to.actel.installation> in each DAEMON line.**
5. **Login to each SERVER machine and in a DOS shell run**
C:<path.to.actel.installation>\bin\lmgrd -c
<path_to_license.dat\license.dat>
6. **Proceed to “Setting Up Environment Variables”.**

Setting Up Environment Variables

Set your environment variables according to your operating system.

Windows NT4.0

1. **Open the Control Panel.** From the Start menu, select Settings and Control Panel.
2. **Double-click the System icon.**
3. **In the 'Systems Properties' dialog box, select the 'Environments' page tab.**
4. **In the VARIABLE field enter:**
`LM_LICENSE_FILE`
5. **In the VALUE field enter:**
`<path to license.dat file>\license.dat.`
6. **Click the 'Set' button, then the 'Apply' button and finally, the 'OK' button**
7. **Start Designer R1-2001.**

Windows 2000

- 1. In the Start menu, click Control Panel.**
- 2. With the Control Panel Window in focus, double-click the icon labeled 'System'.** The 'Systems Properties' dialog box is now in focus.
- 3. Click the 'Advanced' page tab.**
- 4. Click the 'Environment Variables' button.**
- 5. Click the top most 'New' button.** The dialog titled 'New User Variable' should now be in focus.
- 6. In the 'Variable Name' field type:**
`LM_LICENSE_FILE`
- 7. In the 'Variable Value' field type:**
`<path to license.dat file>\license.dat`
- 8. Click OK.**
- 9. The 'Environment Variables' dialog is now in focus -> click OK.**
- 10. Start Designer R1-2001.**

Windows 98

- 1. Bring up the MS DOS prompt**
- 2. Go to the topmost directory of your main drive (usually this is the C: drive).**
- 3. Type 'edit AUTOEXEC.BAT'**
- 4. In the editor type the following: setenv**
`LM_LICENSE_FILE=<path to license.dat file>\license.dat`
- 5. Save the file and reboot your machine.**
- 6. Start Designer R1-2001.**

UNIX Installation Instructions for the Actel Designer Series

This document describes the system requirements and installation procedures for the Actel Designer Series software on UNIX workstations running Solaris™ or HP-UX.

System Requirements

The following are the system requirements for the Actel Designer Series software on UNIX workstations:

- Sun Workstation running Solaris 2.6, Solaris 7, Solaris 8 plus Y2K updates
- HP Workstation running HP-UX 10.20, 11.x plus Y2K updates
- 256 MB RAM
- 400 MB disk space
- 128 MB swap space

Installation on a UNIX Workstation

The following steps describe how to install Actel Designer Series software on a UNIX workstation.

- 1. Place the Actel Designer Series CD-ROM into the CD-ROM drive.**
- 2. Run the installation script.** Type the following commands at the prompt:

```
cd /cdrom/cdrom0
./install.als
```

This assumes that `/cdrom/cdrom0` (`/cd/cdrom` for HP-UNIX) is the directory in which your CD-ROM is located.

- 3. Initialize the installation script.** Enter a number (1-2) corresponding to the platform on which you plan to run the software.

Note: The Actel software supports the following platforms:

- 1) SunOS 5.x (Solaris 2.x)
- 2) HP-UX 10.x/11.x

- 4. Enter the installation directory or press ENTER to accept the default directory** (`/usr/local/actel`). Enter the full path, including the directory name, or to install in the current working directory, enter only the directory name (for example: `Actel_R1_2001`).
- 5. Enter the product code.** Enter “da-ws-syn”.
- 6. Press ENTER to begin the installation.** To customize your installation, enter the number corresponding to the product you want to modify for installation.

The products and the respective installable components available for installation are listed below:

Designer Products (default installs all 4):

- Designer Advantage
- ACTgen Macro Builder
- APS
- Silicon Expert

Libraries (default installs Verilog, Vital, and Synopsys libraries only):

- Verilog Libraries
- Vital Libraries
- Cadence Libraries (does not install)
- Mentor Graphics Libraries (does not install)
- Innoveda Libraries (does not install)
- Synopsys Libraries

7. To modify product installation,

Select **I** to install this group using the current settings.

Select **N** to not install this entire group.

Select **P** for partial install (**P** displays the subset products and allows selection of **Install** or **Don't Install** for each item). For Synopsys libraries, you can select **P** for partial install, then select specific Actel families.

For example, if you select **P**, the screen displays the following:

The following products are available for installation:

```
1 Designer Advantage : [ Install ]
2 ACTgen Macro Builder : [ Install ]
3 APS : [ Install ]
4 Silicon Expert : [ Install ]
```

- 8. Press ENTER to accept the default selections or enter the number corresponding to the item you want to add/remove from the installation.** Each time you enter a number, the setting toggles between **Install** and **Don't Install**.
- 9. Press ENTER to accept changes.** Press ENTER again to continue the installation or enter a number to modify other components.

**Installing
Adobe®
Acrobat
Reader®**

Actel provides online manuals in PDF format on the Actel Designer Series Software CD-ROM. To view or print these online manuals, you must have the Adobe Acrobat Reader software installed on your computer. If you do not already have Reader installed, install it by

typing Y at the following prompt after installing the Actel Designer Series software:

```
Designer Series manuals use AcroRead reader from Adobe.  
Do you want to install ACROREAD. [Y/N]
```

Testing the Installation

Start the Actel Designer Series software to verify correct installation. Type:

<full_path_to_actel>/bin/designer

The Designer window should appear momentarily.

Obtaining a License

To obtain a license to run the Actel Designer Series software, log onto <http://register.actel.com> and request a license.

Setting up the License File to Run Designer

UNIX Floating

There are two types of license files for UNIX machines, Single Server and 3-Server Redundant.

Single Server

To set up your system for a single server license on a UNIX workstation, perform the following steps:

- 1. Save the email attachment as 'license.dat'.**
- 2. Open license.dat using any editor.**
- 3. Edit the SERVER line by replacing <put.hostname.here> with your machine's hostname.**
- 4. Edit the <path.to.actel.installation> in each DAEMON line.**

5. Run `<path.to.actel.installation>/bin/lmgrd -c <path_to_license.dat/license.dat>`
6. Proceed to “Setting Environment Variables” on page 15.

3-Server Redundant

A 3-server license requires 2 servers to be operational. At least two servers must be up at all times or the license will not work. To set up your system for a 3-server license on UNIX, perform the following steps:

1. Save the attachment of this email as 'license.dat'
2. Open license.dat using any editor.
3. Edit each SERVER line by replacing `<put.hostname.here>` with each of your three UNIX machine's hostnames.
4. Edit the `<path.to.actel.installation>` in each DAEMON line.
5. Login to each SERVER machine and run `<path.to.actel.installation>/bin/lmgrd -c <path_to_license.dat/license.dat>`
6. Proceed to “Setting Environment Variables”.

Setting Environment Variables

UNIX Environment Variables for Licensing

Use the following commands to set the correct environment variables:

```
setenv ALSDIR <path_to_actel>
set path = ($ALSDIR/bin $path)
setenv LM_LICENSE_FILE <path to license.dat file>/license.dat
```

Start Designer R1-2001.

UNIX Environment Variables for Installation

During installation of Actel Designer Series software, the required environment variables are automatically set to allow the software to run properly.

Add the ALSDIR environment variable by using the following command:

```
setenv ALSDIR <path_to_actel>
```

Add the Designer software directory to your path variable. To modify your path, use the following command:

```
set path = ($ALSDIR/bin $path)
```

Note: You must also add the Acrobat Reader installation directory to your path if you want to view the online manuals.

After you have successfully installed the Actel Designer Series Development System, refer to the *Getting Started with Designer* guide for information about using the Actel Designer Series to implement Actel designs.

Designer Synplify NT Installation Instructions

Installing Designer Synplify Software

Follow the procedure below to install the Designer Synplify software under Windows NT.

- 1. Insert the Actel Designer CD.**
- 2. Install Actel Designer.**
See See "PC Installation Instructions for the Actel Designer Series" on page 5.
- 3. Remove the Actel Designer CD.**
- 4. Insert the Actel DeskTOP CD.**
- 5. Install Synplicity software by clicking the "Install Synplicity" button.**
- 6. Restart your PC after you have installed both components.**

Installing the Security Block Driver

For Windows NT systems, you must install the Security Block Driver. To install the driver, perform these steps:

- 1. Insert the Actel DeskTOP CD.** In Windows Explorer, browse to the sentinel directory of your CD-ROM.
- 2. Double-click "setupx86.exe".**
- 3. Select "Function" -> "Install Sentinel Driver."** The path specified in the window should read "sentinel\i386".
- 4. Click OK.** When you click OK in the subsequent windows, the program closes.
- 5. Restart your PC to activate the new driver.**

Obtaining a License

Use the following procedure to obtain a license to run the Actel DeskTOP (or Designer Synplify) software:

1. **Log onto <http://www.actel.com/license/acteldesktop.html> or go to the Actel Web Portal and click the USER SUPPORT HOME tab.** Then, click LICENSE AND REGISTRATION.
2. **Select Synplify for Actel and enter your e-mail address into the line below.**

Note: You will receive your license at this address.

3. **Enter the software ID found on the software ID sticker on the back of the DeskTOP CD jacket.**
4. **Enter your Security Key #.** On the security block in the Designer Synplify package there is a sticker with a line that begins "Security Key #:" followed by a four-digit hexadecimal number. For example, if the sticker on the security block reads "Security Key #: 0A1B", then your Security Key # is "0A1B".
5. **Click Next Page and fill in the information requested.** Verify that the information you entered is accurate and submit the registration form.

Licensing Terms

The license you receive for the Designer Synplify is valid for one year and includes maintenance.

Setting Up the License to Run Designer Synplify

Once you have received your license files from Actel, you must add the license file to your system to run the software. Copy the license file attached to the e-mail to a temporary directory and name the file "*license.txt*".

The Designer Synplify licensing system works off of the "SYNPLICITY_LICENSE_FILE" environment variable. Follow the procedure below to install your license file:

- 1. Right-click the My Computer icon on the Windows desktop and select the Properties command.** The System Properties dialog box is displayed.
- 2. Select the Environment tab.**
- 3. Check to see if the SYNPLICITY_LICENSE_FILE environment variable exists in the System Variables: or User Variables: windows in the Systems Properties dialog box.**

If the variable does not exist, follow these steps:

- a. Type "SYNPLICITY_LICENSE_FILE" in the Variable text box.**
- b. Type "C:\flexlm\license.txt" in the Value text box.**
- c. Click Set.**
- d. Click Apply, then click OK.**
- e. Create a directory called "flexlm" on your C: drive.**
- f. Copy the *license.txt* file that you saved to the temporary directory to the C:\flexlm directory.**
- g. Restart your computer if NT has problems recognizing the new environment variable.**

If SYNPLICITY_LICENSE_FILE does exist, follow these steps:

- a. Note the directory and file name that the SYNPLICITY_LICENSE_FILE environment variable points to.**
- b. Close the Systems Property dialog box by clicking OK.**
- c. Copy the *license.txt* file to that directory and file name.**

Note: This will overwrite your old Synplicity licenses.

Troubleshooting

Go to:

<http://www.actel.com/dt/tech.htm> and click "Licensing & Installation."

Designer Synplify Windows 95 Installation Instructions

Installing Designer Synplify Software

Follow the procedure below to install the Designer Synplify software under Windows 95.

- 1. Insert the Actel Designer CD.**
- 2. Install Actel Designer.**
See See "PC Installation Instructions for the Actel Designer Series" on page 5.
- 3. Remove the Actel Designer CD.**
- 4. Insert the Actel DeskTOP CD.**
- 5. Install Synplicity software by clicking the "Install Synplicity" button.**
- 6. Restart your PC after you have installed both components.**

Obtaining a License

Use the following procedure to obtain a license to run the Actel DeskTOP (or Designer Synplify) software:

- 1. Log onto <http://www.actel.com/license/acteldesktop.html> or go to the Actel Web Portal and click the **USER SUPPORT HOME** tab.**
Then, click **LICENSE AND REGISTRATION**.
- 2. Select Synplify for Actel and enter your e-mail address into the line below.**
Note: You will receive your license at this address.
- 3. Enter the software ID found on the software ID sticker on the back of the DeskTOP CD jacket.**
- 4. Enter your Security Key #.** On the security block in the Designer Synplify package there is a sticker with a line that begins "Security Key #:" followed by a four-digit hexadecimal number. For example,

if the sticker on the security block reads "Security Key #: 0A1B", then your Security Key # is "0A1B".

- 5. Click Next Page and fill in the information requested.** Verify that the information you entered is accurate and submit the registration form.

Licensing Terms

The license you receive for Designer Synplify is valid for one year and includes maintenance.

Setting Up the License to Run Designer Synplify

Once you have received your license file from Actel, you must add the license file to your system to run the software. Copy the license file attached to the e-mail to a temporary directory and name the file "*license.txt*".

The DeskTOP Pro licensing system works off of the "SYNPLICITY_LICENSE_FILE" environment variable set in the AUTOEXEC.BAT file. Follow the procedure below to install your license file:

- 1. Open your AUTOEXEC.BAT file with a text editor.**
- 2. Check to see if the SYNPLICITY_LICENSE_FILE environment variable exists.**

If the variable does not exist, follow these steps:

- a. Add the following line to your AUTOEXEC.BAT file:**

```
SET SYNPLICITY_LICENSE_FILE=C:\flexlm\license.txt
```

- b. Save the file.**

- c. Create a directory called "flexlm" on your C: drive.**

- d. Copy the *license.txt* file that you saved to the temporary directory to the C:\flexlm directory.**

e. Restart your PC.

If SYNPLICITY_LICENSE_FILE does exist, follow these steps:

a. Note the directory and file name that the SYNPLICITY_LICENSE_FILE environment variable points to.

b. Close the AUTOEXEC.BAT file.

c. Copy the *license.txt* file to that directory and file name.

Note: This will overwrite your old Synplicity licenses.

Troubleshooting

Go to:

<http://www.actel.com/dt/tech.htm> and click “Licensing & Installation.”

Actel DeskTOP Pro Windows NT Installation Instructions

Installing Actel DeskTOP Pro Software

Follow the procedure below to install the Actel DeskTOP Pro software under Windows NT from the CD start-up browser screen.

1. Insert the Actel DeskTOP Open/Pro CD.

Note: If the CD start-up browser screen does not start automatically, double-click the setup.exe file at the top level of the CD-ROM.

2. Install VeriBest software by clicking the "Install VeriBest, Inc." button.

3. (Optional) Install Silicon Explorer by clicking the "Install Silicon Explorer" button. If you have purchased the Silicon Explorer hardware for debugging, you can load this software and run it from DesignView.

4. Remove the Actel DeskTOP Open/Pro CD.

5. Insert the Actel Designer CD.

6. Install Actel Designer. Make sure the VITAL libraries are selected for installation (that is the default); VHDL simulation requires them. If you skip this step, reinstall the Designer software selecting only the VITAL libraries. Using the VeriBest software, you must compile VITAL libraries for each device family before use.

7. Remove the Actel Designer CD.

8. Insert the Actel DeskTOP CD.

9. Install Synplicity software by clicking the "Install Synplicity" button.

10. Restart your PC after you have installed all components.

Installing the Security Block Driver

For Windows NT systems, you must install the Security Block Driver. To install the driver, perform these steps:

1. **Insert the Actel DeskTOP Open/Pro CD.**
2. **Click on the "Install NT Key Driver" button on the CD start-up browser.** The "Sentinel Driver Setup Program" window opens.
3. **Select "Function" -> "Install Sentinel Driver."** The path specified in the window should read "sentinel\i386".
4. **Click OK.** When you click OK in the subsequent windows, the program closes.
5. **Restart your PC to activate the new driver.**

Obtaining a License

Use the following procedure to obtain a license to run the Actel DeskTOP Pro software:

1. **Log onto <http://www.actel.com/license/acteldesktop.html> or go to the Actel Web Portal and click the USER SUPPORT HOME tab.** Then, click LICENSE AND REGISTRATION.
2. **Select Actel DeskTOP to register the VeriBest portion of Actel DeskTOP Pro.** You will receive your license at the address you enter in the line below.
3. **Enter the software ID found on the software ID sticker on the back of the Actel DeskTOP Open/Pro CD.**
4. **Enter your FlexLM Security Block ID.** On the FlexLM security block in the package there is a sticker with a line that begins "FLEXID=7-" followed by an eight-digit hexadecimal number. Your Security Block ID is the number following the "FLEX=". For example, if the sticker on the security block reads "FLEXID=7-1A2B3C4D", then your Security Block ID is "7-1A2B3C4D".

5. **Click Next Page and fill in the information requested.** Verify that the information you entered is accurate and submit the registration form.
6. **Return to** <http://www.actel.com/license/acteldesktop.html>
7. **Select Synplify for Actel to register the Synplify portion of Actel DeskTOP Pro.** You will receive your license at the address you enter in the line below.
8. **Enter the software ID found on the software ID sticker on the back of the Actel DeskTOP CD.**
9. **Enter your Security Key #.** On the Synplicity security block in the package there is a sticker with a line that begins "Security Key #:" followed by a four-digit hexadecimal number. For example, if the sticker on the security block reads "Security Key #: 0A1B", then your Security Key # is "0A1B".
10. **Fill in the information requested.** Verify that the information you entered is accurate and submit the registration form. You should receive your license in about a day.

Note: Actel DeskTOP Pro is a software bundle which combines Designer Synplify and Actel DeskTOP Open. You will receive two e-mails with licenses from Actel. One license is for Designer Synplify and the other for Actel DeskTOP Open.

Licensing Terms

The license you receive for the Actel DeskTOP Pro design environment is valid for one year and includes maintenance.

Setting Up the License to Run Synplify and DesignView

Once you have received your license files from Actel, you must add the license file to your system to run the software. Copy the license files attached to the e-mail to a temporary directory and name the files "*license.dat*" for the Actel DeskTOP Open license and "*license.txt*" for the Designer Synplify license. There should be no reason to edit either

file, but if you use an editor such as Notepad, make sure you preserve the file extension of **.dat* for the DeskTOP license file when saving the file after editing the file. Notepad might add a *.txt* extension to the file resulting in *license.dat.txt*. If your license file name changes due to editing with Notepad, open a MSDOS window and rename the file to *license.dat*.

The Actel DeskTOP Pro licensing system works off of the "LM_LICENSE_FILE" and "SYNPLICITY_LICENSE_FILE" environment variables set in the AUTOEXEC.BAT file. Follow the procedure below to install your license file:

- 1. Right-click the My Computer icon on the Windows desktop and select the Properties command.** The System Properties dialog box is displayed.
- 2. Select the Environment tab.**
- 3. Check to see if the LM_LICENSE_FILE or SYNPLICITY_LICENSE_FILE environment variable exists in the System Variables: or User Variables: windows in the Systems Properties dialog box.**

If neither variable exist, follow these steps:

- a. Type "LM_LICENSE_FILE" in the Variable text box.**
- b. Type "C:\flexlm\license.dat" in the Value text box.**
- c. Click Set.**
- d. Type "SYNPLICITY_LICENSE_FILE" in the Variable text box.**
- e. Type "C:\flexlm\license.txt" in the Value text box.**
- f. Click Set.**
- g. Click Apply, then click OK.**
- h. Create a directory called "flexlm" on your C: drive.**
- i. Copy the *license.dat* and *license.txt* files that you saved to the temporary directory to the C:\flexlm directory.**
- j. Restart your computer if NT has problems recognizing the new environment variable.**

If LM_LICENSE_FILE does exist, go to “Setting Up the DeskTOP License to Run with an Existing FlexLM License” on page 29 and follow the steps.

If SYNPLICITY_LICENSE_FILE does exist, follow these steps:

- a. Note the directory and file name that the SYNPLICITY_LICENSE_FILE environment variable points to.**
- b. Close the AUTOEXEC.BAT file.**
- c. Copy the *license.txt* file to that directory and file name.**

Note: This will overwrite your old Synplicity licenses.

Troubleshooting

Go to:

<http://www.actel.com/dt/tech.htm> and click “Licensing & Installation.”

Setting Up the DeskTOP License to Run with an Existing FlexLM License

If you already have a LM_LICENSE_FILE environment variable set to another installed application that requires a FlexLM license, take the following steps to insure that the Actel DeskTOP license sent will work.

- Sometimes another application will append another file name to the environment variable causing a license-order problem. Here is an example of what this may look like:

```
LM_LICENSE_FILE C:\flexlm\license.dat ;  
c:\another_application\license.dat
```

- To solve this issue, complete the following steps:
 - 1. Set LM_LICENSE_FILE environment variable to only ONE file.**

The following is an example:

 - a. Select the LM_LICENSE_FILE variable.**
 - b. Type "C:\flexlm\license.dat" in the Value text box.**

c. Click Set.

d. Click Apply, then click OK.

- 2. Open the other license file(s) with a text editor, such as c:\another_application\license.dat, and COPY ALL of the text contained in the file.**

Note: Do not delete these files as these will become backup files for existing licenses in emergencies.

- 3. Open the *license.dat* file sent for the DeskTOP tools with a text editor.**
- 4. Paste the text copied from the other file(s) on a new line at the **BOTTOM** of the existing text.**
- 5. Save the file.** Repeat these last three steps until you have appended all of the text from the other license files to the *license.dat* file sent for the DeskTOP tools. The end goal is to create a single license file with ALL of the contents of the separate license files.
- 6. Save the *license.dat* file that you have now created by appending all of the contents of the other license files into the C:\flexlm directory.**

Actel DeskTOP Pro Windows 95 Installation Instructions

Installing Actel DeskTOP Pro Software

Follow the procedure below to install the Actel DeskTOP Pro software under Windows 95 from the CD start-up browser screen.

1. Insert the Actel DeskTOP Open/Pro CD.

Note: If the CD start-up browser screen does not start automatically, double-click the setup.exe file at the top level of the CD-ROM.

2. Install VeriBest software by clicking the "Install VeriBest, Inc." button.

3. (Optional) Install Silicon Explorer by clicking the "Install Silicon Explorer" button. If you have purchased the Silicon Explorer hardware for debugging, you can load this software and run it from DesignView.

4. Remove the Actel DeskTOP Open/Pro CD.

5. Insert the Actel Designer CD.

6. Install Actel Designer. Select the VITAL libraries for installation; VHDL simulation requires them. If you skip this step, reinstall the Designer software selecting only the VITAL libraries. Using the VeriBest software, you must compile VITAL libraries for each device family before use.

7. Remove the Actel Designer CD.

8. Insert the Actel DeskTOP CD.

9. Install Synplicity software by clicking the "Install Synplicity" button.

10. Restart your PC after you have installed all components.

Obtaining a License

Use the following procedure to obtain a license to run the Actel DeskTOP Pro software:

1. **Log onto <http://www.actel.com/license/acteldesktop.html> or go to the Actel Web Portal and click the USER SUPPORT HOME tab.** Then, click LICENSE AND REGISTRATION.
2. **Select Actel DeskTOP to register the VeriBest portion of Actel DeskTOP Pro.** You will receive your license at the address you enter in the line below.
3. **Enter the software ID found on the software ID sticker on the back of the Actel DeskTOP Open/Pro CD.**
4. **Enter your FlexLM Security Block ID.** On the FlexLM security block in the package there is a sticker with a line that begins "FLEXID=7-" followed by an eight-digit hexadecimal number. Your Security Block ID is the number following the "FLEX=". For example, if the sticker on the security block reads "FLEXID=7-1A2B3C4D", then your Security Block ID is "7-1A2B3C4D".
5. **Click Next Page and fill in the information requested.** Verify that the information you entered is accurate and submit the registration form.
6. **Return to <http://www.actel.com/license/acteldesktop.html>**
7. **Select Synplify for Actel to register the Synplify portion of Actel DeskTOP Pro.** You will receive your license at the address you enter in the line below.
8. **Enter the software ID found on the software ID sticker on the back of the Actel DeskTOP Open/Pro CD.**
9. **Enter your Security Key #.** On the Synplicity security block in the package there is a sticker with a line that begins "Security Key #:" followed by a four-digit hexadecimal number. For example, if the sticker on the security block reads "Security Key #: 0A1B", then your Security Key # is "0A1B".

10. Fill in the information requested. Verify that the information you entered is accurate and submit the registration form. You should receive your license in about a day.

Note: Actel DeskTOP Pro is a software bundle which combines Designer Synplify and Actel DeskTOP Open. You will receive two e-mails with licenses from Actel. One license is for Designer Synplify and the other for Actel DeskTOP Open.

Licensing Terms

The license you receive for the Actel DeskTOP Pro design environment is valid for one year and includes maintenance.

Setting Up the License to Run Synplify and DesignView

Once you have received your license files from Actel, you must add the license file to your system to run the software. Copy the license files attached to the e-mail to a temporary directory and name the files “*license.dat*” for the DeskTOP Open license and “*license.txt*” for the Designer Synplify license. There should be no reason to edit either file, but if you use an editor such as Notepad, make sure you preserve the file extension of “*.dat” for the DeskTOP license file when saving the file after editing the file. Notepad might add a “.txt” extension to the file resulting in “*license.dat.txt*”. If your license file name changes due to editing with Notepad, open a MSDOS window and rename the file to “*license.dat*”.

The DeskTOP Pro licensing system works off of the "LM_LICENSE_FILE" and "SYNPLICITY_LICENSE_FILE" environment variables set in the AUTOEXEC.BAT file. Follow the procedure below to install your license file:

- 1. Open your AUTOEXEC.BAT file with a text editor.**
- 2. Check to see if the LM_LICENSE_FILE and SYNPLICITY_LICENSE_FILE environment variables exists.**

If neither variable exists, follow these steps:

a. Add the following lines to your AUTOEXEC.BAT file:

```
SET LM_LICENSE_FILE = C:\flexlm\license.dat  
SET SYNPLICITY_LICENSE_FILE=C:\flexlm\license.txt
```

b. Save the file.

c. Create a directory called "flexlm" on your C: drive.

d. Copy the *license.dat* and *license.txt* files that you saved to the temporary directory to the C:\flexlm directory.

e. Restart your PC.

If LM_LICENSE_FILE does exist, go to "Setting Up the DeskTOP License to Run with an Existing FlexLM License" on page 34 and follow the steps.

If SYNPLICITY_LICENSE_FILE does exist, follow these steps:

a. Note the directory and file name that the SYNPLICITY_LICENSE_FILE environment variable points to.

b. Close the AUTOEXEC.BAT file.

c. Copy the *license.txt* file to that directory and file name.

Note: This will overwrite your old Synplicity licenses.

Troubleshooting

Go to:

<http://www.actel.com/dt/tech.htm> and click "Licensing & Installation."

Setting Up the DeskTOP License to Run with an Existing FlexLM License

If you already have a LM_LICENSE_FILE environment variable set in the AUTOEXEC.BAT file from another installed application that requires a FlexLM license, take the following steps to insure that the Actel DeskTOP license sent will work.

- Sometimes another application will append another file name to the environment variable causing a license-order problem. Here is an example of what this may look like:

```
SET LM_LICENSE_FILE = C:\flexlm\license.dat ;  
c:\another_application\license.dat
```

- To solve this issue, complete the following steps:
 1. **Set LM_LICENSE_FILE environment variable to only ONE file. The following is an example:**

```
SET LM_LICENSE_FILE = C:\flexlm\license.dat
```

2. **Open the other license file(s) with a text editor, such as c:\another_application\license.dat, and COPY ALL of the text contained in the file.**

Note: Do not delete these files as these will become backup files for existing licenses in emergencies.

3. **Open the *license.dat* file sent for the DeskTOP tools with a text editor.**
4. **Paste the text copied from the other file(s) on a new line at the **BOTTOM** of the existing text.**
5. **Save the file.** Repeat these last three steps until you have appended all of the text from the other license files to the *license.dat* file sent for the DeskTOP tools. The end goal is to create a single license file with ALL of the contents of the separate license files.
6. **Save the *license.dat* file that you have now created by appending all of the contents of the other license files into the C:\flexlm directory.**

Actel DeskTOP Open Windows NT Installation Instructions

Installing Actel DeskTOP Open Software

Follow the procedure below to install the Actel DeskTOP Open software under Windows NT from the CD start-up browser screen.

1. Insert the Actel DeskTOP Open/Pro CD.

Note: If the CD start-up browser screen does not start automatically, double-click the setup.exe file at the top level of the CD-ROM.

2. Install VeriBest software by clicking the "Install VeriBest, Inc." button.

3. (Optional) Install Silicon Explorer by clicking the "Install Silicon Explorer" button. If you have purchased the Silicon Explorer hardware for debugging, you can load this software and run it from DesignView.

4. Remove the Actel DeskTOP Open/Pro CD.

5. Insert the Actel Designer CD.

6. Install Actel Designer. Make sure the VITAL libraries are selected for installation (that is the default); VHDL simulation requires them. If you skip this step, reinstall the Designer software selecting only the VITAL libraries. Using the VeriBest software, you must compile VITAL libraries for each device family before use.

7. Remove the Actel Designer CD.

Installing the Security Block Driver

For Windows NT systems, you must install the Security Block Driver. To install the driver, perform these steps:

1. Insert the Actel DeskTOP Open/Pro CD.

2. Click on the "Install NT Key Driver" button on the CD start-up browser. The "Sentinel Driver Setup Program" window opens.

3. **Select "Function" -> "Install Sentinel Driver."** The path specified in the window should read "sentinel\i386".
4. **Click OK.** When you click OK in the subsequent windows, the program closes.
5. **Restart your PC to activate the new driver.**

Obtaining a License

Use the following procedure to obtain a license to run the Actel DeskTOP Open software:

1. **Log onto <http://www.actel.com/license/acteldesktop.html> or go to the Actel Web Portal and click the USER SUPPORT HOME tab.** Then, click LICENSE AND REGISTRATION.
2. **Select Actel DeskTOP to register the VeriBest portion of Actel DeskTOP Pro.** You will receive your license at the address you enter in the line below.
3. **Enter the software ID found on the software ID sticker on the back of the Actel DeskTOP Open/Pro CD.**
4. **Enter your FlexLM Security Block ID.** On the FlexLM security block in the package there is a sticker with a line that begins "FLEXID=7-" followed by an eight-digit hexadecimal number. Your Security Block ID is the number following the "FLEX=". For example, if the sticker on the security block reads "FLEXID=7-1A2B3C4D", then your Security Block ID is "7-1A2B3C4D".
5. **Click Next Page and fill in the information requested.** Verify that the information you entered is accurate and submit the registration form.

Licensing Terms

The license you receive for the Actel DeskTOP Open design environment is valid for one year and includes maintenance.

Setting Up the License to Run DesignView

Once you have received your license file from Actel, you must add the license file to your system to run the software. Copy the license file attached to the e-mail to a temporary directory and name the file "*license.dat*". There should be no reason to edit the "*license.dat*" file, but if you use an editor such as Notepad, make sure you preserve the file extension of "*.dat*" when saving the file after editing the file. Notepad might add a "*.txt*" extension to the file resulting in "*license.dat.txt*". If your license file name changes due to editing with Notepad, open a MSDOS window and rename the file to "*license.dat*".

The licensing system works off of the environment variable LM_LICENSE_FILE set in the environment variable dialog box for the System Variables or the User Variables. Follow the procedure below to install your license file:

- 1. Right-click the My Computer icon on the Windows desktop and select the Properties command.** The System Properties dialog box is displayed.
- 2. Select the Environment tab.**
- 3. Check to see if the LM_LICENSE_FILE environment variable exists in the System Variables: or User Variables: windows in the Systems Properties dialog box.**

If LM_LICENSE_FILE does NOT exist, follow these steps:

- a. Type "LM_LICENSE_FILE" in the Variable text box**
- b. Type "C:\flexlm\license.dat" in the Value text box.**
- c. Click Set.**
- d. Click Apply, then click OK.**
- e. Create a directory called "flexlm" on your C: drive.**
- f. Copy the *license.dat* file that you saved to the temporary directory to the C:\flexlm directory.**
- g. Restart your computer if NT has problems recognizing the new environment variable.**

If LM_LICENSE_FILE does exist, go to “Setting Up the License to Run with an Existing FlexLM License” on page 40 and follow the steps.

Troubleshooting

Go to:

<http://www.actel.com/dt/tech.htm> and click “Licensing & Installation.”

Setting Up the License to Run with an Existing FlexLM License

If you already have a LM_LICENSE_FILE environment variable set another installed application that requires a FlexLM license take the following steps to insure that the Actel DeskTOP license sent will work.

- Sometimes another application will append another file name to the environment variable causing a license-order problem. Here is an example of what this may look like:

```
LM_LICENSE_FILE C:\flexlm\license.dat ;  
c:\another_application\license.dat
```

- To solve this issue, complete the following steps:
 1. **Set LM_LICENSE_FILE environment variable to only ONE file.**
The following is an example:
 - a. **Select the LM_LICENSE_FILE variable.**
 - b. **Type "C:\flexlm\license.dat" in the Value text box.**
 - c. **Click Set.**
 - d. **Click Apply, then click OK.**
 5. **Open the other license file(s) with a text editor, such as c:\another_application\license.dat, and COPY ALL of the text contained in the file.**

Note: Do not delete these files as these will become backup files for existing licenses in emergencies.

6. **Open the *license.dat* file sent for the DeskTOP tools with a text editor.**
7. **Paste the text copied from the other file(s) on a new line at the BOTTOM of the existing text.**
8. **Save the file.** Repeat these last three steps until you have appended all of the text from the other license files to the *license.dat* file sent for the DeskTOP tools. The end goal is to create a single license file with ALL of the contents of the separate license files.
9. **Save the *license.dat* file that you have now created by appending all of the contents of the other license files into the C:\flexlm directory.**

Setting Up DeskTOP Open to Use FPGA Express or Synplify

The Actel DeskTOP Open software functions with either Synopsys FPGA Express or Synplicity Synplify. If you have both Actel DeskTOP Open and one of these tools installed, you can select between the two by doing the following:

1. **Open a project in the DeskTOP environment.**
2. **From the tool bar, select Tools -> Options.** In the "Synthesis Configuration" tab, the choices for synthesis engine are displayed.
3. **Select the synthesis engine you wish to use in this window.**

Actel DeskTOP Open Windows 95 Installation Instructions

Installing Actel DeskTOP Open Software

Follow the procedure below to install the Actel DeskTOP Open software under Windows 95 from the CD start-up browser screen.

1. Insert the Actel DeskTOP Open/Pro CD.

Note: If the CD start-up browser screen does not start automatically, double-click the setup.exe file at the top level of the CD-ROM.

2. Install VeriBest software by clicking the "Install VeriBest, Inc." button.

3. (Optional) Install Silicon Explorer by clicking the "Install Silicon Explorer" button. If you have purchased the Silicon Explorer hardware for debugging, you can load this software and run it from DesignView.

4. Remove the Actel DeskTOP Open/Pro CD.

5. Insert the Actel Designer CD.

6. Install Actel Designer. Select the VITAL libraries for installation; VHDL simulation requires them. If you skip this step, reinstall the Designer software selecting only the VITAL libraries. Using the VeriBest software, you must compile VITAL libraries for each device family before use.

7. Remove the Actel Designer CD.

Obtaining a License

Use the following procedure to obtain a license to run the Actel DeskTOP Open software:

- 1. Log onto <http://www.actel.com/license/acteldesktop.html> or go to the Actel Web Portal and click the USER SUPPORT HOME tab.** Then, click LICENSE AND REGISTRATION.

- 2. Select Actel DeskTOP to register the VeriBest portion of Actel DeskTOP Pro.** You will receive your license at the address you enter in the line below.
- 3. Enter the software ID found on the software ID sticker on the back of the Actel DeskTOP Open/Pro CD.**
- 4. Enter your FlexLM Security Block ID.** On the FlexLM security block in the package there is a sticker with a line that begins "FLEXID=7-" followed by an eight-digit hexadecimal number. Your Security Block ID is the number following the "FLEX=". For example, if the sticker on the security block reads "FLEXID=7-1A2B3C4D", then your Security Block ID is "7-1A2B3C4D".
- 5. Click Next Page and fill in the information requested.** Verify that the information you entered is accurate and submit the registration form.

Licensing Terms

The license you receive for the Actel DeskTOP Open design environment is valid for one year and includes maintenance.

Setting Up the License to Run DesignView

Once you have received your license file from Actel, you must add the license file to your system to run the software. Copy the license file attached to the e-mail to a temporary directory and name the file "license.dat". There should be no reason to edit the "license.dat" file, but if you use an editor such as Notepad, make sure you preserve the file extension of "*.dat" when saving the file after editing the file. Notepad might add a ".txt" extension to the file resulting in "license.dat.txt". If your license file name changes due to editing with Notepad, open a MSDOS window and rename the file to "license.dat".

The licensing system works off of the environment variable LM_LICENSE_FILE set in the environment variable dialog box for the System Variables or the User Variables. Follow the procedure below to install your license file:

1. **Right-click the My Computer icon on the Windows desktop and select the Properties command.** The System Properties dialog box is displayed.
2. **Select the Environment tab.**
3. **Check to see if the LM_LICENSE_FILE environment variable exists in the System Variables: or User Variables: windows in the Systems Properties dialog box.**

If LM_LICENSE_FILE does NOT exist, follow these steps:

a. Type "LM_LICENSE_FILE" in the Variable text box

b. Type "C:\flexlm\license.dat" in the Value text box.

c. Click Set.

d. Click Apply, then click OK.

e. Create a directory called "flexlm" on your C: drive.

f. Copy the *license.dat* file that you saved to the temporary directory to the C:\flexlm directory.

g. Restart your computer if NT has problems recognizing the new environment variable.

If LM_LICENSE_FILE does exist, go to "Setting Up the License to Run with an Existing FlexLM License" on page 45 and follow the steps.

Troubleshooting

Go to:

<http://www.actel.com/dt/tech.htm> and click "Licensing & Installation."

Setting Up the License to Run with an Existing FlexLM License

If you already have a LM_LICENSE_FILE environment variable set in the AUTOEXEC.BAT file from another installed application that requires a FlexLM license, take the following steps to insure that the Actel DeskTOP license sent will work.

Sometimes another application will append another file name to the environment variable causing a license order problem. Here is an example of what this may look like:

```
SET LM_LICENSE_FILE = C:\flexlm\license.dat ;  
c:\another_application\license.dat
```

To solve this issue complete the following steps:

1. **Set LM_LICENSE_FILE environment variable to only ONE file.**
The following is an example:

```
SET LM_LICENSE_FILE = C:\flexlm\license.dat
```

2. **Open the other license file(s) with a text editor, such as c:\another_application\license.dat, and COPY ALL of the text contained in the file.**

Note: Do not delete these files as these will become backup files for existing licenses for emergencies.

3. **Open the *license.dat* file sent for the DeskTOP tools with a text editor.**
4. **Paste the text copied from the other file(s) on a new line at the BOTTOM of the existing text.**
5. **Save the file.** Repeat these last three steps until you have appended all of the text from the other license files to the *license.dat* file sent for the DeskTOP tools. The end goal is to create a single license file with ALL of the contents of the separate license files.
6. **Save the *license.dat* file that you have now created by appending all of the contents of the other license files into the C:\flexlm directory.**

Setting Up DeskTOP Open to Use FPGA Express or Synplify

The Actel DeskTOP Open software functions with either Synopsys FPGA Express or Synplicity Synplify. If you have both Actel DeskTOP

Open and one of these tools installed, you can select between the two by doing the following:

- 1. Open a project in the DeskTOP environment.**
- 2. From the tool bar, select Tools -> Options.** In the "Synthesis Configuration" tab, the choices for synthesis engine are displayed.
- 3. Select the synthesis engine you wish to use in this window.**

