Libero SoC Design Suite Software and License Installation Guide

Libero SoC v2024.2

Introduction (Ask a Question)

Welcome to Libero® System-on-Chip (SoC) Design Suite!

Libero SoC Design Suite is Microchip's flagship FPGA software for designing with Microchip's latest power-efficient flash FPGAs, SoC FPGAs, and Rad-tolerant FPGAs.

Libero SoC Design Suite integrates industry-standard Synopsys® Synplify Pro® ME synthesis, and Siemens ModelSim® ME Pro simulation with best-in-class constraints management, debug capabilities, and secure production programming support.

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1. Overview (Ask a Question)

This guide will be your installation partner, providing you with all the necessary information to get Libero® SoC Design Suite up and running. Along with guiding you through the step-by-step installation process, it also explains how to set up licensing. Linux® users will find additional coverage on the packages required to run Libero SoC Design Suite on Linux operating systems, as well as troubleshooting procedures specific to Linux.

Follow these steps to install Libero SoC Design Suite.

1. Meet all system requirements
2. Order and download a Libero license
3. Install the Libero SoC Design Suite software

2. System Requirements (Ask a Question)

You must meet all system requirements to install Libero SoC Design Suite.

To view the current system requirements, see the most recent Libero release notes.

2.1 Supported Product Families (Ask a Question)

For the most current list of supported product families, see the FPGAs and PLDs page on the Microchip website.

Important: The Libero software version 11.9 software branch is in maintenance mode and only critical bug fixes will be made going forward.

2.2 System Memory Requirements (Ask a Question)

A minimum of 16 GB of Random-Access Memory (RAM) is recommended. For implementing designs on MPF500T, MPFS460T, or RTPF500T devices, a minimum of 32 GB of RAM is recommended.

2.3 Compatible Third-Party Simulation Tools (Ask a Question)

For the latest information about the third-party simulation tools compatible with Libero, see the Pre-Compiled Simulation Libraries page on the Microchip website.

3. Ordering and Downloading a License (Ask a Question)

You must have a license to run Libero SoC Design Suite. The following sections describe the types of licenses available, how to request licenses, and how to download licenses.

3.1 Types of Licensing (Ask a Question)

To use the Libero SoC Design Suite, a valid Libero license must be installed.

Microchip offers Libero in tiers. All tiers can be delivered as node-locked licenses or floating licenses. For more information about Libero licenses, visit the Microchip Licensing page.

Tip: Need help selecting the right license for your design? Download the Libero License Selector Guide from the Microchip Licensing page. Other than a few high-value IP cores, most in-house IP cores (DirectCores) are freely available with Libero licenses. For more information, visit our FPGA IP Search page.

Node-Locked Licenses

A node-locked license is locked to a specific hard disk ID. Node-locked licenses are supported on Windows®operating systems.

Important: Remote access is not supported for node-locked Silver, Gold, and Platinum licenses. As a result, you cannot use a Virtual Network Computing (VNC) or Remote Desktop Connection application on one PC to access the PC on which the license is installed.

Floating Licenses

Floating licenses are installed on a physical Windows or Linux network server. Microchip does not support installing a license on virtual machine or cloud-based server. Any Windows or Linux networked client machine can access the license from the server. The floating license is tied to the Ethernet MAC ID (MAC address) of the license server.

3.2 Obtaining a License (Ask a Question)

To obtain a free license, register for a free license on the Microchip Direct website.

There are two ways to obtain a paid license:

- Sign in to Microchip Direct with your business account. This is the preferred way to obtain a Libero license.
- Request a quote from Microchip Direct.

To obtain a paid license, perform the following procedure. In the unlikely event you encounter a license-related issue, create a Microchip Support case:

1. Sign in to or register on the Microchip Technical Support Portal.
2. Scroll to the bottom of the page, and then click the **Support Service** icon.
3. Click the **Create Microchip Support Case** icon and, if prompted, sign in.
4. Under **Let us know how we can help you**, select **Development Tools**, provide a case reason, click **Next**, and then complete the fields in the remaining screens.

3.2.1 Ordering a License from Microchip Direct (Ask a Question)

Ordering a license from Microchip Direct is the preferred way to obtain a Libero license. Before you obtain a license, it is recommended that you download the Libero License Selector Guide to find the appropriate Libero license for your design.

Attention: For users interested in security, the Libero SoC Design Suite is available with a free Silver license that supports PolarFire security devices. For more information, see the Microchip Licensing page.

After you find the license best suited for your requirements, create a business account on the Microchip Direct Preferred Application page to pay for the license with a purchase order or request a quote. It takes from 24 to 48 hours to set up an account. For answers to questions about opening a business account, click here.

To order Libero licenses from Microchip Direct, perform the following procedure:

1. Sign in to Microchip Direct with your business account.
2. Navigate to the FPGA products.
3. Click **Purchase Libero Licenses**.
   A Product Search page lists the Libero licenses. **Best Match** and **Availability** buttons at the right side of the page allow you to sort licenses (default is **Best Match**).
4. Scroll through the Libero licenses until you find the one you want to purchase, then click in the **Quantity** field at the lower right side, enter the number of licenses you want to purchase, and click **Add to Cart**.
5. To purchase additional licenses, repeat step 4.
6. After purchasing all the desired licenses, click the cart icon at the top right of the page.
   The Shopping Cart page appears.
7. Review your order and make any adjustments to it by changing the quantity or removing a license.
8. After confirming your order, click **Proceed to Secure Checkout**.
9. At the next page, confirm the shipping address. Enter your method of payment, and then click **Place Order** at the bottom of the page.
   If you purchased a new license, the requested Software ID and instructions for generating a license are emailed as attachments to the registered email ID in the Microchip Direct portal account. If you purchased a renewal license, you can download the renewed license from your microchipDIRECT account.

3.2.2 Requesting a Quotation (Ask a Question)

Microchip can provide quotations for license purchases using standard and nonstandard prices:

- Standard price quotes: Users who need to generate a quotation copy for budgetary approval from their organization before purchasing the license can request a quotation with standard prices (list price is available on Microchip Direct).
- Nonstandard price quotes: Users requiring a discounted price for a paid DirectCore IP or Libero license order for more than 10 licenses at a time can request a quote with a target price. These quotes are raised on an exception basis only.

To request a quote for standard or nonstandard prices, perform the following procedure:

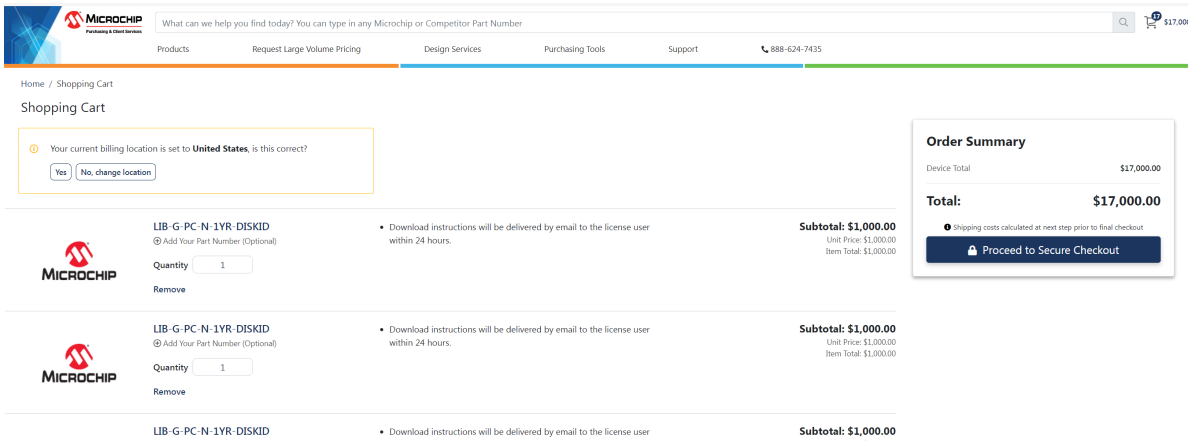
1. Sign in to Microchip Direct or Microchip Direct Quote Request.
2. On the **Request Large Volume Pricing** menu, click **Request Quote for Large Quantity**.

3. Provide the required information in the High-Volume Quote Request form.
4. Click **Submit Request**.
5. For updates on the status of your request, on the **Request Large Volume Pricing** menu, click **Check Quote Status/Place Order** or click Microchip Direct Quote Request.

> **Important:** If the status is **Ready**, it means the quote is approved.

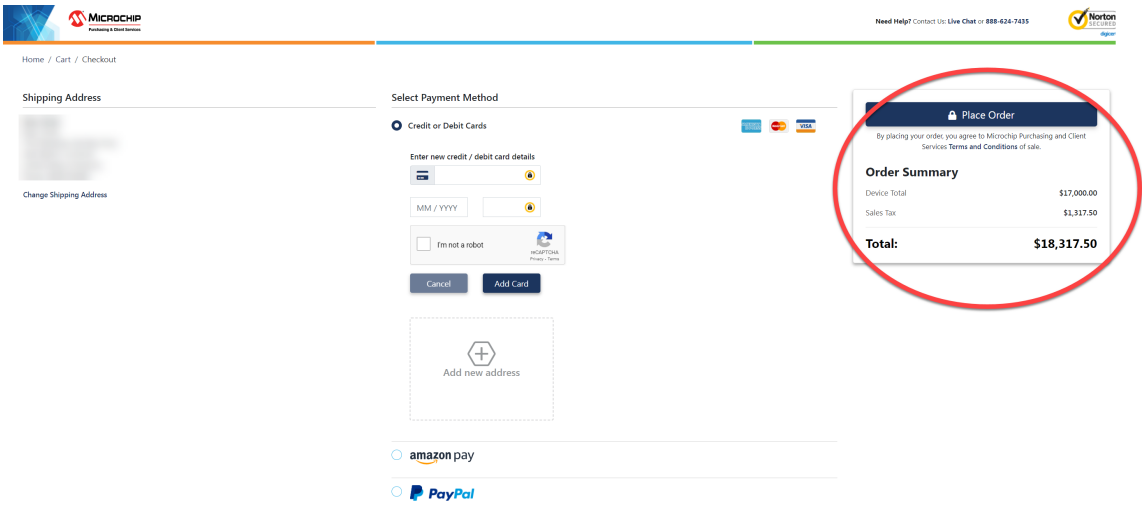
6. Validate the contents of the shopping cart and note the **Quote Number**, then apply the quote and proceed to Secure Checkout for payment. The following figure shows the part number and field where the quote is applied. After you apply quote number, the price changes to the discounted or approved price automatically.

Figure 3-1. Shopping Cart View Before Applying Quote



If the quote is approved for a discounted price, the pricing changes (compare the price in the following figure to the one above). Otherwise, the price does not change.

Figure 3-2. Shopping Cart View After Applying Quote



7. If you have a purchase order, use its number with your approved credit line and receive an invoice within 30 days. Verify the other payment methods allowed by Microchip Direct.

3.3 Downloading Your Libero License (Ask a Question)

After the Libero license ordering process is complete and approved, use the following procedure to download the license.

1. Sign in to Microchip Direct with your business account.
2. Navigate to the Licensing page.
3. Perform one of the following steps:
   - If you have a Libero Gold or Platinum license, click **Register Purchased Software ID**. If prompted for a Disk ID or MAC ID, enter it in the field, and then click **Submit**. Click **Close** to close the Register Product window. Your software license will arrive via email within 45 minutes. You can also download your license on the Manage Your Licenses page (see step 4).
   - If you have a Silver license, click **Request Free License** when prompted. Under the **Register License** column on the Register Free FPGA license page, click **Register** for the license you want to register. If prompted for a Disk ID or MAC ID, enter it in the field, and then click **Register**. Click **Close** to close the Register Product window. Your software license will arrive via email within 45 minutes. You can also download your license from the Manage Your Licenses page (see step 4).
4. After you receive your license, you can manage it on the Licensing page. This page also provides a **Download License** link for each license you purchased, which you can use to download your license instead of using the link provided in the email.

3.3.1 Obtaining a MAC ID (Ask a Question)

Paid licenses are available as node-locked and floating licenses. When installing a floating license, you are prompted for a MAC ID of the license server. Floating license can be used on a Windows or a Linux operating system.

Linux Operating Systems

To obtain the MAC ID on a Linux machine, type the following from the command prompt:

```
% Libero_SoC_v<version>/Libero/bin64/lmhostid
lmhostid - Copyright (c) 1989-2018 Flexera. All Rights Reserved.
The FlexNet host ID of this machine is ""f8f21e5e3165 f8f21e5e3164 a4bf016b7e05 a4bf016b7e04""
Only use ONE from the list of hostids.
```

The Ethernet/MAC ID address appears. The MAC ID address is a 12-character hexadecimal number, similar to **f8f21e5e3165**. Enter the MAC ID into the registration page window where indicated.

Windows Operating Systems

To obtain the MAC ID on a Windows PC, type the following at a DOS or command prompt:

```
C:> lmutil lmhostid
The FLEXnet host ID of this machine is "10604b7456f3"
```

You can also use:

```
C:> <path_to_Libero_SoC_installation\Designer\bin64\lmhostid>
The FLEXnet host ID of this machine is "10604b7456f3"
```

The Ethernet/MAC ID address appears. The MAC ID address is a 12-character hexadecimal number, similar to **10604b7456f3**. Enter the MAC ID into the registration page window where indicated.

3.3.2 Obtaining a Disk ID (Ask a Question)

Paid licenses are available as node-locked and floating licenses. When installing a node-locked license, you are prompted for a disk ID.

A node-locked license is locked to a specific hard disk ID. This ID, also referred to as a disk ID, is the hard drive serial number of the computer on which the license will be installed. A disk ID is an 8-character hexadecimal number of the form xxxx-xxxx (for example, `A085-AFE9`).

When specifying the disk ID, use the disk ID of the system drive (the `C:\` drive), even if you install the Libero SoC Design Suite on another drive. Remote Desktop is not supported.

To obtain your computer's disk ID, type the following command at the command prompt: `C:> Vol C:`

When the disk ID is returned, enter it where indicated on the registration page.

3.4 Setting Up a License (Ask a Question)

After you register for a Libero license on the Microchip website, your license is automatically emailed to the address you provided. A `License.dat` file is attached to the email. Use this file as you perform the installation appropriate for your operating system.

Attention: You must have Admin rights on the installation machine to install the Libero SoC software.

3.4.1 Installing a Node-Locked Disk ID License on Windows (Ask a Question)

Attention: A node-locked license does not support remote desktop login. Only a floating license supports remote desktop login.

1. Create a folder named flexlm on the **c:** drive and save the `License.dat` file in that folder.
2. Open your Environment Variables dialog box:
   a. Right-click **Computer** and select **Properties** to open the System dialog box.
   b. Click **Advanced System Settings** to open the System Properties dialog box.
   c. Click the **Advanced** tab.
   d. Click the **Environment Variables** button.
   e. In Windows Search, select **Settings** (Windows key +w) and search for **Environment Variable**.
   f. Double-click the environment variable for your account to open the Editor.
   g. Open File Explorer, right-click **This PC** , and select **Properties**.
   h. Click **Advanced System Settings**, and then click **Environment Variables**.

   If the `LM_LICENSE_FILE` is already listed in **System variables**, perform the following steps:
   - i. Select the `LM_LICENSE_FILE`, and then click **Edit**.
     ii. Either add the path to the Microchip `License.dat` file after any existing variable value, separated with a semicolon (no space), or replace the existing value.
     iii. Click **OK** to exit System Properties.

   If the `LM_LICENSE_FILE` is not listed in System variables, perform the following steps:
   - i. Under **System Variable**, click **New** to create a new system variable. The New System Variable dialog box appears.
     ii. In the **Variable name** field, type **LM_LICENSE_FILE**.
     iii. In the **Variable value** field, type `c:\flexlm\License.dat` (or the path where you installed the `License.dat` file).

Attention: The path to the installed license software is case sensitive; check for the case of the folder path in which the license is saved.

iv. Click **OK**, and then click **OK** again to save the new Environment Variables and return to the System Properties dialog box.

v. Click **OK** to exit System Properties.

Installation is completed for the Libero SoC tools from Microchip, and those tools are ready for use. If you plan to use the bundled third-party tools, such as Siemens ModelSim ME Pro and Synopsys Synplify Pro, note that in addition to the `LM_LICENSE_FILE` variable, which applies to all vendors, Synopsys license can be set using two vendor-specific variables (see the following table).

Important: Libero SoC versions 12.2 and later do not impose any restriction with the Synplify Pro tool. For Libero SoC versions 12.1 and earlier, Synopsys tools do not work beyond the distance of 50 miles or beyond the geographic locations.

Table 3-1. Variables to Use with Synopsys License

Variable	Description	Variable Name	Variable Value Example
`SNPSLMD_LICENSE_FILE`	For Synopsys tools released in September 2010 and later (2010.09)	`SYNPLCTYD_LICENSE_FILE`	`c:\flexlm\License.dat`
`SYNPLCTYD_LICENSE_FILE`	For Synplify Pro releases before September 2010	`SYNPLCTYD_LICENSE_FILE`	`c:\flexlm\License.dat`

3.4.2 Installing a Floating License on a Windows Server (Ask a Question)

1. On the server machine, save the `License.dat` file into a flexlm folder on your **c:** drive.
2. Download the required license manager daemons to your server platform from www.microchip.com/en-us/products/fpgas-and-plds/fpga-and-soc-design-tools/fpga/licensing#downloads. Under **Documents and Downloads**, click the **Daemons Download** tab and select the appropriate platform download. Microchip recommends placing these files into the same location as the `License.dat` file.
3. Open `License.dat` and edit the `SERVER` line by replacing `<put.hostname.here>` with your hostname. Do not include the brackets. If necessary, change the port number (1702) to any unused port.
4. Libero floating licenses include Libero, Synplify Pro ME, Identify ME, Synphony Model Compiler ME, and ModelSim ME tools. Edit each VENDOR and DAEMON line with the correct path to each vendor daemon, and then save the `License.dat` file. For example:

```
VENDOR snpslmd C:\flexlm\snpslmd DAEMON mgcld C:\flexlm\mgcld DAEMON actlmgrd
C:\flexlm\actlmgrd
```

Important: Libero SoC versions 12.2 and later do not impose any restriction with the Synplify Pro tool. For Libero SoC versions 12.1 and earlier, Synopsys tools do not work beyond the distance of 50 miles or beyond the geographic locations.

5. Log in to the server machine and run the following command from the command prompt to start the lmgrd License Manager on the server machine: `C:flexlm/lmgrd -c C:flexlm/License.dat`

If you prefer to have the License Manager output written to a log file, run the following command at the command prompt:

```
C:flexlm/lmgrd -c <path_to_License.dat>/License.dat -l <path_to_logfile>/license.log
```

3.4.3 Installing a Floating License on a Linux Server (Ask a Question)

To install a floating license on a Linux server, perform the following procedure:

1. On the server machine, save the `License.dat` file.
2. Download the required license manager daemons to your server platform from www.microchip.com/en-us/products/fpgas-and-plds/fpga-and-soc-design-tools/fpga/licensing#downloads. Under **Documents and Downloads**, click the **Daemons Download** tab and select the appropriate platform download. Microchip recommends placing these files into the same location as the `License.dat` file.
3. Open `License.dat` using any editor. Edit the `SERVER` line by replacing `<put.hostname.here>` with your machine hostname. Do not include the brackets.
4. Libero Linux floating licenses include Libero, Synplify Pro ME, Identify ME, Synphony Model Compiler ME, and ModelSim ME Pro tools. Edit each `VENDOR` and `DAEMON` line with the correct path to each vendor daemon, and then save the `License.dat` file.

   Important: Libero SoC versions 12.2 and later do not impose any restriction with the Synplify Pro tool. For Libero SoC versions 12.1 and earlier, Synopsys tools do not work beyond the distance of 50 miles or beyond the geographic locations.

5. Sign in to the server machine and run the following command to start the License Manager:

   ```
   <path_to_lmgrd>/lmgrd -c <path_to_License.dat/License.dat>
   ```

   If you prefer to have the License Manager output written to a log file, run the following command at the command prompt:

   ```
   <path_to_lmgrd>/lmgrd-c <path_to_License.dat>/License.dat -l
   <path_to_logfile>/license.log
   ```

3.4.4 Connecting Windows and Linux Client Machines to the License Server (Ask a Question)

If you installed a floating license, connect your Windows or Linux client machines to the Libero license server. If you installed a node-locked license, you can skip this step.

3.4.4.1 Connecting a PC Client to a Windows or Linux License Server (Ask a Question)

To connect a PC client to a Windows or Linux license, from **Control Panel** > **System** > **System Properties (Advance tab)** > **Environment Variable**, add or modify `LM_LICENSE_FILE` to include `port@hostname`:

- Variable name: LM_LICENSE_FILE Variable
- Value: port@hostname. Example: 1702@sage

For Synplify Pro, check out a license by adding or modifying one of the two environment variables in the following table, depending on the Synplify Pro version used.

Table 3-2. Synplify Pro Licenses

License File	Used for...	Variable Name	Variable Value
SNPSLMD_LICENSE_FILE	Synopsys tools released in September 2010 and later (2010.09)	*SNPSLMD_LICENSE_FILE*	<*port@hostname*> Example: 1702@sage
SYNPLCTYD_LICENSE_FILE	Synplify Pro releases before September 2010	*SYNPLCTYD_LICENSE_FILE*	<*port@hostname*> Example: 1702@sage

3.4.4.2 Connecting a Linux Client to a Windows or Linux License Server (Ask a Question)

To connect a Linux client to a Windows or Linux license server, use the following command to set the environment variables on the Linux CLIENT machine:

```
setenv LM_LICENSE_FILE <port@hostname>
```

Example:

```
setenv LM_LICENSE_FILE 1702@sage
```

For Synplify Pro, to check out a license, add or modify one of the two environment variables in the following table, depending on the Synplify Pro version used.

Table 3-3. Synplify Pro Licenses

License File	Used for...	Variable Name	Example
SNPSLMD_LICENSE_FILE	Synopsys tools released in September 2010 and later (2010.09)	`setenv SNPSLMD_LICENSE_FILE <port@hostname>`	`setenv SNPSLMD_LICENSE_FILE1702@sage`
SYNPLCTYD_LICENSE_FILE	Synplify Pro releases before September 2010	`setenv SYNPLCTYD_LICENSE_FILE <port@hostname>`	`setenv SYNPLCTYD_LICENSE_FILE 1702@sage`

4. Installing Libero SoC Design Suite (Ask a Question)

This chapter describes how to install Libero SoC Design Suite.

4.1 Types of Installations (Ask a Question)

Libero supports the following types of installations:

- Graphical user interface (GUI) installation
- Console installation
- Silent installation

Some installations are permitted on certain operating systems only, as indicated in the following sections.

GUI Installations (Windows and Linux Operating Systems)

A GUI installation allows you to control the installation from start to finish. Unlike a silent installation, which bypasses all levels of user interaction, a GUI installation prompts you to select options during the installation process. A GUI installation is suited for users who want greater control over their Libero installation. Libero GUI installations are available for Windows and Linux operating systems.

Console Installations (Linux Operating System Only)

A console installation is available for Linux users who want to run the installation command from a Linux console. See section Performing a Console Installation (Linux Operating Systems Only).

Silent Installations (Windows and Linux Operating Systems)

A silent (or unattended) installation obviates the need to monitor the Libero installation because no graphical output is displayed and no input from you is required. A silent installation uses either default values or a response file that contains the values for various installer variables that are used to control the installation. Once the silent installation starts, you are not offered any options to change or edit the installation process. A silent installation is suited for scenarios where monitoring and manual input are not required during installation. See section Performing a Silent Installation.

4.2 Downloading Libero SoC Design Suite (Ask a Question)

Download the latest Libero SoC Design Suite from the Libero SoC Design Suite page.

4.3 Installing Libero SoC Design Suite (Ask a Question)

You can install Libero SoC Design Suite on Windows and Linux operating systems.

You can install Libero SoC Design Suite in any drive or folder. Use a unique path for each installation. Microchip recommends you install the software inside a folder on any drive and not directly in a drive. For example, instead of installing the software `E:\`, specify `E:\<some_folder>\` as the installation path.

Important: You must have Admin rights on Windows to install Libero SoC Design Suite.

4.3.1 Performing a GUI Installation on Windows Operating Systems (Ask a Question)

When you install Libero SoC Design Suite on a Windows operating system, you can choose to download the full installer or just the executable file. Installing the full installer allows you to place the software on removable media, and then install it on Windows PCs located in secure environments.

The following procedure describes how to perform a GUI installation on a Windows operating system.

Important: Offline users can perform this procedure when online, but in step 4, click **MegaVault <*version_number*>** for Windows shown below the important note.

1. Make sure your hard drive has at least 25 GB of available disk space.
2. Navigate to the Download Software page.
3. Under **Libero SoC Design Suite**, click **Latest Software**.
4. Scroll down the page until you see **Windows Installers**, and then perform one of the following steps:
   - To install only the executable file, click the **Windows Web Installer** option.
   - To install the full installer, click the **Windows Full Installer** option.
5. To verify your software downloads using MD5 and SHA256 checksums, issue the following commands at the command prompt:
   - MD5: `certutil -hashfile <path_to_installer> MD5`
   - SHA256: `certutil -hashfile <path_to_installer> SHA256`
6. Launch the installation:
   - If you downloaded the Libero installation executable file, double-click it and follow the prompts to complete the installation.
   - If you downloaded the full installer, unzip the file in a new folder, then double-click the shortcut and follow the prompts to complete the installation.
7. To verify your Libero installation, find the script in the `.\scripts\sample` folder and run it through the Libero SoC design flow.

4.3.2 Performing a GUI Installation on Linux Operating Systems (Ask a Question)

When you install Libero SoC Design Suite on a Linux operating system, you can choose to download the full installer or just the executable file. Installing the full installer allows you to place the software on removable media, and then install it on Linux machines located in secure environments.

Attention: Certain Linux operating systems might require you to install dependent libraries. If the installer finds these libraries missing, it alerts you to the missing libraries, and then installs them automatically. You must have admin privileges to install the packages.

The following procedure describes how to perform a GUI installation on a Linux operating system.

Important: For users who prefer to install Libero without connection to the internet, save the full (non-web) Libero installer to a local drive, and then run the installation.

1. Make sure your hard drive has at least 25 GB of available disk space.
2. Navigate to the Download Software page.
3. Under **Libero SoC Design Suite**, click **Latest Software**.

4. Scroll down the page until you see **Linux Installers**, and then perform one of the following steps:
   - To download only the executable file, click the **Linux Web Installer** option.
   - To download the full installer, click the **Linux Full Installer** option.
5. To verify your software downloads using MD5 and SHA256 checksums, issue the following commands at the command prompt:
   - MD5: `% md5sum <path_to_installer>`
   - SHA256: `% sha256sum <path_to_installer>`
6. Launch the installation:
   - If you downloaded the Libero installation executable file, double-click it and follow the prompts to complete the installation.
   - If you downloaded the full installer, unzip the file in a new folder, and then open the folder, double-click the `.sh` file, and follow the prompts to complete the installation.
7. To verify your Libero installation, find the script in the `./scripts/sample` folder and run it through the Libero SoC design flow.

4.3.3 Performing a Console Installation (Linux Operating Systems Only) (Ask a Question)

To perform a console installation on Linux operating systems, perform the following procedure:

1. At the command prompt, type the following command:
   `% <installer> -i console`

   The Console Mode Installation page appears.
2. Press `Enter` to continue.
   The License Agreement appears.
3. Review the license agreement. The installer displays the license agreement one screen at a time. Press `Enter` to view each page and continue. Type `Y` at the end of the agreement to accept and continue:
   a) Specify the installation folder. Do not accept the default path. You must enter the same Microchip parent directory as your past Libero installations. The installer creates a version-specific sub-directory under this parent directory. If this is your first Libero installation, enter a Microchip parent install directory under which you intend to install all future Libero installations. Microchip recommends using `/usr/local/microchip/libero` as your parent installation directory.
   b) Type `Y` to confirm the installation folder. Enter the absolute path for the Libero common directory. A Libero common directory is shared by multiple versions of Libero. Microchip recommends that you use the common directory `/usr/local/microchip/common`.
   c) Enter the absolute path for the Libero common directory. A Libero common directory is shared by multiple versions of Libero. Microchip recommends that you use the common directory `/usr/local/microchip/common`.
   d) Confirm the Absolute Path for the Libero common directory.
   e) Enter the number that corresponds to the software features you want to install.
   f) Press `Enter` to continue.
   The pre-installation summary appears.
   g) Press `Enter` to begin the installation.
4. To verify your Libero installation, find the script in the `./scripts/sample` folder and run it through the Libero SoC design flow.

4.3.4 Performing a Silent Installation (Ask a Question)

A silent installation is a non-interactive installation mode used for installing Libero on multiple hosts that share similar configurations. Unlike a GUI installation, which receives user input in the form of responses to dialogs, a silent installation does not prompt you for input. Instead, a silent installation uses default settings or gets inputs from a response file.

You can perform a silent installation using either default values or custom values specified in a response file.

Performing a Silent Installation Using Default Values

To perform a silent installation using default values, issue the following command from the command line:

```
<installer> -i silent
```

where *<installer>* is the installer for Windows or Linux.

Performing a Silent Installation Using a Response File

If you do not want to accept the default installation settings, you can customize the installation to suit your requirements by using a response file. Generating a response file is an interactive session where your responses to the installer are captured in a response file.

There are two ways to create a response file that the silent installation process will use:

- Automatically using the installer
- Manually using a user-generated text file

Creating a Response File Automatically

To have the installer create a response file, issue the following command:

```
<installer> -r <path_to_response_file>
```

where:

- *<installer>* is the installer for Windows or Linux.
- *<path_to_response_file>* is the location where the response file will be placed after the installer creates it.

Linux example:

```
% ./Libero_SoC_v2023.2.bin -r /tmp/installer_response_file
```

Windows example:

```
setup.exe -r /tmp/installer_response_file
```

Issuing this command starts an interactive installation session where the installer captures your responses in the response file. When the session ends, the file specified as *<path_to_response_file>* is created. It contains a list of parameters, each representing a single prompt.

If you want to edit your responses before running the silent installation, open the response file in a text editor, and then change the parameters to suit your requirements. The figure below shows an example of a response file and the table below the figure describes the parameters.

Creating a Response File Manually

You can also create the response file manually and add the required parameters to the file. Create a text file with the content in the following figure, and then set the parameters to suit

your requirements. For information about what values to specify for each parameter, see the table following the figure. If you exclude a value from a parameter, the default value is used.

Figure 4-1. Sample Response File

```
************************************************

#Installation Flow
#------------------
USER_INPUT_RESULT_1=1
USER_INPUT_RESULT_2=0
USER_INPUT_RESULT_3=0

#Choose Install Directory
USER_INSTALL_DIR=<path for installation>
USER_COMMON_DIR=<path to common directory>

#Choose Install Set
#-------------------
CHOSEN_FEATURE_LIST=Libero,Synplify,ModelsimPro,Identify,SmartHLS
CHOSEN_INSTALL_FEATURE_LIST=Libero,Synplify,ModelsimPro,Identify,SmartHLS
CHOSEN_INSTALL_SET=Custom

************************************************
```

Table 4-1. Response File Contents

Parameter	Description
`USER_INPUT_RESULT_1=1 USER_INPUT_RESULT_2=0 USER_INPUT_RESULT_3=0`	Do not change these parameters.
`USER_INSTALL_DIR=<path for installation>`	Specifies the path location of the installation directory.
`USER_COMMON_DIR=<path to common directory>`	Specifies the path location of the folder for all versions of Libero.
`CHOSEN_FEATURE_LIST=.`	Lists the features that will be installed. To remove a feature from being installed, remove its feature name from this parameter.

Running the Silent Installation with the Response File

After preparing the response file, run the following command from the command line to perform the silent installation on as many hosts as necessary to propagate one configuration across multiple hosts in your enterprise.

```
<installer> -i silent -f <path_to_response_file>
```

where:

- *<installer>* is the installer for Windows or Linux.
- *<path_to_response_file>* is the location where the response file is located.

Linux example:

```
% ./Libero_SoC_v2023.2.bin -i silent -f /tmp/installer_response_file
```

Windows example:

```
setup.exe -i silent -f /tmp/installer_response_file
```

Verifying Your Installation

After performing the silent installation with or without the response file, verify your installation by finding the script in the `.\scripts\sample` folder and running it through the Libero SoC design flow.

4.3.5 Configuring Linux to Detect and Use FlashPro 6 Programmer Hardware (Ask a Question)

If you use Libero on a Linux operating system, perform the appropriate procedure to configure Linux to detect and use FlashPro 6 programmer hardware.

Important: The `fp6_env_install` script creates two files:

- `cysub.conf` (located under `/etc`) — This file contains the list of devices you wish to communicate with CYUSB suite for Linux. If the file does not exist, the only device is FlashPro 6. Otherwise, the device is appended to the existing file.
- `88-cyusb.rules` (located under `/etc/udev/rules.d/`) — This file contains the udev rules for programming tools for allowing users to access the device without `sudo` or `root` access.

Procedure for sudo Users (Preferred Usage)

To configure Linux to detect and use the FlashPro 6 programmer hardware, sudo users must perform the following procedure:

1. At the prompt, type:
   ```
   sudo -
   ```
2. Change directory to `<libero-install path>/bin`
   ```
   cd <libero-install path>/bin
   ```
3. Execute `fp6_env_install`
   - The `cyusb.conf` file is created under `/etc`
   - The `88-cyusb.rules` file is created or modified under `/etc/udev/rules.d`
4. When the script finishes, unplug the FlashPro 6 hardware from the Linux server, and then plug the hardware back in. This enables the updates for the correct modules in the system.

Procedure for non-sudo Users (when Installing FlashPro 6 for the First Time)

To configure Linux to detect and use the FlashPro 6 programmer hardware when using FlashPro 6 for the first time, non-sudo users must perform the following procedure:

1. Change directory to `<libero-install path>/bin`:
   ```
   cd <libero-install path>/bin
   ```
2. Execute `fp6_env_install -t /tmp`
   - The `cyusb.conf` file is created or modified under `/tmp`
   - The `88-cyusb.rules` file is created or modified under `/tmp`
3. After the files are created, ask a user with `sudo` access to copy the files.

5. Using Libero SoC Design Suite in a Secure Environment (Ask a Question)

If you use Libero SoC Design Suite in a secure environment that does not have access to an Internet connection, Microchip recommends you reconnect occasionally to check for software updates and download new IP cores to take advantage of new features, enhancements, and fixes.

5.1 Changing Vault and Repository Locations (Ask a Question)

To change vault and repository locations, perform the following procedure:

1. Launch Libero SoC.
2. From the **Project** menu, select **Vault/Repositories Settings**.
3. Click **Vault location**.
4. Browse to the new vault location.
5. Click **OK**.

5.2 Disabling Internet Access to Libero (Ask a Question)

You can disable access to the Internet or disable the Libero automatic software update feature. This is useful if you use Libero SoC Design Suite in a secure environment. This can also reduce the wait time when launching Libero. However, disabling Internet access will not allow you to receive the latest Libero updates until you connect to the Internet.
To disable Internet access to Libero, perform the following procedure:

1. On the **Project** menu, click **Preferences**.
   The **Preference** dialog appears.
2. Click **Software update**, and then click either **Do not check for updates** or **Remind me at startup**.
3. Click **Internet Access** and uncheck **Allow Access to Internet**.
4. Click **OK**.

5.3 Downloading IP Cores (Ask a Question)

There are two methods to download IP Cores:

- Downloading and Installing MegaVault without an Internet Connection
- Downloading IP Cores with an Internet Connection

5.3.1 Downloading and Installing MegaVault without an Internet Connection (Ask a Question)

The MegaVault application contains a list of Microchip IP cores. When you install the application, you can add the IP cores to the existing vault or to a new vault on the local machine or server.

The following procedure describes how to download and install MegaVault without an internet connection. Use this procedure if the machine on which Libero is installed does not have internet access or has security restrictions that prevent you from downloading IP cores from the Libero Catalog.

To download and install MegaVault without an internet connection, perform the following procedure:

1. Download and install MegaVault installer for the required Libero SoC versions:
   - MegaVault v12.0 and later versions
   - MegaVault v11.9 and earlier versions
2. Install the MegaVault application and change the Vault location (see Changing Vault and Repository Locations).

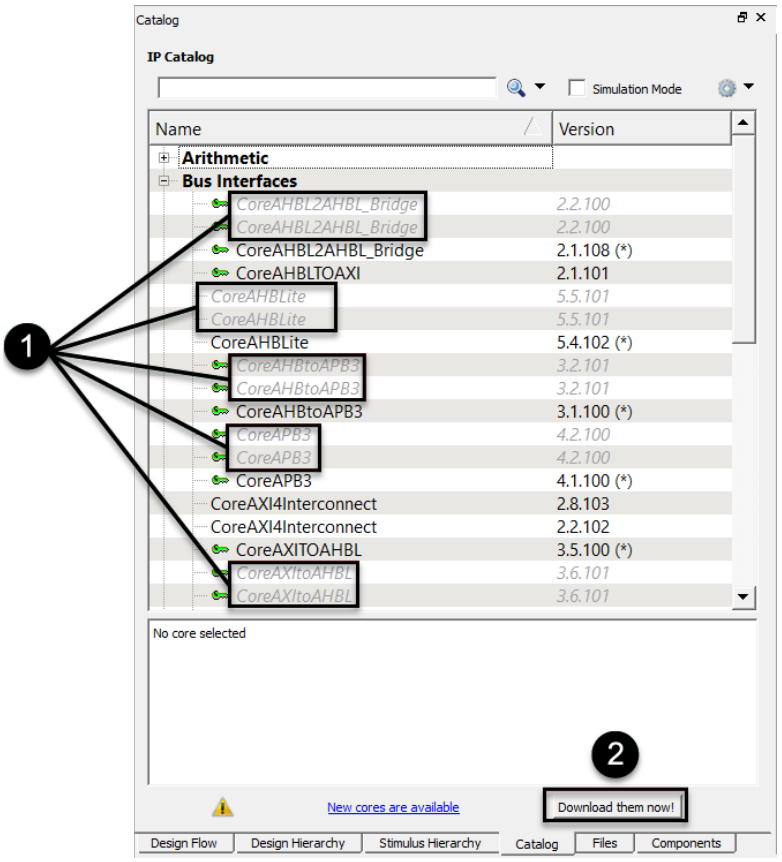
3. Download individual IP cores (`.zip` files) into the Vault. To obtain specific cores and versions, download the `.cpz` file and import it into the Libero Vault. For a complete list of cores, see the following core indexes:
   - DirectCores
   - SgCores
   - Firmware cores
4. After downloading the cores, import them into Libero SoC:
   a) Launch the Libero SoC software.
   b) From the **Windows** menu, select **View > Catalog** to open the **Catalog** window.
   c) From the **Option** button, select **Add Core to Vault**.
   d) Browse to the downloaded `.cpz` file, and then import it to the Vault location specified in your Libero software. The imported cores are added to the Vault location specified in your Libero software.

5.3.2 Downloading IP Cores with an Internet Connection (Ask a Question)

There are two methods to download individual IP cores with an internet connection:

- Download individual IP cores by double-clicking them one at a time. See **1** highlighted in the following image.
- Download all the available IP cores in the Libero Catalog by clicking **Download them now!**. See **2** highlighted in the following image.

Figure 5-1. Downloading Cores from the Catalog



5.3.3 Installing Paid IP Cores (DirectCores) (Ask a Question)

To install paid IP cores (DirectCores), perform the following procedure:

1. Generate a new IP Core license based on your purchased license part number. For more details, see Ordering and Downloading a License.
2. When you receive the license file, open the IP Core `license.dat` file, copy the content, and then add it to the original Libero software license file on the similar Libero license option (Disk ID or MAC ID). For example, if you purchased a node-locked license for the IP Core, add the IP core license file content to the original Libero node-locked license file.

5.4 Downloading Firmware Cores (Ask a Question)

You can download firmware cores and store them in the same vault location as the DirectCore and Sg cores.

To download firmware cores and store them in the same vault location as the DirectCore and Sg cores, perform the following procedure:

1. Access the Microchip Firmware Catalog.
2. Scroll to the bottom of the page, and then click **Software Downloads**.
3. Under **Firmware Catalog**, click the link to download the Firmware Catalog.

   After you perform this procedure, the Internet connection is no longer required to use Libero.

6. Troubleshooting Linux Installations (Ask a Question)

If the following conditions appear when installing Libero SoC Design Suite on Linux, see the appropriate topics for more information.

- Are There Any Special Requirements to Use Libero SoC Design Suite on Linux?
- Can a Libero License be Hosted on a Virtual Machine?
- Designer GUI Appears Stretched While Running on Linux
- Difficulty Running SynplifyPro Daemon
- Double Quotes Around Vault Location Path on Linux installation
- Downloading IP Cores
- Error: Could not locate the Motif Library in LD_LIBRARY_PATH
- Error While Installing Linux Packages
- How Can I Fix the Error “snpslmd exited with status 255()” That Appears in the Debug Log File while Hosting a License on a Server?
- JRE Libraries are Missing or Not Compatible
- Libero GUI Fails to Start When Preloading a Project
- Libero GUI is Distorted on Older Versions of Red Hat 5 Through VNC
- Libero Installation Registry File Shows Uninstalled Directories
- Libero Installer Stalled on Red Hat/CentOS 6.x
- Message Appears During Installation: /tmp does not have enough disk space
- Missing libfontconfig.sol.1 Libraries
- Missing libfreetype.so.6 Libraries (Libero)
- Missing libgthread-2.0.so.0 Libraries (Libero)
- Missing libncurses.so.5 Libraries (ModelSim)
- Missing libpng.so.6 Libraries
- Missing libXrender Libraries
- Missing libXtst Library During Libero Installation
- Missing MOTIF Libraries (Libero)
- Possible Errors Related to Linux SSSD
- Segmentation Fault "$exedir/$exename" "$@" Message
- Starting the License Manager Generates Error on Linux
- Viewing PDF Files and Online Help Files
- Warning: Failed to Contact Web Repositories
- Warning: Ignoring ‘modelism.log’ File Log File Name from Tool’s Profile
- Warning: Unknown Locale
- What Should I Do if an Error Message is Reported in the Debug Log File when a Floating License Daemon is Started on a Server?
- What Should I Do if the "Unable to find a valid Actel tool license [-5, -5, -5, -5]" Error Appears?
- While Running Synthesis, How Can the "Microchip License Error [-10,32]. Feature has expired” Error be Corrected?
- While Using a Floating License to Run Synthesis, How Can the "FlexNet licensing error: -8,234" be Corrected?

- Wind/U Error: Failed to connect to the registry on server
- Wind/U X-toolkit Error: wuDisplay: Can't open display
- X Libraries not in LD_LIBRARY_PATH (Libero)

6.1 Are There Any Special Requirements to Use Libero SoC Design Suite on Linux? (Ask a Question)

To run Libero SoC on Linux, perform the following procedure:

1. Meet all system requirements.
2. Install the OPENMOTIF Graphical Library.
3. Open the file `/etc/gdm/gdm.conf` and change line 267 from `DisallowTCP = true` to `DisallowTCP = false`.
4. Run the command: `export DISPLAY=:0`.

Attention: If your system does not have the required fonts installed, you might also have to install the x11 fonts.

6.2 Can a Libero License be Hosted on a Virtual Machine? (Ask a Question)

Microchip does not support hosting licenses on a virtual machine. It is recommended to use a physical machine as the license server.

6.3 Designer GUI Appears Stretched While Running on Linux (Ask a Question)

Important: Designer is for IGLOO®, SmartFusion®, Fusion, and ProASIC3® devices only.

Symptom: When you directly sign in to a Linux machine, some Designer GUIs appear to be stretched.

Cause: There are issues with mismatched color depths on the GUI and desktop.

Resolution: Change the desktop color depth. For Linux access via VNC, change the color depth of the vncserver to 8, 16, or 24. For more information, see the vncserver manual.

6.4 Difficulty Licensing Synplify Pro® Daemon on Linux OS (Ask a Question)

Symptom: Linux customers might encounter difficulties while running the Synplify Pro daemon.

Resolution: Install the following hybrid binary schemes:

- Synplify Pro: 32-bit binary scheme
- Libero SoC: 64-bit binary scheme

6.5 Double Quotes Around Vault Location Path on Linux Installation (Ask a Question)

Symptom: After console mode installation on Linux, the vault location shown under the **Project > vault/repositories** setting shows `<path install libero>/bin "<path common directory>/vault"`. The double quotes around the vault path location should be removed.

Cause: The `install.def` file has double quotes around the variable for the vault location.

Resolution: Perform the following procedure:

1. Exit Libero.

2. At the Linux shell prompt, go to *<Libero_installed_path>*/data directory:
   % cd *<Libero_installed_path>*/data
3. At the Linux shell prompt, issue the sed command to remove the double quotes in the install.def file:

```
% sed 's/"//g' install.def > tmp.def
% cp tmp.def install.def
% rm tmp.def
```

4. Restart Libero, and then confirm that the double quotes around the vault location path have been removed.

6.6 Error: Could not locate the Motif Library in LD_LIBRARY_PATH (Ask a Question)

Symptom: The following error message appears:

```
Error: Could not locate the Motif library in LD_LIBRARY_PATH
```

Cause: Libero uses Motif Graphical Toolkit Library for its graphical interface on Linux. The Red Hat Enterprise Linux operating system installation may not include a Motif Library.

Resolution: If you have the Motif Library installed, the environment variable LD_LIBRARY_PATH should point to the location of the Motif Library. Make sure that the path of the Motif Library is contained in the LD_LIBRARY_PATH environment variable. You can add the path with the following command:

```
set LD_LIBRARY_PATH = (<path to Motif Library> $LD_LIBRARY_PATH)
```

If you are not sure whether you have the Motif Library installed, issue the following commands, which list which Motif Library is installed: rpm -qa | grep -i motif.

The command rpm -qal | grep -i motif lists the files and paths associated with the Motif Library listed above (notice the extra l in the second command).

If you do not have a Motif Library installed, download and install OPEN Motif for free from www.opengroup.org/openmotif/.

Libero Linux tools expect to see the libXm.so.3 package of the Motif Library. Different versions of OPEN Motif might install libXm.so.4 or others that are not compatible with Libero. Make sure the OPEN Motif version used installs libXm.so.3. One sample version that provides libXm.so.3 is openmotif v2.2.3. Because Libero is a 32-bit application, you must use the 32-bit Motif Library even if the computer is running a 64-bit operating system.

6.7 Error While Installing Linux Packages (Ask a Question)

Symptom: The following error message appears while installing Linux packages:

```
Protected multilib versions...
```

Cause: There is package incompatibility between i686 (32-bit) and x86_64 (64-bit) packages when 32-bit Linux packages are installed.

Resolution: Upgrade the packages to 64-bit, and then install the 32-bit package (for example, for the gtk2 package). The commands are:

```
% sudo yum upgrade gtk2
```

```
% sudo yum install gtk2.i686
```

6.8 How Can I Fix the Error "snpslmd exited with status 255()" That Appears in the Debug Log File while Hosting a License on a Server? (Ask a Question)

Symptom: The following error message appears in the debug log file while hosting a license on a server:

```
snpslmd exited with status 255()
```

Cause: This error occurs when there is a missing certificate for Synplify in Windows.

Resolution: Download the certificate from Digicert website.

6.9 JRE Libraries are Missing or Not Compatible (Ask a Question)

Symptom: The following Libero installer error message appears:

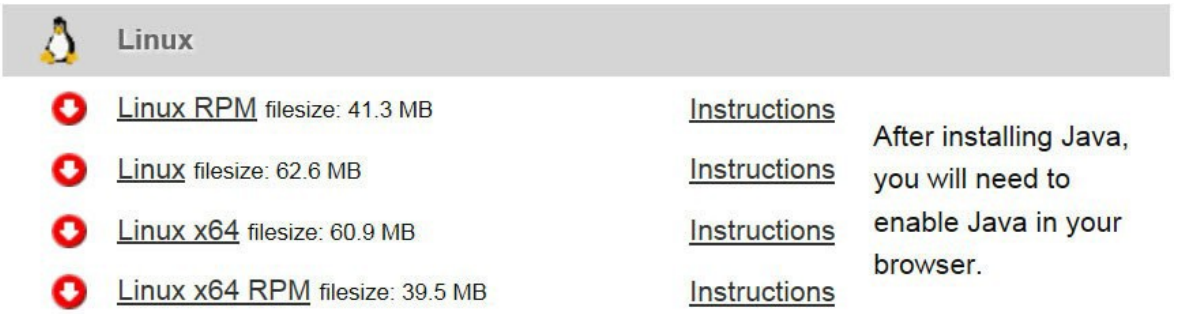
```
JRE Libraries are Missing or Not Compatible
```

Cause: The installer script requires Java Libraries that are missing.

Resolution: Perform the following procedure:

1. Go to the following Java download website and install the missing Java libraries: `http://www.java.com/en/download/manual.jsp#lin`
2. To download the 32-bit version, select **Linux RPM**. Instructions for installing the RPM are under the **Instructions** link to the right of the **Linux RPM** link.
3. To download the 64-bit version, select **Linux x64 RPM**. Instructions for installing the RPM are under the **Instructions** link to the right of the **Linux x64 RPM** link.

Figure 6-1. Java Download Website



Important: Alternatively, you can install the latest OpenJDK JRE as follows:

```
% su
% yum install java
```

4. If the installer still fails and you are using CentOS 6, run the installer as follows: `LiberoSoc_v<version>Linux_bin LAX_VM <path_to_JRE>/java.exe`. This forces the Libero Linux installer to use the Java executable in the specified path.

6.10 Libero GUI Fails to Start When Preloading a Project (Ask a Question)

Symptom: Your most recent project file might have been corrupted and caused Libero to crash while trying to open the corrupted project file.

Resolution: To change your user settings to prevent Libero from automatically opening your last project when it invokes, perform the following procedure:

1. Open `~/.actel/libero.def`.

2. Add the following line to the file: `data IDE_OPEN_MRU_PROJECT 0`
3. Start Libero using `<path_to_libero_install>/bin/Libero`.

6.11 Libero GUI is Distorted on Older Versions of Red Hat 5 through VNC (Ask a Question)

Symptom: The Libero GUI appears distorted when VNC is used with Linux Red Hat versions older than v5.3.

Cause: When using VNC and Linux Red Hat v5.2 or older, Libero GUI, fonts and background colors might appear slightly faded or fuzzy. This issue is not unique to Libero, but affects all Qt-based software including Synplify Pro. The problem is caused by the VNC server (Xvnc) not loading Xrender by default in older versions of Red Hat Enterprise Linux (RHEL) v5.

Important: There should be no issue when using Linux RHEL 5 (Tikanga) 5.3 to 5.75 (32-bit and 64-bit).

Resolution: When using RHEL v5.2 and older with VNC, Microchip has tested and recommends using Exceed 11 if possible. This version of Exceed is still on the support list at OpenText.

OR

Upgrade to a newer version of VNC server (Xvnc) that enables Xrender by default. One version that has been tested is Tiger (an open source vncserver that is available from tigervnc.org/) VNC v1.2.0 instead of the default VNC server on RHEL 5.2.

6.12 Libero Installation Registry File Shows Uninstalled Directories (Ask a Question)

Symptom: The **Libero installer** dialog shows existing installation instances that had been uninstalled.

Cause: The Libero installer keeps installation instances in its registry file kept at the user home location by the name `.com.zerog.registry.xml`. After each instance is uninstalled, the instance properties lines in the registry file do not get deleted as expected. Upon subsequent installation, the installer shows the previous installations still exist.

Resolution: Remove the installation properties lines in the registry file.

Example of the registry file:

```
<product name="Libero SoC v11.8" id="11d9aae4-1f0b-11b2-ad7a-efd5e774d882"
version="11.8.0.119" copyright="2013" info_url="" support_url="" location="/home/mikej/prod/
Libero_v11.8" last_modified="2020-01-24 02:37:58">
<![CDATA[]]>
<vendor name="Microchip." id="11d9b6f2-1f0b-11b2-ad7a- efd5e774d882" home_page="http://
www.actel.com" email=""/>
…..
</product>
```

After carefully removing the above lines from the registry file, save and exit the file, and then restart the Libero installer. The previous installation will not appear.

6.13 Libero Installer Stalled on Red Hat/CentOS 6.x (Ask a Question)

Symptom: When installing Libero on Red Hat/CentOS 6.x machines, installation starts, but then stalls half-way through. In the System Monitor, the Waiting Channel of the process is `futex_wait_queue_me`.

Resolution: Update the system kernel to version 2.6.32-504.16.2.el6.x86_64.

6.14 Message Appears During Installation: /tmp does not have enough disk space (Ask a Question)

Symptom: The following message appears during installation:

```
/tmp does not have enough disk space
```

Cause: The Installer ran out of disk space in `/tmp` and tried to use `/home/user` instead, which had less disk space than required.

Resolution: At the Linux prompt, set the environment variable `IATEMPDIR` to a disk location that has sufficient disk space:

- For Borne Shell (sh), Korn Shell (ksh), bash, and zsh users:
  ```
  % IATEMPDIR=/your/free/space/directory
  % export IATEMPDIR
  ```
- For C-shell (csh) and tcsh users:
  ```
  setenv IATEMPDIR= /your/free/space directory
  ```

6.15 Missing libfontconfig.sol.1 Libraries (Libero) (Ask a Question)

Symptom: Libero has a dependency on the libfontconfig libraries, but cannot find them.

Resolution: Install the following libfontconfig libraries:

For Red Hat: `% sudo yum install fontconfig-2.8.0-3.el6.i686`

For CentOS: `% sudo yum install fontconfig-2.8.0-5.el6.i686`

6.16 Missing libfreetype.so.6 Libraries (Libero) (Ask a Question)

Symptom: Libero has a dependency on the libfreetype libraries, but cannot find them.

Resolution: Install the current freetype libraries:

```
% sudo yum install freetype-2.3.11-14.el6_3.1.i686
```

6.17 Missing libgthread-2.0.so.0 Libraries (Libero) (Ask a Question)

Symptom: Libero has a dependency on the glib2 libraries, but cannot find them.

Resolution: Install the glib2 package:

```
% sudo yum install glib2.i686
```

> **Attention:** If the yum install command errors-out due to a version conflict with the x86_64 version already installed, use the following `yum update` command instead of the one above:
> ```
> % sudo yum update glib2
> ```

6.18 Missing libncurses.so.5 Libraries (ModelSim) (Ask a Question)

Description: ModelSim Simulator has a dependency on the libncurses.so.5 libraries, but cannot find them.

Solution: Install the current package version of ncurses libraries:

```
% sudo yum install ncurses-libs.i686
```

6.19 Missing libpng.so.6 Libraries (Ask a Question)

Symptom: Libero v12.2 and earlier require the installation of the libpng12.x86_64 system package.

Resolution: Install the libpng12.x86_64 library:

```
% sudo yum install libpng12.x86_64
```

6.20 Missing libXrender Libraries (Ask a Question)

Symptom: Libero has a dependency on the libXrender libraries, but cannot find them.

Resolution: Install the current libXrender libraries:

```
% sudo yum install libXrender.i686
```

6.21 Missing libXtst Library During Libero Installation (Ask a Question)

Symptom: Libero installer crashes with the following message:

```
Invocation of this Java Application has caused an InvocationTargetException. This application
will now exit. (LAX)
Stack Trace: java.lang.UnsatisfiedLinkError:
/tmp/install.dir.8046/Linux/resource/jre/lib/i386/xawt/libmawt.so: libXtst.so.6: cannot open
shared object file: No such file or directory
```

Cause: The libXtst system library is missing.

Resolution: Install the libXtst.i686 library:

```
% sudo yum install libXtst.i686
```

Important: This issue exists only for Libero SoC versions 12.0, 12.1, and 12.2.

6.22 Missing MOTIF Libraries (Libero) (Ask a Question)

Symptom: Libero has a dependency on the MOTIF libraries, but cannot find them.

Resolution: Install the following MOTIF libraries:

CentOS 5/Red Hat: `% sudo yum install openmotif`

CentOS 6/Red Hat: `% sudo yum install openmotif22`

CentOS7/Red Hat 7: `% sudo yum install motif`

6.23 Possible Errors Related to Linux SSSD (Ask a Question)

Symptom: If you configure SSSD for central authentication, several applications, such as Firefox or Adobe, might not start and the following errors are generated when running Designer:

```
Wind/U Error (251): Function RegPingDaemon - A fatal registry I/O failure has occurred. A
registry daemon may not be running. Restart your application and verify that a registry
daemon is running.
Wind/U Error (251): Function RegOpenKeyExA - A fatal registry I/O failure has occurred. A
registry daemon may not be running. Restart your application and verify that a registry
daemon is running.
Wind/U Error (251): Function RegPingDaemon - A fatal registry I/O failure has occurred. A
registry daemon may not be running. Restart your application and verify that a registry
daemon is running.
Wind/U Error (251): Function RegOpenKeyExA - A fatal registry I/O failure has occurred. A
registry daemon may not be running. Restart your application and verify that a registry
daemon is running.
```

Cause: To access the password and identity cache, 32-bit applications require a 32-bit version of SSSD even on 64-bit systems.

Resolution: If a 32-bit version of SSSD is not available, but the system is configured to use the SSSD cache, 32-bit applications can fail to start.

Customers on RHEL/CentOS v6.8 or higher who use System Security Services Daemon (SSSD) for authentication should run the following command to install system package sssd-client.i686:

```
% sudo yum install sssd-client.i686
```

For more information, see: access.redhat.com/documentation/en-us/red_hat_enterprise_linux/6/html/deployment_guide/installing-sssd-tools

6.24 Segmentation Fault "$exedir/$exename" "$@" Message (Ask a Question)

Scenario 1

Symptom: When you invoke Libero SoC v10.1 on a machine running Linux Red Hat v5.4 (32- or 64-bit), Libero fails to come up and a crash with segmentation fault message is issued. For example:

```
<line 67: 10617 Segmentation fault "$exedir/$exename" "$@">
```

Resolution: The templates file at `<Installation-path-to-libero-10.1>/data/catalogs/templates.xml` may get corrupted and cause the crash. To resolve this issue, rename the file at

`<Installation-path-to-libero-version>/data/catalogs/templates.xml` to templates.xml.ori. Make sure there is enough disk space in the user's home directory, ~<user_name>.

Run the `check_linux_req` script to confirm that all required packages have been installed on the system.

Scenario 2

Symptom: Multiview Navigator errors are reported when opening the Constraints Editor, and the following messages appear on the Linux terminal when the Floorplan Constraints Editor is opened:

```
Start Server 1
Start Server 2
Failed to open Def Table: 9 Failed to open Def Table: 8 Failed to open Def Table: 12
Running in orphan mode!
```

The following message appears on exiting MVN and a core file is created:

```
…/bin/mvn: line 69: 1675 Segmentation fault (core dumped) "$exedir/../lib/$exename" "$@"
```

Resolution: You can ignore these errors.

6.25 Starting the License Manager Generates Error on Linux (Ask a Question)

Symptom: When running lmgrd to start the License Manager on Linux systems, the system generates the following error message:

```
12:39:28 (actlmgrd) Vendor daemon can't talk to lmgrd (License server machine is down or not
responding. (-96,7:2 "No such file or directory"))
12:39:28 (actlmgrd) EXITING DUE TO SIGNAL 37 Exit reason 5
```

Cause: The host is not recognized due to a problem in the `/etc/hosts` file on the Linux system.

Resolution: Perform the following procedure:

1. At the Linux prompt, edit the `/etc/hosts` file and add the following lines:
   ```
   # IP address Hostname Alias
   127.0.0.1 localhost <hostname>
   ```

   Important: `<hostname>` is the name of the Linux system.

2. Restart lmgrd.

6.26 Viewing PDF Files and Online Help Files (Ask a Question)

To view online Help files and PDF files, you may need to set environment variables `LINUX_HTMLREADER` to the full path of your web browser in your terminal before invoking Libero. For example:

csh (C-shell):

```
setenv LINUX_HTMLREADER /usr/bin/firefox
```

sh (Borne Shell)/ ksh (Korn Shell):

```
LINUX_HTMLREADER=/usr/bin/firefox; export LINUX_HTMLREADER
```

If you do not set the environment variable, some HTML files, such as the online help, will not be viewable from within Libero.

6.27 Warning: Failed to Contact Web Repositories (Ask a Question)

Symptom: The following warning message appears in the Libero catalog window:

```
Warning: Failed to contact Web Repositories
```

Cause: This message can occur for any of the following reasons:

- You do not have a connection to the Internet.
- You do not have write permission to the disk location you have set your vault to.
- Your vault location runs out of disk space. (For the Linux environment, The Libero vault location is set by default to your user directory in `~/.actel/vault`. If your work site imposes quota restrictions on the size of user directories, you user directory may run out of disk space).
- A firewall prevents access to the Web Repositories.
  Resolution: Perform the following procedure:
  1. Check that you have an Internet connection.
  2. Check that you have write permission to the vault location or change your vault location setting to a location to which you have write permission (**Project** > **Vault/Repositories Setting** > **Vault location**).
  3. Increase the disk space for the vault location to a minimum of 850 MB.
  4. Contact your IT department about firewall issues.

6.28 Warning: Ignoring 'modelsim.log' Log File Name from Tool's Profile (Ask a Question)

Symptom: The ModelSim ME Pro tool fails during sample design flow script with the following warning message:

```
Warning:  Ignoring 'modelsim.log' log file name from tool's profile. Using
'testbench_presynth_simulation.log' instead.
Calling ModelSim Pro Edition simulator for pre-synthesis simulation.
Starting Simulation...
Error:  Simulation failed.
Error:  The command 'run_tool' failed.
Pre-Synthesis simulation -> FAILED
TEST RUN FAILED
```

Cause: This issue might appear randomly in some scenarios.

Resolution: Delete the `.actel` directory under the user home.

6.29 Warning: Unknown locale (Ask a Question)

Symptom: The following warning message appears:

```
Warning (241): Unknown locale specified locale:en_US.iso885915 LANGUAGE: UNDEFINED
SUBLANGUAGE: Wind/U Warning (241): Unknown locale specified locale: en_US.iso885915
LANGUAGE:UNDEFINED SUBLANGUAGE:
```

The four tabs on the lower left side of the GUI are also displayed incorrectly.

Cause: An incorrect language setting is configured on the operating system.

Resolution: Use the following command to set the locale `[elcap]`:

```
% setenv LANG en_US
```

Attention: If you experience this problem frequently, add the above command to your shell setup (such as `.cshrc` or `.bashc`) file.

6.30 What Should I Do if an Error Message is Reported in the Debug Log File when a Floating License Daemon is Started on a Server? (Ask a Question)

Symptom: The following error message appears in the debug log file when a floating license daemon starts on a server:

```
(snpslmd) Error: Incompatible vendor daemon found. The vendor daemon is not supported in
version
Error: Please upgrade to the latest SCL version. Go to www.synopsys.com/support/licensing-
installation-computeplatforms/licensing.html.
```

Cause: The error does not interfere with the Libero flow and can be caused by the following reasons:

- The Synopsys tools (SynplifyPro) verifies all the license daemons in a license file.
- SynplifyPro recognizes only the Synopsys license daemon snpslmd, and reports the other daemons as incompatible.
- The Microchip license file consists of three license daemons (actlmgrd, saltd, and snpslmd). Synopsys tools always issue two incompatible error messages: one for actlmgrd and the other for saltd. Therefore, these incompatible error messages can be safely ignored.

6.31 What Should I Do if the "Unable to find a valid Actel tool license [-5, -5, -5, -5]" Error Appears? (Ask a Question)

Symptom: The following error message appears:

```
Unable to find a valid Actel tool license [-5, -5, -5, -5]
```

Resolution: Perform the following procedure:

1. Check whether the environment variable `LM_LICENSE_FILE` is set properly.
2. Check whether the supported Libero version for this license is used.
3. Download the latest daemons version available on Libero SoC Licensing.

6.32 While Running Synthesis, How Can the "Microchip License Error [-10,32]. Feature has expired" Error be Corrected? (Ask a Question)

Symptom: While running Synthesis, the following error message appears:

```
Microchip License Error [-10,32]. Feature has expired
```

Cause: The environment variable `LM_LICENSE_FILE` has not been set.

Resolution: Set the variable (see section Installing a Node-Locked Disk ID License on Windows).

6.33 While Using a Floating License to Run Synthesis, How Can the "FlexNet licensing error: -8,234" be Corrected? (Ask a Question)

Symptom: The following message appears:

```
FlexNet licensing error: -8,234
```

Cause: The environment variable `LM_LICENSE_FILE` is wrongly set to a node locked license format.

Resolution: Set the environment variable for floating license using the format *<port_no>@<hostname>*.

6.34 Wind/U Error: Failed to connect to the registry on server (Ask a Question)

Symptom: The following error message appears:

```
Wind/U Error: Failed to connect to the registry on server [server_name]
```

Cause: There might be a Linux security setting that is preventing Libero from connecting to the Wind/U Registry. Typically, this connection is made using a TCP port.

Resolution: Perform the following procedure:

1. Modify the Linux security settings. For example, on RHEL5, navigate to the desktop menu **System** > **Administration** > **Login screen** > **Security tab**, and uncheck **Security Setting Deny TCP connections to Xserver**.
2. Restart your computer to apply the changes.

6.35 Wind/U X-toolkit Error: wuDisplay: Can't open display (Ask a Question)

Symptom: The following error message appears:

```
Wind/U X-toolkit Error: wuDisplay: Can't open display
```

Resolution: Perform the following procedure:

1. Use the following command to set the `$DISPLAY` environment variable to :0 u:

   ```
   setenv DISPLAY :0
   ```

6.36 X Libraries are Not in the LD_LIBRARY_PATH (Libero) (Ask a Question)

Symptom: Libero has a dependency on the X Libraries, but cannot find them.

Resolution: Install the libXft package:

```
% sudo yum install libXft.i686
```

7. Revision History (Ask a Question)

The revision history describes the changes that were implemented in the document. The changes are listed by revision, starting with the most current publication.

Revision	Date	Description
D	08/2024	The following changes are made in this revision: • Revised a note to describe how to allow the Synopsys tools to work beyond 50 miles and beyond the geographic locations, in section Installing a Node-Locked Disk ID License on Windows,
C	02/2024	The following changes are made in this revision: • In section Types of Licensing, revised the link to show the FPGA IP Search page. • In section Obtaining a License, changed the last step. • In section Ordering a License from Microchip Direct, revised step 9. • In sections Performing a GUI Installation on Windows Operating Systems, Performing a GUI Installation on Linux Operating Systems, Performing a Console Installation (Linux Operating Systems Only), and Performing a Silent Installation, changed the step about verifying that the installation was successful. • Added section Configuring Linux to Detect and Use FlashPro 6 Programmer Hardware. • Added section Downloading IP Cores. • Added section Can a Libero License be Hosted on a Virtual Machine?
B	09/2023	The following change is made in this revision: • Added section Troubleshooting Linux Installations.
A	08/2023	Initial revision. This document supersedes the following documents and must be used instead of the ones listed below: • Libero SoC Linux Environment Setup User Guide (DS00003755) • Libero SoC Software Installation Licensing Setup User Guide (DS00003751) • Libero SoC Software Download and License Installation Quick Start Guide (DS50003162)

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