# Frequently Asked Questions Libero IDE Software Installation and Licensing





Power Matters."

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Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for aerospace & defense, communications, data center and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; enterprise storage and communication solutions, security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California, and has approximately 4,800 employees globally. Learn more at www.microsemi.com.



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# **1** Revision History

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

## 1.1 Revision 3.0

The following is a summary of the changes in revision 3.0 of this document".

- Removed question "I do not find the Microsemi devices I need in the installation components list. Why?"
- Removed question "Why cannot I select the required Microsemi device in the new project wizard?"
- Added question How do I launch Libero IDE on Linux?, page 6.
- Removed question "How do I generate a Libero Gold license?"
- Updated Figure 5.1, page 7.
- Added question What are the software tools require licenses to run?, page 8.
- Added discontinued information of Solaris Platinum license. For more information, see Which host ID should I use?, page 9 and Which computer should be the license server?, page 11.
- Removed question "What are the restrictions on a Gold license?

## 1.2 Revision 2.0

The following was a summary of the changes in revision 2.0 of this document.

- Changed Actel to Microsemi throughout the document.
- Removed 45 days Evaluation licenses information from question How can I obtain the license server daemons?, page 9.
- Added Question 3.6 and 3.18. For more information, see Software License Availability and Request Questions, page 7.
- Added Libero Gold License information. For more information, see The Microsemi software does not start when I launch it, what can I do?, page 6.

## 1.3 Revision 1.0

Revision 1.0 was the first publication of this document.



# 2 Software Availability and Download Questions

## 2.1 How can I obtain Microsemi Libero IDE software?

- Download the latest software release from www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-ide#downloads.
- You must first sign in. If you have an existing Microsemi *Customer Portal* account, enter your username and password. If you do not have a Microsemi user account, create a new account.

### 2.2 Which download method should I use?

There are two ways to download the Libero IDE through HTTP and FTP.

When using the HTTP download method, the supplied download manager plug-in must be used, which ensures download of all the required files, including the Web Install Client. The download manager plug-in follows the standard plug-in installation convention.

Note: The download manager browser plug-in must be installed in order to download from the site.

The Microsemi download manager helps downloading the files faster with the ability to pause or resume downloading; it requires the pop-ups to be enabled for the download site. If you have trouble using the HTTP download method or cannot install the Microsemi download manager due to your local security policies, then use the FTP download method.

# 2.3 What are the software tools that come along with Libero IDE?

The following tools come along with Libero IDE:

- Synopsys Synplify Pro Microsemi Edition (ME)
- Mentor Graphics ModelSim ME
- Microsemi Designer (includes SmartTime, SmartPower, and MultiView Navigator)
- SynaptiCAD WaveFormer Lite (prior to December 1st, 2009)
- Microsemi SmartDesign
- Microsemi FlashPro (standalone download available)
- Microsemi Firmware Catalog (standalone download available)
- Microsemi IP Catalog of Basic Blocks and DirectCores

# 2.4 What are the software tools that must be downloaded additionally?

The following tools must be additionally downloaded:

- Microsemi SoftConsole (before Libero IDE v9.2)
- Microsemi Silicon Explorer
- Synopsys Synphony Model Compiler (HLS) ME
- Synopsys Identify ME
- Mentor Graphics Precision RTL
- Microsemi IP Vault

### 2.5 What are the system requirements for Libero IDE?

To know the system requirements for Libero IDE refer the link: www.microsemi.com/products/fpgasoc/design-resources/design-software/libero-ide#device-support.



# 2.6 Are there any special requirements to use Libero IDE on Linux?

Apart from the system requirements, it is necessary to:

- Install the OPENMOTIF Graphical Library
- Run the command: export DISPLAY=:0
- Run the command: microsemi\_wuclean –R

Note: You might also have to install the x11 fonts, if your system does not have the required fonts installed.

# 2.7 Does Libero IDE run on Ubuntu Linux?

Currently, Microsemi does not support Ubuntu Linux. As Ubuntu Linux is similar to Red Hat Linux, it is possible to run Libero IDE on Ubuntu. The following steps enable you to run Libero IDE on Ubuntu:

- Install the OPENMOTIF Graphical Library
- Change the file /etc/gdm/gdm.conf line 267: from DisallowTCP = true to DisallowTCP = false
- Run the command: export DISPLAY=:0
- Run the command: Microsemi\_wuclean –R

Note: You may also have to install the x11 fonts, if your system does not have the required fonts installed.

### 2.8 Is the Microsemi Libero IDE software free?

Libero SoC needs a software license to run. Some licenses are free and some have to be purchased. Please refer to the table on the following webpage to know about available license types: http://www.microsemi.com/products/fpga-soc/design-resources/licensing.

You can download the software from the following link: http://dev.microsemi.com/products/fpgasoc/design-resources/design-software/libero-ide#downloads.

## 2.9 Do I have to use the MEs of Synplify and Mentor Graphics to design for a Microsemi device?

The MEs of Synplify and Mentor Graphics are tested by Microsemi to ensure that they function well with the version of Libero IDE and Designer with which they are bundled. However, it is not mandatory to use the MEs of Synplify and Mentor Graphics to design for a Microsemi device. If you have a licensed copy of the standard editions of Synplify or Mentor Graphics, you can use them instead. The Microsemi device libraries for simulation will have to be compiled by the standalone version of the Mentor ModelSim ME used for simulation. Please refer to the following document for Library compile Instructions: VHDL VITAL and Verilog Compile Instructions for Standalone ModelSim with Libero IDE

Note: Library compilation is not required when using the ME of ModelSim that is bundled with Libero IDE.

## 2.10 Where can I find a Libero IDE tutorial or documentation?

Click on the following link to access the tutorials, online training webcasts, software user guides, and manuals. www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-ide#documents.



# **3 Software Installation Questions**

# 3.1 Can I install the Libero IDE service packs to get the complete software installation?

The Libero IDE service packs are only add-on installations to the Libero IDE base version. Ensure that the base version is installed first and then update it with the service pack. For example, to use Libero IDE v9.2 SP1, Libero IDE v9.2 must be installed prior to SP1 installation.

## 3.2 Can Libero IDE be installed in any drive or folder?

Yes, you can install Libero IDE in any drive or folder. Ensure that the path used for each installation is unique.

# 3.3 The Libero IDE Installer says I have registry errors; how can I fix them?

This message indicates that there are references to the Libero IDE software in the Windows registry and therefore the Libero IDE installer does not let you run the installer until the registry is cleaned up and the software is completely uninstalled.

For complete information on how to scrub Libero SoC from your machine, refer to www.microsemi.com/kb/article.aspx?id=KI8794. After completing, re-run the installer again. If it still does not work, download a registry cleaner utility and try cleaning your registry.

One example of a registry cleaner program can be found at www.ccleaner.com/download.

**Note:** Microsemi does not endorse or recommend any specific registry cleaning tool and is not liable for any errors that occur while you are modifying the Windows registry.

## 3.4 How can I uninstall the Libero IDE software?

Run the Libero IDE uninstaller from the Microsemi Libero start menu group or from the Windows control panel, add/remove software utility. If it does not work and the Libero IDE software cannot be uninstalled, then contact Microsemi Technical Support.

# 3.5 Can I have more than one version of Libero IDE installed on the same computer?

Yes, you can install different versions on the same computer, but you must install each version in a different folder.

# 3.6 The Libero IDE Installer closes before the installation is complete. What can I do?

Contact Microsemi Technical Support for debugging assistance on this issue. Following is the list of the possible causes:

- A corrupted/incomplete downloaded Libero IDE installer.
- A conflict caused by the security software actively running and accessing files also being used, during the Libero IDE installation process.
- Insufficient user privileges to complete the installation.
- A corrupted Windows registry.



# 3.7 Do I need administrative privileges to install Libero IDE?

Yes, you must have administrative privileges to install Libero IDE and for the first launch of Libero IDE.



# 4 Software Startup Questions

# 4.1 What are the operating systems supported for Libero IDE software?

To know the operating systems supported for Libero IDE. Please refer Microsemi website at: https://www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-ide#device-support.

### 4.2 How do I launch Libero IDE on Linux?

Launch Libero IDE using the following command: <Libero Installation Folder>/Libero/bin/libero.

For additional information to launch Libero IDE on Linux, see the *Libero Software Installation and Licensing Guide*.

# 4.3 The Microsemi software does not start when I launch it, what can I do?

Contact Microsemi Technical Support for debugging assistance on this issue. Following is a list of possible causes:

- A corrupted or an incompletely downloaded Libero IDE installer resulting in an incomplete installation
- A conflict caused by the security software actively preventing the Microsemi software from starting
- A license setup issue
- A corrupted Windows registry

# 4.4 Where do I find the latest Libero IDE release information?

The latest Libero IDE release information is available at: https://www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-ide#downloads.

### 4.5 Where do I find the previous Libero release information?

The previous Libero release information is available at: http://soc.microsemi.com/download/software/libero/libero\_vhistory.aspx.

# 4.6 What is the procedure for Libero installation software and licensing?

Refer to the Libero installation and licensing guide Libero Software Installation and Licensing Guide.



# 5 Software License Availability and Request Questions

## 5.1 How many license types are available?

The following table lists the types of licenses available.

#### Table 1 •Types of Licenses

	Gold	Platinum	Standalone
License Term	One Year	One Year	One Year
Libero Design Software, including SmartDesign, IP Catalog and Place and Route	✓	✓	4
Licensing Requirements per Device	See Table 2, page 8	All	All
SoftConsole <sup>1</sup>	$\checkmark$	$\checkmark$	✓
FlashPro Software <sup>1</sup>	$\checkmark$	✓	✓
IP Core Bundle	For more i	nformation, see t	he IP DirectCores
Synopsys Synplify Pro ME	$\checkmark$	$\checkmark$	Not Included
ModelSim ME	✓	✓	Not Included
Synopsys Identify ME <sup>1</sup>	✓	$\checkmark$	Not Included
Synopsys Synphony Model Compiler ME <sup>2</sup>	✓	<b>√</b>	Not Included

1. The following software is not supported on Linux: FlashPro, SoftConsole and Identify ME.

2. The Synphony MC ME license is included with Libero floating licenses. If you are using a Libero Node-locked license you must request the Synphony license separately.



# 5.2 What are the requirements of licensing?

The following table lists the requirements of licensing.

Product	Device Support	Gold	Platinum/ Standalone
RTAX-S	RTAX250S, RTAX1000S	$\checkmark$	$\checkmark$
	RTAX2000S, RTAX4000S		$\checkmark$
RTAX-DSP	RTAX2000D, RTAX4000D		$\checkmark$
RTSX-SU	All Devices	$\checkmark$	$\checkmark$
Axcelerator	AX125, AX250, AX500, AX1000	$\checkmark$	$\checkmark$
	AX2000		$\checkmark$
SX-A, eX, and MX	All Devices	$\checkmark$	$\checkmark$

#### Table 2 • Licensing Requirements

### 5.3 What are the software tools require licenses to run?

The following software tools require licenses to run:

- Libero IDE
- Designer
- Synplify ME, Synplify Pro ME, Identify ME Instrumentor and Debugger, and Synphony HLS ME
- ModelSim ME
- Microsemi DirectCore IP Cores

### 5.4 What are the software tools do not require licenses?

The following software tools work do not require license:

- SoftConsole
- FlashPro
- Silicon Sculptor
- Silicon Explorer

### 5.5 Are the licenses free?

Libero Gold license was available for free, till Feb 2017. From March 2017 the Free Gold license is moved to a paid license. For more information, see http://www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-ide#licensing.

For more information, see CN17012: Changes to Libero License Offerings.

### 5.6 What is a Node-Locked License?

A Node-Locked license allows to run the software only on the system the license is locked to.

A disk ID Node-Locked license for Windows is locked to the volume serial number of the computer's C:\ drive. The license.dat file should also be located on the C:\ drive.

A USB dongle Node-Locked license for Windows is locked to the dongle ID of the two dongles supplied with this license. The computer using this license file must have two USB dongles, physically connected to the PC and the required drivers installed.

Set the LM\_LICENSE\_FILE environment variable to point to the Node Locked license.



# 5.7 Can a Licensee transfer their license to any 3rd party vendor?

No, the Licensee is not authorized to transfer the license to any 3rd party vendor.

## 5.8 What is a Floating license?

A Floating license requires a license manager daemon to be running on a server and can support multiple users (seats). The license.dat file can be located anywhere on the network that is accessible to the server. All systems on the network can run the software correctly by setting the LM\_LICENSE\_FILE environment variable to point to the server. The daemon monitors the number of users. Each Floating license feature line contains a number that defines how many users can run that feature simultaneously.

## 5.9 Which host ID should I use?

The host ID is the unique number assigned to your computer on the network. The host ID depends on the type of license you have. It is the Volume ID of the C:\ drive for disk ID Node-Locked licenses, USB dongle ID for a USB dongle Node-Locked license and the 12-digit MAC ID for the ethernet network Interface card (NIC) when a Linux or Windows Floating license is used. Solaris Floating licenses use an 8-digit host ID. The command to run on windows is C:\ipconfig/all and on Linux it is /sbin/ifconfig.

**Note:** Microsemi discontinued supporting the Solaris Platinum license from January 2017. For more information, see *CN17002: Update to Libero FlexLM daemons v11.14.0.0 for Libero server-based floating licenses, and discontinued supporting the Solaris hosting license.* 

## 5.10 What happens if I need to change my host ID?

If your host ID has changed, Libero IDE returns a license checkout error. The license file must be regenerated to be tied to the correct host ID. Contact Microsemi Customer Service to request license changes. For free licenses, a new license can be obtained online and tied to the new host ID.

## 5.11 How do I obtain a license?

You can obtain a free licenses online from the *Software License and Registration System* of the Microsemi Customer Portal. purchase a license, please contact your local Microsemi sales office.

# 5.12 What should I do to continue using the Libero IDE software, when the licence is about to expire?

Libero licenses can be renewed not more than 14 days in advance of the expiration date by the license holder through their respective web portal account license and registration section. Locate the software ID of the expiring license and click Renew.

For more information, please contact your local Microsemi sales office.

### 5.13 How can I obtain the license server daemons?

The Floating license daemons are provided as standalone downloads, so they do not have to be extracted from the Libero IDE software. You can download these files from the webpage at: https://www.microsemi.com/products/fpga-soc/design-resources/licensing#downloads.

### 5.14 Can I use a Node-Locked license on a remote terminal?

Node-Locked licenses do not support operation over the Windows remote desktop protocol (RDP); a license checkout error is displayed. Due to contract obligations with our third-party software vendors (Synopsys and Mentor Graphics), Node-Locked licenses must be used on the computer to which they are locked.

Alternatively, if you are using only Libero IDE standalone and designer standalone software, you can use the Node-Locked license over a virtual network connection (VNC). For more information, see the Remote Access of Libero IDE or Designer.



# 5.15 What are Floating license seats?

A seat of a Floating license allows only one user to check out the license at a time. If your Floating license is needed by multiple users, you need to purchase incremental Floating license seats. Refer to the following webpage for the necessary part numbers: www.microsemi.com/products/fpga-soc/design-resources/licensing#ordering.

# 5.16 Do I need a new license for each version of Libero IDE installed on my computer?

No, the license files are backwards compatible, but you need a license file generated for the most recent major release of Libero IDE running on your computer. For example, when Libero IDE v9.2 was released, it required a Libero IDE v9.2 license file.

## 5.17 How can I get a Microsemi desktop license?

Microsemi no longer has the ability to generate licenses for the obsolete Microsemi desktop software.

## 5.18 How many seats can I have on a Node-Locked license?

Microsemi only issues one seat per Node-Locked license.

# 5.19 Does the Libero software license support Configuring WAN license server feature?

No. Microsemi Libero offers triple redundant server support, but they have to be within the same time zone.



# **6** Software License Setup Questions

# 6.1 How do I set up a Floating license (or) Node-Locked license?

For license setup instructions, see the Libero Software Installation and Licensing Guide.

### 6.2 Which computer should be the license server?

The license server can be a Windows, Linux, or a Solaris computer. The license server must be accessible to all other computers on the same local area network which can checkout a Libero IDE Floating license. Although, the license sever can be a Solaris computer, the Microsemi Libero IDE can only be run on Windows or Linux computers.

**Note:** Microsemi discontinued supporting the Solaris Platinum license from January 2017. For more information, see the *CN17002: Update to Libero FlexLM daemons v11.14.0.0 for Libero server-based floating licenses, and discontinued supporting the Solaris hosting license.* 

## 6.3 Should I install Libero IDE on the license server?

You do not have to install Libero IDE on the license server. The license daemon executables can be downloaded from the Microsemi website. The Libero IDE can be installed on the license server in the event that a user on the license server needs to run Libero IDE directly from the server computer.

### 6.4 How do I start the license server?

For license setup instructions, see the Libero Software Installation and Licensing Guide.

Once the license server is set up, start it by logging into the server machine and entering the following command: <path.to.microsemi.installation>/bin/lmgrd -c <path\_to\_license.dat/license.dat>

# 6.5 How do I start the license server and have the output saved in a log file?

To save the license server output to a log file rather than having the text output directly to the terminal on the license server, you must start the server using the –I flag to the Imgrd command and specify the path and name of a log file to create or append to. For example:

<path.to.microsemi.installation>/bin/lmgrd -c <path\_to\_license/license.dat> l <desired\_path/logfile.txt>

# 6.6 My license server has multiple licenses for the same software, can these licenses be merged?

To combine license server files for the same product:

- a. Concatenate the files
- b. Remove the duplicate Server and Vendor lines
- Note: The expiration dates and the number of seats can be different.

Although, the files can be concatenated, duplicate license features for the same software are not read as additional licenses (they will not be accumulated). To have the same features be accumulated, the feature line is replaced by an Increment line. If a license server file has a feature line instead of an increment line, you must generate a new license for that software feature.

#### Note: Microsemi do not recommend merging of multiple licenses.



# 6.7 Do I need administrative privileges to modify an environment variable?

Yes, you must have administrative privileges to modify an environment variable.

# 6.8 I followed the license setup instructions, but still got a checkout error. What can I do?

To resolve the error, see the *Libero IDE License Troubleshooting Guide* or contact Microsemi Technical support.