Lattice Radiant Software 2025.2.1 Installation Guide for Windows

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Type Conventions Used in This Document

Convention	Meaning or Use
Bold	Items in the user interface that you select or click. Text that you type into the user interface.
<*Italic*>	Variables in commands, code syntax, and path names.
Ctrl+L	Press the two keys at the same time.
`Courier`	Code examples. Messages, reports, and prompts from the software.
`...`	Omitted material in a line of code.
`.` `.` `.`	Omitted lines in code and report examples.
`[ ]`	Optional items in syntax descriptions. In bus specifications, the brackets are required.
`( )`	Grouped items in syntax descriptions.
`{ }`	Repeatable items in syntax descriptions.
`|`	A choice between items in syntax descriptions.

Contents

Introduction

This document provides installation instructions for Lattice Radiant® Software for Windows.

Radiant software supports iCE40 UltraPlus™,CertusPro™NX (LFCPNX), Certus™-NX (LFD2NX), CrossLink™-NX (LIFCL), Certus™-NX-RT (UT24C), CertusPro™-NX-RT (UT24CP), Certus™-N2 (LN2-CT-ES), Avant™ (LAV-AT), MachXO4™-NX (LFMXO4), and MachXO5™-NX (LFMXO5).

Note

The available devices vary depending on the type of license.

Radiant software is available in a 64-bit version.The 64-bit version of Radiant software is optimized to run on Windows 64-bit systems. Radiant software must be running on Windows 64-bit systems.

System Requirements

The following are the basic system requirements for Radiant software on Windows:

- Intel x86 64-bit or 64-bit-compatible PC
- 64-bit OS
- Windows 10 or 11
- Approximately 50 GB free disk space
- Computer Memory Requirement: 32GB Recommended for running a single project. If running multiple projects, the memory requirement will be higher

- Network adapter and network connectivity

  Note

  A node-locked license is based on the physical (hard-coded) address provided by the network adapter. Network connectivity is not necessarily required for a node-locked license. In the absence of a network connection, you can install the NWLink IPX/SPX protocol to force the recognition of your NIC card ID (see "Licensing for Radiant Software and Stand-Alone Power Estimator" on page 15).

  A floating license requires access to the license server, so both a network adapter and connectivity are required.

- 1024 X 768 graphics display
- Microsoft-compatible mouse and mouse driver
- A Web browser with Javascript capability
- Adobe Acrobat Reader

Whitelisting the ibbasct.dll File

The encrypted libbasct.dll in Radiant may trigger a security alert in your system. libbasct.dll is a secure file. If your antivirus (AV) software addresses it as a security threat, you may need to whitelist this file on your AV software.

Contacting Technical Support

FAQs

The Answer Database provides solutions to questions that many of our customers have already asked. Lattice Applications Engineers are continuously adding to the database.

To access the Answer Database, go to www.latticesemi.com > Support > Answer Database.

For Technical Support Assistance

Submit a technical support case via technical support case portal or go to www.latticesemi.com > Support > Technical Support Request.

For Local Support

Contact your nearest Lattice Sales Office.

Installing Radiant Software for Windows

The following sections describe product options and installation instructions for Radiant software for Windows.

Software Product Options

Table 1 shows the product options for the installation of Radiant software for Windows.

Table 1: Radiant Design Tools Installation Options

Product Option	Description
Radiant software for Windows	Installs the Radiant software design tools for all Lattice Semiconductor FPGA designs. Table 2 lists the tools included in this option.
FPGAs	Installs the FPGA design environment.
QuestaSim Lattice Edition	Installs Siemens® QuestaSim™ Lattice Edition simulation tool. A license for QuestaSim is included.
Programmer Drivers	Installs drivers for the Radiant Programmer tool, which loads FPGAs with the designs.

Table 2 shows the tools included in the Radiant software for Windows option.

Table 2: Tools Included in the Radiant Software for Windows Option

Tool	Description
Project Management Tools	Include the Reports view, and the Security Setting tool to enable you to create and maintain the project, keep track of the stages in the design implementation process, review reports, and compare different implementations of the project.
Design Entry Tools	Include Source Editor and Device Constraint Editor, which offer VHDL, Verilog, schematic, and mixed-mode design entry support and design structure check.
Design Simulation Tools	Include Simulation Wizard and QuestaSim Lattice Edition for performing functional simulation for the projects and creating the test stimulus files.
Design Constraints Application Tools	Include Physical Designer, and Netlist Analyzer to enable you to set constraints for implementing the design.
Design Implementation Tools	Include Synplify Pro for Lattice, Lattice Synthesis Engine (LSE), Clear Tool Memory, Map, Place & Route, and Bit Generation to ease the design implementation process.
Analyzing Static Timing, Power Consumption, and Signal Integrity Tools	Include Timing Analysis View and Power Calculator to enable you to estimate the design performance, experiment with different configurations, and to calculate power consumption.
Programming the FPGA Tool	Includes Programmer, Deployment Tool, Download Debugger, and Programming File Utility tools to let you program the FPGAs.
Testing and Debugging On-chip Tools	Include Reveal Inserter and Reveal Analyzer to let you complete the final stage of developing a design: testing in the actual FPGA, either on a test board or in your system.
HTML Help and User Documentation	Include complete instructions for designing with Radiant software design tools and third-party tools. Also provides user manuals, tutorials, example design projects, and access to technical documentation from the Lattice Semiconductor Web site.
Tcl/Tk Scripting Tool	Enables you to automate Radiant software design processing.

Installation Procedure

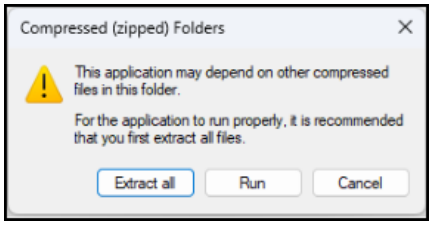
Radiant software is available for download from the Lattice Radiant Downloads & Licensing web page located at http://www.latticesemi.com/Latticeradiant. Click the **Software Downloads & Documentation** tab. Some documents and downloads are not visible to anonymous visitors. To view all items, please log in to your Lattice account. Follow the product download instructions and uncompress the software.

To install the Lattice Semiconductor Radiant software for Windows:

1. Close all applications before starting Radiant software installation.
2. After downloading the installer ZIP file, extract the contents to a local folder.

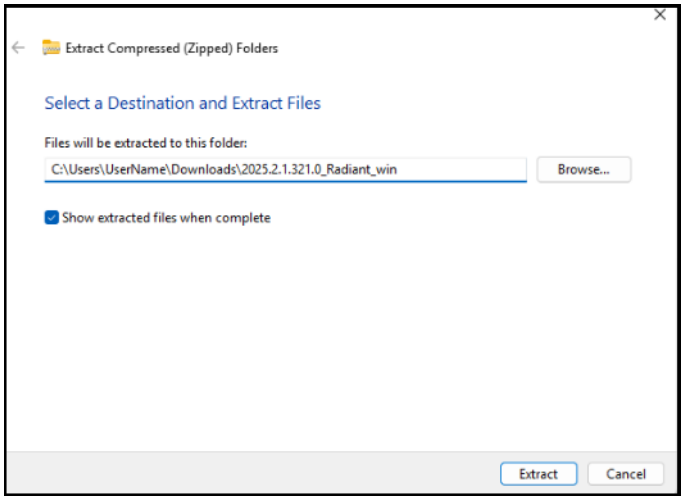
   Right-click the ZIP file and select **Extract All**.

Figure 1: Compressed Folders Dialog Box



3. When prompted, accept the default extraction location and click **Extract**.

Figure 2: Extract Compressed Folders Dialog Box

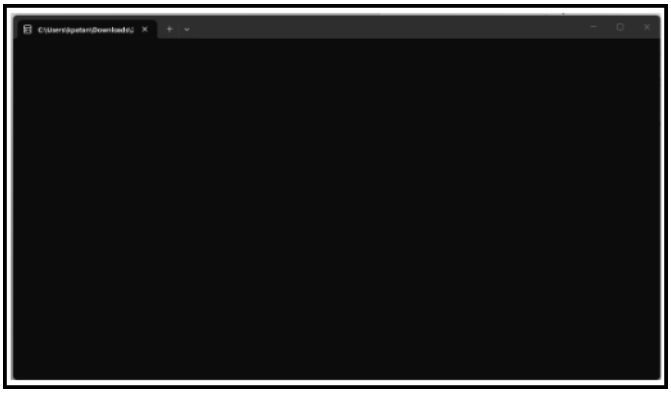


4. Navigate to the extracted folder and double-click **2025.2.1.321.0_Radiant.exe** to launch the installer.

Figure 3: Radiant .exe File

5. A terminal window will open and after some time, the installer splash screen will appear.

Figure 4: Terminal Window



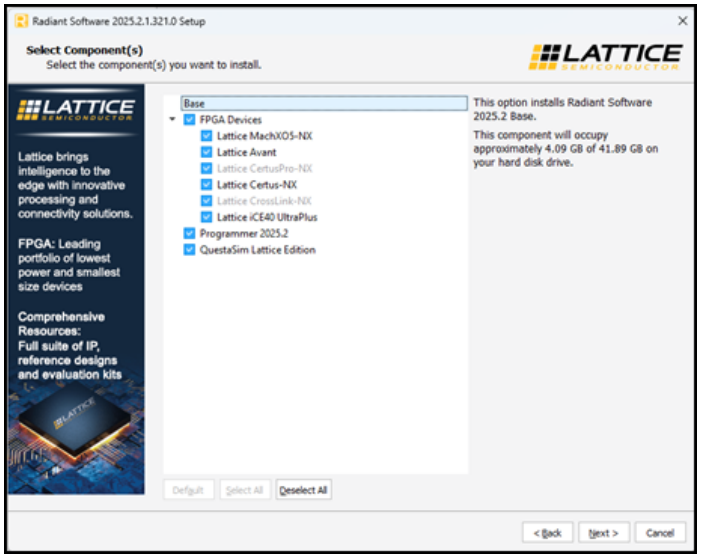
6. The **Welcome To Lattice Radiant Software 2025.2 Setup** dialog box opens.

Figure 5: Welcome To Lattice Radiant Software 2025.2 Setup Dialog Box

7. Click **Next** to select Installation Folder.
8. The default destination folder is C:\lscc\radiant\2025.2.1. Click **Browse** to change the drive or destination folder.
9. Click **Next** to open the Product Options dialog box.
10. Select the Radiant software components that you want to install by selecting or clearing each of the listed options. If you have purchased third-party synthesis and simulation tools directly from the third-party vendors, you can clear the **QuestaSim Lattice Edition** product options.

    The FPGAs product option has additional options for selecting the Lattice FPGA devices that you want to install. To set the additional options, select **FPGAs** and click the device.
11. Click **Next** to open the License Agreement dialog box.

Figure 6: Select Components Dialog Box



12. Read the license agreement. If you agree, click **I accept the license** to open the Start Menu shortcuts dialog box.
13. Click **Next** to open the Select Program Folder dialog box. The default name of the program group is **Lattice Radiant Software 2025.2**. Modify this to: **Lattice Radiant Software 2025.2.1**.
14. Click **Next** to display the Ready to Install dialog box. Review the current settings: the destination folder and components selected. If everything is correct, select **Install** to start the installation.
15. Once the installation is completed, the following environment user variables are shown in the installation page.
    - **LATTICE_LICENSE_FILE** – A variable for lattice license file setting. This field can be edited.
    - **SALT_LICENSE_SERVER** – A variable required for launching QuestaSim's **latticeqsim** feature. This field can be edited.
    - **LM_LICENSE_FILE** – This setting cannot be edited in this page. If you need to update it, change the environment variable using the Control Panel.
    - **MGLS_LICENSE_FILE** – A variable required for launching ModelSim's **latticemsim** feature. MGLS_LICENSE_FILE setting may not be available in the installation page but it important to set this up correctly using **System variables** in Windows.

Figure 7: Installation Wizard Complete Dialog Box

16. In the Installation Wizard Complete dialog box, read the confirmation note and click **Finish**.

    Note

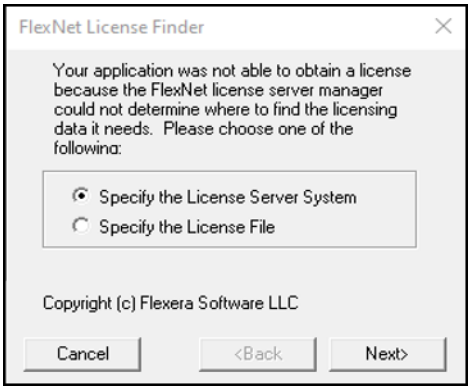
    Do not close the installation window. The window automatically closes once the installation is completed.

    Note

    If you encounter a problem when opening a Radiant project on a virtual machine (VM), you will need to set the environment variable “QT_OPENGL=angle”.

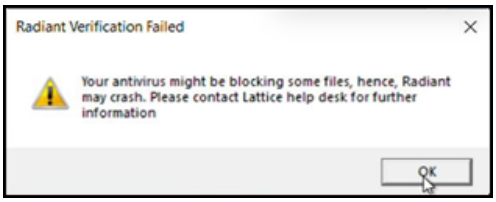
17. If you have never installed any Lattice Software before, you need to set a valid license file path. Without this variable, the FlexNet License Finder dialog box will pop up to ask you for the license. Select the desired license option and click **Next** to complete the license installation.

Figure 8: Flex License Finder



18. At this stage, Radiant installer checks if the installation is good. If it finds any problems, it will display the appropriate warning.

Figure 9: Radiant Verification Failed Dialog Box



Licensing Setup

Licensing for Radiant Software and Stand-Alone Power Estimator

When installation is complete, you will need to use the Lattice website to apply a license to your Radiant software.

Note

The available devices for Radiant software can vary, depending on the type of license.

Note

To use the included Questa Lattice OEM simulator, you need a license with the latticeqsim license feature. The licenses generated for use with the Modelsim Lattice OEM simulator have the latticemsim license feature and must be updated to the new feature to use Questa Lattice OEM.

The license you received is based on the identification of your network interface card (NIC). The NIC ID or equivalent is the 12-character hexadecimal physical address. License your software early to avoid any down time.

You can also get the NIC via an alternate network interface, such as a wireless interface.

To obtain a license file for your Radiant software:

1. Go to Lattice Semiconductor Software Licensing page: www.latticesemi.com/licensing
2. Select **Lattice Radiant Software**.
3. Follow the on-screen instructions.

Optional Floating License

To enable a floating license, you must have a license server set up on a Windows or Linux server to monitor your Radiant software license. Each client PC must have the LATTICE_LICENSE_FILE variable set to point to the license file on the server.

Note

Radiant software uses the following network communication ports (TCP/IP socket ports):

- Port 80 – This is the standard HTTP web access port. Radiant software uses this port in the following cases:
  - When the Lattice Radiant software has updates from the Lattice web site.
  - IP or reference designs are downloaded from the Lattice web site.
  - When message ID's are sent.
- Port 7788 – This is the port used by the Radiant software to check the floating license between the software and license server. This port is configurable by changing the license files.

Before you start the server setup, ensure that TCP/IP is installed and that the client machines can communicate with the server by name. At the prompt in a Command Prompt window, type the following:

```
ping <hostname>
```

Table 1 lists the files used for license management for 64-bit systems. The files are located at:

<Radiant_install_path>\ispfpga\bin\nt64

Table 1: License Management Files

Filename	Version	Description
lmgrd.exe	11.19.4.1	The license server program.
lmutil.exe	11.19.4.1	FLEXlm utility for diagnosing, reporting, and controlling licensing.
lmtools.exe	11.19.4.1	Program that sets up the server for floating licenses.
lattice.exe	11.19.4.1	The Lattice Semiconductor licensing daemon.

Note

Users of the ispLEVER 7.0 or older software must bring down the previous license daemon and start the new license daemon.

Editing the License File

After obtaining a floating license from Lattice Semiconductor, you must edit the license file to specify the server name and the paths to the Lattice daemon. An example of a floating license file is shown below.

```
SERVER nodename e0be037e00da 7788
DAEMON lattice daemon_path
FEATURE LSC_RADIANT lattice 2025.06 12-jun-2025 1 4AB180876D89 \
                        VENDOR_STRING=LSC_RADIANT
FEATURE LSC_SYNPLIFYPRO1 lattice 2025.06 12-jun-2025 1 D86E40930FFB \
                        VENDOR_STRING="ispLEVER System with Synplicity
Pro 1"
FEATURE LSC_CTL_PROPBLD lattice 2025.06 12-jun-2025 1 8AE4CA6C0D82 \
                        VENDOR_STRING=LSC_CTL_PROPBLD
FEATURE LSC_CTL_PROPSDK_PFR lattice 2025.06 12-jun-2025 1 \
                        45FBE5EEB71D VENDOR_STRING=LSC_CTL_PROPBLD
```

Note

The "\" followed by a carriage return indicates a line continuation.

To edit the license file:

1. Edit the `SERVER` line by replacing *`nodename`* with the host name of the server for which you requested your license.dat file. You may also need to change the PORT NUMBER (7788).
2. Edit the `DAEMON lattice` line by replacing *`daemon_path`* with the path to the lattice daemon, for example:

   `C:\lscc\radiant\2025.2.1\ispfpga\bin\nt64\lattice.exe`

When you are editing these lines, make sure that they are typed exactly as you received them.

Windows License Server Setup for QuestaSim Lattice Edition

If you want to run the QuestaSim Lattice Edition software, you must have a separate license file for QuestaSim Lattice Edition installed.

The steps below show you how to setup a server-based license for QuestaSim Lattice Edition.

Modify the license file.

See below for the example:

```
SERVER nodename 283A4D51E5C8 1717
DAEMON saltd path_to_saltd
INCREMENT latticemsim mgcld 2020.10 24-sep-2021 42F51711882B1345257E8 \
VENDOR_STRING=E0A4806A HOSTID=283a4d51e5c8 ISSUER="ModelSIM Lattice" \
SN=72951337 SIGN2="016B 9A3C 250A 4BE0 4EA2 6214 A021 CABE 0739 573F \
D7E9 BC45 3706 2F63 8829 122B D282 EBFC A8B1 62AB 78C5 4F8E F369 CE8E \
306B F3C5 1F73 4941 503A D5CB"
```

```
INCREMENT latticeqsim mgcld 2020.10 24-sep-2021 4 2F51711882B1345257E8\
VENDOR_STRING=E0A4806A HOSTID=283a4d51e5c8 ISSUER="Questasim lattice" \
SN=72951337 SIGN2="016B 9A3C 250A 4BE0 4EA2 6214 A021 CABE 0739 573F \
D7E9 BC45 3706 2F63 8829 122B D282 EBFC A8B1 62AB 78C5 4F8E F369 CE8E \
306B F3C5 1F73 4941 503A D5CB"
```

- Replace nodename with the name of your server or PC.
- Replace path_to_saltd with the path to the saltd executable. In the QuestaSim OEM edition, the path is <install_path>/questasim/license_server/

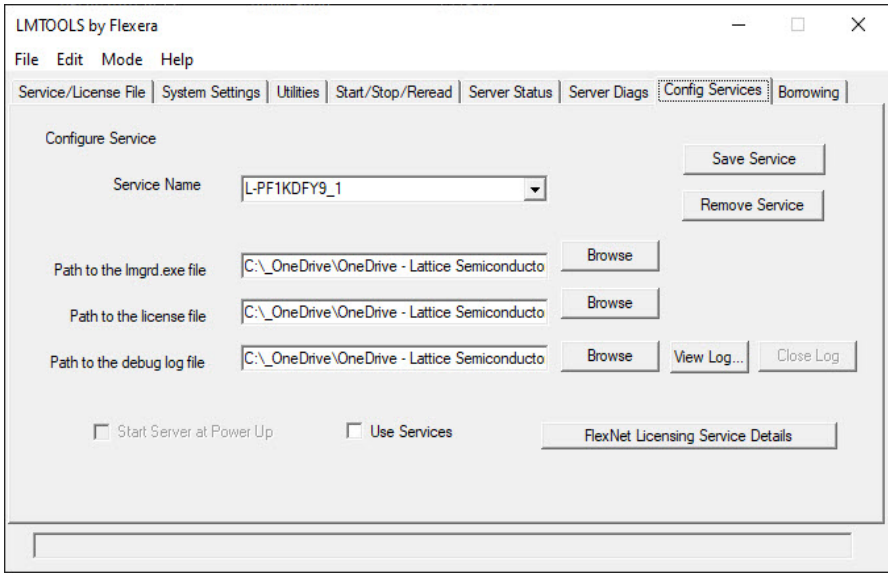
```
SERVER L-PF1KDFY9 283A4D51E5C8 1717
DAEMON saltd C:\Mentor\questasim\license_server\saltd.exe
INCREMENT latticeqsim mgcld 2020.10 24-sep-2021 4
2F51711882B1345257E8\
VENDOR_STRING=E0A4806A HOSTID=283a4d51e5c8 ISSUER="Questasim
Lattice" \
SN=72951337 SIGN2="016B 9A3C 250A 4BE0 4EA2 6214 A021 CABE
0739 573F \
D7E9 BC45 3706 2F63 8829 122B D282 EBFC A8B1 62AB 78C5 4F8E
F369 CE8E \
306B F3C5 1F73 4941 503A D5CB"
```

Start the License Server using LMTools

Run LMTools is located at: <install_path>\ispfpga\bin\nt64\lmtools.exe

1. In the **Config Services** tab:
   - Create a Service Name
   - Browse to the path of the lmgrd.exe file (<install_path>\ispfpga\bin\nt64\lmgrd.exe)
   - Browse to the path of the license file.
   - Browse to the location of where you want to create the log file.
   - Save the Service by clicking the **Save Service** button.

Figure 1: LMTools_Config Services



2. In the Server/License File tab, select **Configuration using Services**
3. In the Start/Stop/Reread tab, click **Start the Server** button.
4. In the Server Status tab, click **Perform Status Enquiry** button to ensure that the server will be started properly.
5. If you see that your daemon is up and see the number of licenses available, your server has started successfully.

Configure your SALT_LICENSE_SERVER environment variable:

- In Control Panel > Advanced system settings > Environment Variables, modify or create your lattice_license_file and SALT_LICENSE_SERVER to include the port@servername.
- In the example SALT_LICENSE_SERVER value is: 1717@L-PF1KDFY9).

Note:

Radiant floating license is not available on the website. You need to request a license by filing a Support Case.

Floating License Configuration

After you receive your floating license and ensure that the license manager is running, install the Radiant software locally on each client that will use the floating license.

Set your system variable lattice_license_file and SALT_LICENSE_SERVER to point to
TCP/IP_PORT@hostname

Setting up Floating License on Linux

You can also put the Radiant software license on a Linux machine. Then each client (Windows or Linux) points to the license file on the Linux machine. In this case, you need to set the environment variable lattice_license_file value to License_Port_number@linux_host_name. Or, have the SALT_LICENSE_SERVER value set to the path to a license file on the client that is set up with the SERVER name of the Linux_host_name and License_Port_number.

Troubleshooting Licensing Problems

If you encounter problems with your license, refer to Table 2 for common FLEXlm error messages and possible causes or solutions.

Table 2: FLEXlm Error Messages

FLEXlm Error Message	Possible Causes or Solutions
Invalid parameter [-42, 252]	▶ The LATTICE_LICENSE_FILE variable has not been set properly. ▶ The license file is invalid. ▶ An invalid feature is specified in the license file.
Invalid parameter [-42, 252:10061] Winsock error code	▶ You have a floating license, and the license daemon has not been started at the Windows NT server. ▶ The network connection between the server and the client has not been established.
Invalid parameter [-12, 122] Invalid returned data from license server	The node name of the Windows NT server does not match the one in your floating license file.
Invalid parameter [-5, 222] No such feature exists	The feature could not be found in the license file.
! License Check Failed	You either have a node-locked license or you do not have a license file. Contact Lattice Semiconductor Technical Support for a valid floating license file.

If you encounter any software-related problems, review the following common troubleshooting scenarios before calling Lattice Semiconductor Technical Support:

- Ensure that your environment variable settings are set correctly, including the **TEMP** user variable.
- For Windows, your system should contain the following environment settings:

  `SET LATTICE_LICENSE_FILE=<install_path>\license\license.dat`

  You can verify these settings by accessing the **System Properties** dialog box from your Windows system. Select the **Advanced** tab and the **Environment Variables** section.

If Radiant software still does not run after you have installed your new license file and confirmed that your environment variables are correct, gather the following items:

- A screen capture showing the error message
- A text file that contains a listing of the environment setup for your PC. From an Command Prompt window, issue the **set > env.txt** command.
- Your license.dat file

Combine these items in a zip file and e-mail it to techsupport@latticesemi.com. Include an explanation of the problem.

Running Multiple Versions of Lattice Software

Radiant software enables you to run FPGA designs on platforms on which Radiant and previous Diamond/ iCE are installed. You can run current and previous versions.

Running Radiant Software

After the software and license configuration have been installed, you can invoke Radiant software.

Running Radiant Software Locally

If you have installed Radiant software on your local machine:

- In Windows 10, choose **Apps > Lattice Radiant Software 2025.2.1 > Radiant Software.**

The Radiant software main window is invoked.

Running Radiant Software using Windows Remote Desktop

You can also install Radiant software on a shared disk, installation procedure of which is exactly the same as that for the local installation. After the license file setup, you can access the shared disk from the Windows Explorer and then invoke Radiant software from that installation directory by double-clicking `<boot_drive>:\<Radiant_install_directory>\bin\nt64\radiant.exe`

When the installation is finished, make sure to set the LATTICE_LICENSE_FILE environment variable to be the location of your license file. When you use a client-server setup, it is recommended that you use a floating license. Then set LATTICE_LICENSE_FILE=7788@*nodename*. Confirm that it works by selecting and compiling one of the examples on the client.

Finding the Installation History

The Radiant software records a log of the installation history, which you can find from the Radiant software main window.

To view the installation history:

1. Open the Radiant software main window.

Select **Help > About Lattice Radiant Software**. See the Installation History tab.

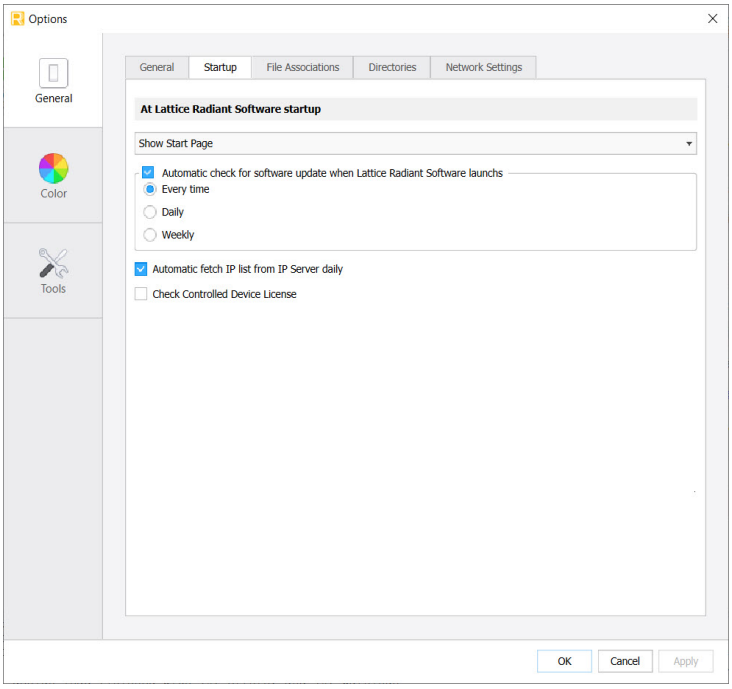
Updating Lattice Radiant Software

After you have registered and licensed your installation, check the Lattice Semiconductor Web site for new software updates, device support, and enhancements. Make sure that you have the latest software by checking for updates regularly.

To activate UPDATE:

1. To enable automatically check for software update when Radiant software is launched, if you don't see Update window pops up. In Start page do as follows:
   - Select the **Startup** tab of the Options dialog box in Tools, click "Automatically check for software update when Lattice Radiant Software launches" and choose how often it will check.

Figure 1: Startup Tab of the Options Dialog Box



When Radiant software is launched, it will connect to the Internet automatically to check for updates.

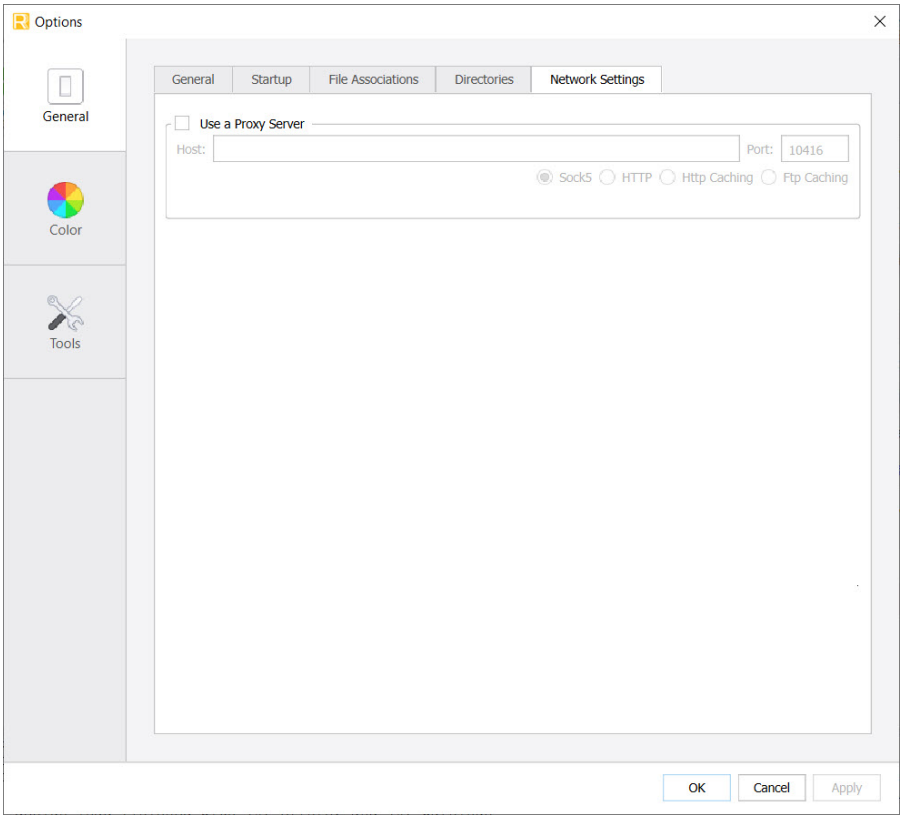
Changing the Network Setting

To enable automatic checking, you must indicate how your computer accesses the Internet.

To change the Internet connection settings:

1. Select the **Network Setting** tab of the Options dialog box in Tools.

Figure 2: Network Settings Tab of the Options Dialog Box



2. Select the **Use a Proxy Server** option if you must go through a proxy server before connecting to the Internet. The proxy server prevents outsiders from breaking into your organization's private network. Ask your system administrator for the URL address and port assignment. This option is turned on by default.

   If you use direct Internet access, do not select the **Use a Proxy Server** option on this tab.

Installing Updates

When you use the Auto Check feature, UPDATE notifies you whenever an update version of Radiant software becomes available. You receive notification when you open the Radiant software main window.

To check and install the recommended update:

- Launch Radiant software and the UPDATE software goes online to check for an update. If one is available, the Radiant software update version will be displayed in the **Available update versions** field.
- Click **Download** to save the update to a directory and install it later.
- Click **Install** to download and install the selected update version (as the version number specified in the **Available update versions** field) right away.

To install a downloaded update:

1. Close all Radiant tools.
2. Go to the location where you saved the update version.

Double-click the update file and follow the on-screen instructions.

Running Radiant Software from the Command Line

There are two ways to run the Radiant software from the command line: through Radiant Tcl Console or by running executable files directly.

Running Stand-Alone Radiant Tcl Console

Radiant software development environment includes Radiant Tcl Console, which allows you to run scripts for automating common tasks. Radiant Tcl Console is also available outside of the user interface in order to run custom scripts. To launch the stand-alone Radiant Tcl Console, enter the following on a command line:

```
% <install_path>/bin/nt64/radiantc
```

These commands configure the environment allowing all of the underlying design tools to be run. Refer to the online Help for more information about the command line.

Installing Stand-alone Tools

Installing Stand-Alone Radiant Programmer

Programmer is included in the Radiant software installation and consists of six tools:

- Radiant Programmer
- Deployment Tool
- Download Debugger
- Programming File Utility
- Install & Uninstall Cable Drivers

If you want to use Programmer, Deployment Tool, Download Debugger, or Programming File Utility without installing Radiant software, you can install the stand-alone Programmer.

The stand-alone Programmer is available in 64-bit versions.

Follow the product download instructions and uncompress the software. For more information on how to download stand-alone Programmer, go to the Lattice Radiant Software page and click the **Software Downloads & Documentation** tab. Some documents and downloads are not visible to anonymous visitors. To view all items, please log in to your Lattice account.

To install the stand-alone Programmer:

1. Close all applications before starting installation.
2. Double-click on the Programmer installer you downloaded to launch the installation process.
3. The Welcome To Lattice Radiant Programmer setup dialog box opens.
4. The default destination folder is C:\lscc\programmer\radiant\2025.2.1. Click **Browse** to change the drive or destination folder.

5. Click **Next**. The default name of the program group is **Lattice Radiant Programmer 2025.2.1**. If you want to change the name, change it in the Program Folder text box.
6. Click **Next** to open the Select Components dialog box.
7. Click **Next** to open the License Agreement dialog box.
8. Read the license agreement. If you agree, click **I accept the license.** then click **Next** to open the Start Menu shortcuts dialog box.
9. The default shortcuts name is "Lattice Radiant Programmer 2025.2.1". Type a new name in the text box if you wish to change it.
10. Click **Next** to start installing the selected components
11. In the InstallShield Wizard Complete dialog box, read the note and click **Finish**.

Install and Uninstall Cable Drivers

To start the Install & Uninstall Cable Drivers:

- In Windows 10, choose **Apps > Lattice Radiant Programmer > Install & Uninstall Cable Drivers**

Parallel port or USB drivers are required to program Lattice devices using the Lattice download cables. To install the drivers, you must have administrative privileges.

Two drivers installation options are available in the Drivers Install/Uninstall dialog box.

Figure 1: Driver Installation Options

- **Parallel port driver** – Supports device programming through the parallel port of your PC. The driver can be installed on Windows 10. **USB port driver** – Supports device programming through the USB port of your PC. The driver can be installed on Windows 10. This is for the HW-USBN-2A USB cable.

- **FTDI USB driver** – This supports Lattice HW-USBN-2B USB cable and Lattice evaluation boards with FTDI (Future Technology Devices International) USB host chip. The driver does not support Windows 2000 and earlier operating systems.

  Note

  The first time the FTDI driver is installed, the Windows operating system may report that Windows can't verify the publisher of this driver software. Select “Install this driver software anyway.” This warning will not occur on subsequent installations.

1. In the Drivers Install/Uninstall dialog box (Figure 1), select the desired driver and click **Install**.
2. When prompted, verify the USB cable is plugged in and click **Yes**.
3. In the Installation Wizard Complete dialog box, and click **OK**.

   Note

   Do not close the installation window. The window automatically closes once the installation is completed.

Starting Stand-Alone Radiant Programmer

To start the stand-alone Radiant Programmer:

- In Windows Windows 10, choose **Apps > Lattice Radiant Programmer 2025.2.1 > Radiant Programmer**.

Starting Stand-Alone Deployment Tool

To start the stand-alone Deployment Tool:

- In Windows 10, choose **Apps > Lattice Radiant Programmer 2025.2.1 > Deployment Tool**.

Starting Stand-Alone Download Debugger

To start the stand-alone Download Debugger:

- In Windows 10, choose **Apps > Programs > Lattice Radiant Programmer 2025.2.1 > Download Debugger**.

Starting Stand-Alone Programming File Utility

To start the stand-alone Programming File Utility:

- In Windows 10, choose **Apps > Lattice Radiant Programmer 2025.2.1 > Programming File Utility**.

Installing Stand-Alone Radiant Reveal Logic Analyzer

Radiant Reveal Logic Analyzer is included in the Radiant software installation. If you want to use the tool without installing Radiant software, first download it from the Lattice Semiconductor Web site.

Radiant Reveal Logic Analyzer is available in 64-bit versions.

For more information on how to download stand-alone Radiant Reveal Logic Analyzer, go to the Lattice Radiant Software page and click the **Software Downloads & Documentation** tab. Some documents and downloads are not visible to anonymous visitors. To view all items, please log in to your Lattice account.

To install the stand-alone Radiant Reveal Logic Analyzer:

1. Close all applications before starting installation.
2. Double-click on the Radiant Reveal installer you downloaded earlier to launch the installation process.
3. The Welcome To Lattice Radiant Reveal setup dialog box opens.
4. Click **Next** to open the Installation Folder dialog box.
5. The default destination folder is C:\lscc\reveal\radiant\2025.2.1. Click **Browse** to change the drive or destination folder.
6. Click **Next** to open the Select Components dialog box.
7. Click **Next** to open the License Agreement dialog box.
8. Read the license agreement. If you agree, click **I accept the license.** then click **Next** to open the Start Menu shortcuts dialog box.
9. The default shortcuts name is Lattice Radiant Reveal 2025.2.1. Type a new name in the text box if you want to change it.
10. Click **Install** to begin installing the selected components to the selected folder.
11. In the Installation Wizard Complete dialog box, read the note and click **Finish**.

Starting Stand-Alone Reveal Logic Analyzer

To start the stand-alone Reveal Logic Analyzer:

- In Windows 10, choose **Apps > Lattice Radiant Reveal 2025.2.1 > Reveal Logic Analyzer**.

Installing Stand-Alone Power Estimator

Power Calculator is included in the Radiant software installation. If you want to use the tool without installing Radiant software, you can install the stand-alone Power Estimator, available for download from the Lattice Semiconductor Web site.

Power Estimator is available in 64-bit versions.

For more information on how to download stand-alone Power Estimator, go to the Lattice Radiant Software page and click the **Software Downloads & Documentation** tab. Some documents and downloads are not visible to anonymous visitors. To view all items, please log in to your Lattice account.

To install the stand-alone Power Estimator:

1. Close all applications before starting installation.
2. Double-click on the Power Estimator installer you downloaded to launch the installation process.
3. The Welcome To Lattice Radiant Power Estimator setup dialog box opens.
4. Click **Next** to Installation Folder dialog box.
5. The default destination folder is C:\lscc\powerestimator\radiant\2025.2.1. Click **Browse** to change the drive or destination folder.
6. Click **Next** to open the Select Components dialog box.
7. Click **Next** to open the License Agreement dialog box.
8. Read the license agreement. If you agree, click **I accept the license**.
9. Click **Next** to open the Start Menu shortcuts dialog box. The default name of the program group is **Lattice Radiant Power Estimator 2025.2.1**. If you want to change the name, change it in the Program Folder text box.
10. Click **Next** to start installing the selected components.
11. In the Install Wizard Complete dialog box, read the note and click **Finish.**

Starting Stand-Alone Power Estimator

- In Windows 10, choose **Apps > Lattice Radiant Power Estimator 2025.2.1 > Radiant Power Estimator**.

Note

The stand-alone Power Estimator requires a license. See “Licensing for Radiant Software and Stand-Alone Power Estimator” on page 15.

Downloading a Soft IP from IP Catalog

From the IP on Server tab of IP Catalog, you can download and save an IP package to a folder in your local machine or network. This is especially helpful when you need to share an .IPK file in facilities without internet access.

To download and save a Soft IP:

1. In the **IP on Server** tab of **IP Catalog**, right-click the IP and select **Download & Save as**.

   The **Save IP As** dialog box opens.
2. Select or create a location for the IP.
3. If preferred, give the IP a new name in the “File name” box.
4. Click **Save**.

Troubleshooting

If you encounter any software-related problems during or after the installation of Radiant, review the following common troubleshooting scenarios before calling Lattice Semiconductor Technical Support:

- Ensure that your environment variable settings are set correctly, including the TEMP user variable.
- Your should also have the following system environment setting pointing to the license file:

  `SET LATTICE_LICENSE_FILE=<Lattice_license_path>\license.dat`

  If you have multiple installations of Lattice software, this variable may have multiple paths in it. If there are problems, you may need to manually edit the variable.

  You can verify these settings by accessing the System Properties dialog box from your Windows system. Select the Advanced tab from that dialog box and go to the “Environment Variables” section.
- If you have problems with the display, ensure that your system video display is set to a screen resolution of 1024 x 768 or more and that your video display is set to use 256 or more screen colors.
- Opening the online Help may be interrupted by one of the following messages on the Internet Explorer Information Bar:
  - “To help protect your security, Internet Explorer has restricted this file from showing active content that could access your computer. Click here for options...”
  - “To help protect your security, Internet Explorer has restricted this file from running scripts or ActiveX controls that could access your computer. Click here for options...”
  - “To help protect your security, Internet Explorer has restricted this webpage from running scripts or ActiveX controls that could access your computer. Click here for options...”

This can happen if you have Internet Explorer as your default browser.

To see the Help, click on the Information Bar and choose **Allow Blocked Content**. A dialog box with an expanded warning opens. Click **Yes**.

To avoid these warnings, either use a different browser or turn off the warning for active content in Internet Explorer.

Note

Doing either of these means that when you open any Web page that is resident on your computer—not just Radiant software Help—the page will automatically run any active content that it has. While active content is common and can be very useful, malicious content can damage your files. Be sure you trust the software on your computer.

To turn off the warning:

1. In the Internet Explorer, choose **Tools > Internet Options**.
2. Click the **Advanced** tab.
3. Under Security, select **Allow active content to run in files on My Computer**.
4. Click **OK**.

- Whitelisting the ibbasct.dll File

  The encrypted libbasct.dll in Radiant may trigger a security alert in your system. libbasct.dll is a secure file. If your antivirus (AV) software addresses it as a security threat, you may need to whitelist this file on your AV software.

When All Else Fails

If the Radiant software still does not run after you have installed your new license file and confirmed that your environment variables are correct, gather the following items:

- A screen capture showing the error message.
- A text file that contains a listing of the environment setup for your PC. From a Command Prompt window, issue the **set > env.txt** command.
- Your license.dat file.

Put these items into a zip file and e-mail it to techsupport@latticesemi.com, including an explanation of the problem.

Revision History

The following table gives the revision history for this document.

Date	Version	Description
04/06/2026	2.7	Update for Radiant software 2025.2.1.
12/11/2025	2.6	Update for Radiant software 2025.2.
06/26/2025	2.5	Update for Radiant software 2025.1.
12/20/2024	2.4	Update for Radiant software 2024.2.
06/28/2024	2.3	Add QuestaSim and update for Radiant software 2024.1.
11/27/2023	2.2	Update for Radiant software 2023.2.
05/05/2023	2.1	Remove Windows 7/ 8 and update for Radiant software 2023.1.
11/10/2022	2.0	Update for Radiant software 2022.1.
08/09/2022	1.9	Update for Radiant software 3.2.
12/06/2021	1.8	Update for Radiant software 3.1.
05/05/2021	1.7	Updates for Ubuntu system library.
12/07/2020	1.6	Updates for ModelSim floating license.
11/03/2020	1.5	Add ModelSim and update for Radiant software 2.2.
6/03/2020	1.4	Update for Radiant software 2.1.
12/2/2019	1.3	Update for Radiant software 2.0.
09/24/2019	1.2	Add CrossLink-NX.

Date	Version	Description
04/12/2019	1.1	▶ Update for Radiant software 1.1 ▶ Add Stand-Alone Radiant Power Estimator. ▶ Update hypertext.
02/13/2018	1.0	Initial Release.