Lattice Propel 2022.1 Installation for Windows

User Guide

FPGA-AN-02056-1.0

November 2022
Disclaimers
Lattice makes no warranty, representation, or guarantee regarding the accuracy of information contained in this document or the suitability of its products for any particular purpose. All information herein is provided AS IS, with all faults and associated risk the responsibility entirely of the Buyer. Buyer shall not rely on any data and performance specifications or parameters provided herein. Products sold by Lattice have been subject to limited testing and it is the Buyer’s responsibility to independently determine the suitability of any products and to test and verify the same. No Lattice products should be used in conjunction with mission- or safety-critical or any other application in which the failure of Lattice’s product could create a situation where personal injury, death, severe property or environmental damage may occur. The information provided in this document is proprietary to Lattice Semiconductor, and Lattice reserves the right to make any changes to the information in this document or to any products at any time without notice.
# Contents

About Lattice Propel™ 2022.1 ................................................................. 4
System Requirement ............................................................................... 4
Installing Lattice Propel 2022.1 on Microsoft Windows Platform .......... 5
Licensing for Lattice Propel 2022.1 ......................................................... 9
Running Propel 2022.1 Software ......................................................... 10
Install and Uninstall Cable Drivers ..................................................... 10
Revision History ................................................................................ 12

# Figures

Figure 1. Lattice Propel 2022.1 Installation Wizard .................................. 5
Figure 2. Selecting Installation Folder .................................................... 5
Figure 3. Selecting Component(s) ........................................................... 6
Figure 4. Accepting License Agreements ............................................... 6
Figure 5. Selecting Windows Program Group .......................................... 7
Figure 6. Installing Components ............................................................ 7
Figure 7. Installing Propel 2022.1 ......................................................... 8
Figure 8. Installation Completed ............................................................ 8
Figure 9. Lattice Propel 2022.1 & Lattice Propel Builder 2022.1 in the Start Menu and the Shortcut Icon ....... 9
Figure 10. Environment Variables in System Properties Dialog ............ 9
Figure 11. Driver(s) Installation Options ................................................ 11
About Lattice Propel™ 2022.1

Lattice Propel™ 2022.1 software is a complete set of graphical and command-line tools to create, analyze, compile, and debug both FPGA-based hardware and software processor systems.

System Requirement

The basic system requirements for installing and running Lattice Propel 2022.1 software on Microsoft Windows platform are:

- Intel Pentium or Pentium-compatible PC
- Windows 10 64-bit Operating System
- Free Disk Space: approximately 10 GB
- Network adapter and network connectivity for IP server access
Installing Lattice Propel 2022.1 on Microsoft Windows Platform

Follow steps below to install Lattice Propel 2022.1 software:

1. Double-click the Lattice Propel 2022.1 software installer you downloaded. The Install Lattice Propel 2022.1 dialog box opens (Figure 1).

   ![Figure 1. Lattice Propel 2022.1 Installation Wizard](image)

2. Click Next. The Select Installation Folder dialog appears (Figure 2).

3. The default installation folder is C:\lscc\propel\2022.1. Click the Browse button to change to a desired folder for the installation.

   ![Figure 2. Selecting Installation Folder](image)
4. Click **Next**. The Select Component(s) dialog opens (Figure 3). Select Propel 2022.1. The Propel 2022.1 component must be installed.

![Figure 3. Selecting Component(s)](image)

5. Click **Next**. The License Agreement dialog opens (Figure 4).

![Figure 4. Accepting License Agreements](image)

6. Read the license agreement. If you agree, choose **I accept the licenses** option. You must accept the terms contained in these agreements before continuing with the installation. Click **Next**. The Start Menu Shortcut dialog opens (Figure 5).
7. Select the Start menu where you want to create the program shortcut.
8. Click **Next**. The Ready to Install dialog opens (Figure 6).

9. Review the current settings, the destination folder and the selected components. If everything is correct, click **Install** to start the installation (Figure 7).
10. When the installation is completed, the Lattice Propel 2022.1 Installation Completed Wizard pops up (Figure 8).

11. In the Installation Completed Wizard dialog box, read the confirmation note and click Finish.

   **Note:**
   Do not close the installation window manually. The window closes automatically once the installation is completed.

12. A message pops up after the installation prompting you to restart PC. New environment variables are added during the installation process.
13. After restarting the computer, Lattice Propel 2022.1 and Lattice Propel Builder 2022.1 can be found from the Start menu (Figure 9). The Lattice Propel 2022.1 shortcut icon and the Lattice Propel Builder 2022.1 shortcut icon can be found on your computer Desktop (Figure 9). You can invoke Lattice Propel 2022.1 or Lattice Propel Builder 2022.1 by choosing from the Start menu or double clicking the shortcut icon.

![Figure 9. Lattice Propel 2022.1 & Lattice Propel Builder 2022.1 in the Start Menu and the Shortcut Icon](image)

**Licensing for Lattice Propel 2022.1**

To obtain a license file for your Propel 2022.1 software:

2. Select Lattice Propel. You can get the Propel Software Licensing page.
3. Follow the instructions step-by-step.
4. Place license.dat under the `<install_path>\license` directory, where your Propel is installed.

**Note:**

If you saved the license.dat file in a directory other than the default one mentioned above, change LM_LICENSE_FILE variable in the Environment Variables dialog invoked from the System Properties (Figure 10) of MS Windows accordingly pointing to the exact directory where you place license.dat. Before invoking Lattice Propel 2022.1, make sure the environment variable is correctly set.

![Figure 10. Environment Variables in System Properties Dialog](image)
Running Propel 2022.1 Software

After Lattice Propel 2022.1 software is installed, you can open it by using either of the following two methods:

**Invoking Propel 2022.1 from Start Menu**

To invoke Propel 2022.1:

- In Windows 10, choose Apps > Lattice Propel 2022.1 > Lattice Propel 2022.1.
  
The Propel main window opens.

To invoke Propel Builder 2022.1:

- In Windows 10, choose Apps > Lattice Propel 2022.1 > Lattice Propel Builder 2022.1.
  
The Propel Builder main window opens.

**Invoking Propel 2022.1 from Desktop Icon**

To invoke Propel 2022.1:

- In Windows 10, double-click Lattice Propel 2022.1 icon from desktop.
  
The Propel main window opens.

To invoke Propel Builder 2022.1:

- In Windows 10, double-click Lattice Propel Builder 2022.1 icon from desktop.
  
The Propel Builder main window opens.

Install and Uninstall Cable Drivers

Parallel port or USB drivers are required to program Lattice devices using Lattice download cables.

To install the drivers, you need to select *Run as administrator* from the *Install&Uninstall Cable Drivers* right-click menu.

To start installing/uninstalling cable drivers:

- In Windows 10, choose Apps > Lattice Propel 2022.1 > Install&Uninstall Install Cable Drivers.

Driver(s) installation options (Figure 11):

- **LSC Windows Parallel Port Driver** — Supports device programming through the parallel port of your PC. The driver can be installed on Windows 10.
- **LSC Windows USB 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 Windows USB Driver** — Supports Lattice HW-USBN-2B USB cable and Lattice evaluation boards with FTDI (Future Technology Devices International) USB host chip.

  **Note:**

  When the FTDI driver is installed for the first time, the Windows operating system may report that Windows cannot verify the publisher of this driver software. Select *Install this driver software anyway*. This warning message does not occur during subsequent installations.

- All Drivers — Supports all the above three drivers.
To install a driver:

1. In the Drivers Install/Uninstall dialog box (Figure 11), select the desired driver. Click Install.
2. A few successive messages are prompted letting you verify the USB cable is plugged in. Click Yes.
3. In the Installation Completed dialog box, click OK.

**Note:**

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

![Figure 11. Driver(s) Installation Options](image)
Revision History

Revision 1.0, November 2022

<table>
<thead>
<tr>
<th>Section</th>
<th>Change Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Initial release.</td>
</tr>
</tbody>
</table>