Lattice Propel 2024.1 Installation for Windows

User Guide

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Contents

1.   About Lattice Propel™ 2024.1

Lattice Propel™ 2024.1 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.

2.   System Requirement

The basic system requirements for installing and running Lattice Propel 2024.1 software on Microsoft Windows platform are:

- Complex instruction set system based on ×86 64-bit architecture
- Windows 11 Pro 64-bit Operating System
- Windows 10 64-bit Operating System
- Free Disk Space: approximately 8 GB
- Network adapter and network connectivity for IP server access

3.   Installing Lattice Propel 2024.1 on Microsoft Windows Platform

Follow steps below to install Lattice Propel 2024.1 software:

1.   Double-click the Lattice Propel 2024.1 software installer you downloaded. The **Install Lattice Propel 2024.1** dialog box opens (Figure 3.1).
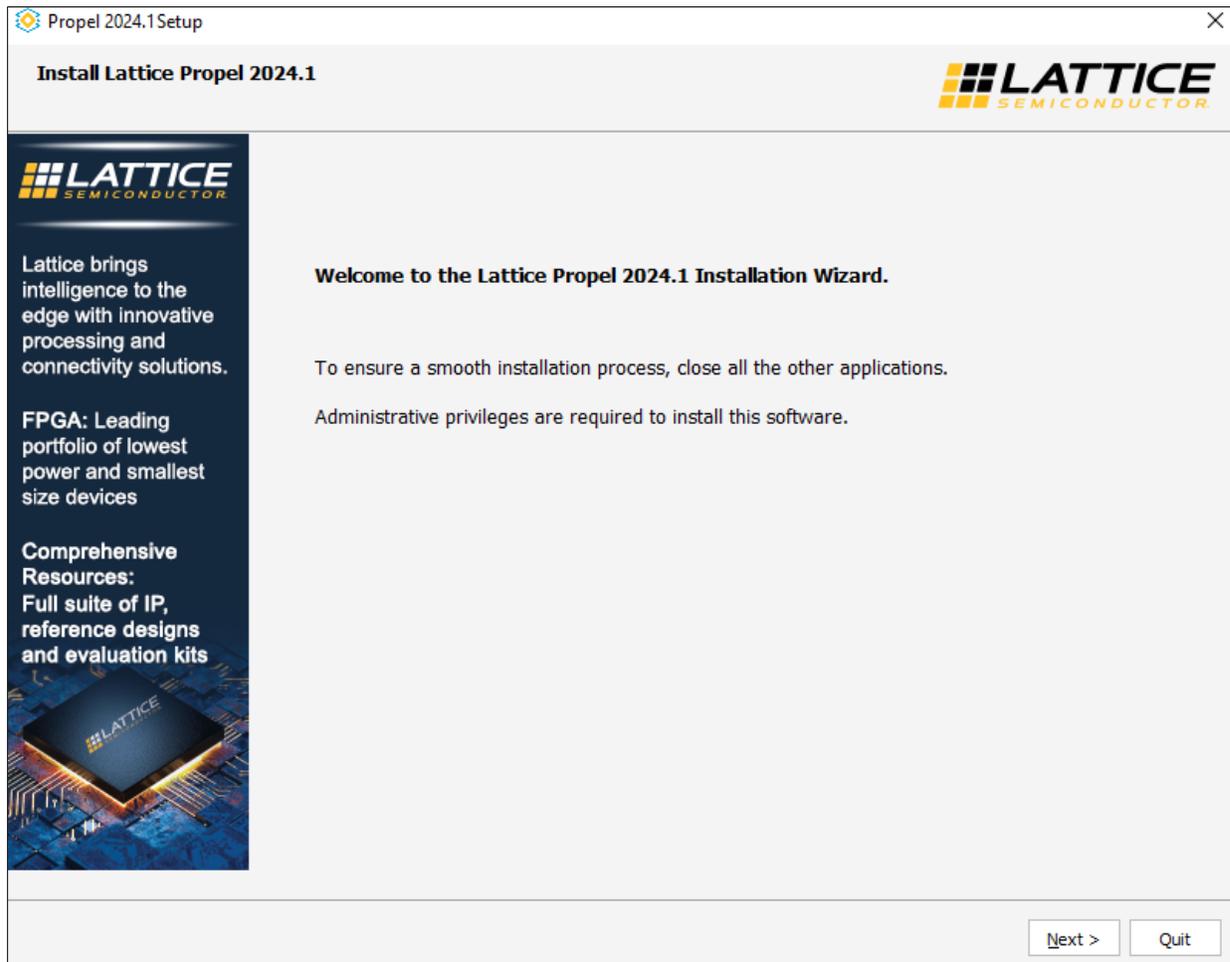

Figure 3.1. Lattice Propel 2024.1 Installation Wizard

2.   Click **Next**. The **Select Installation Folder** dialog appears (Figure 3.2).

3.   The default installation folder is C:\lscc\propel\2024.1. Click the **Browse** button to change to a desired folder for the installation.
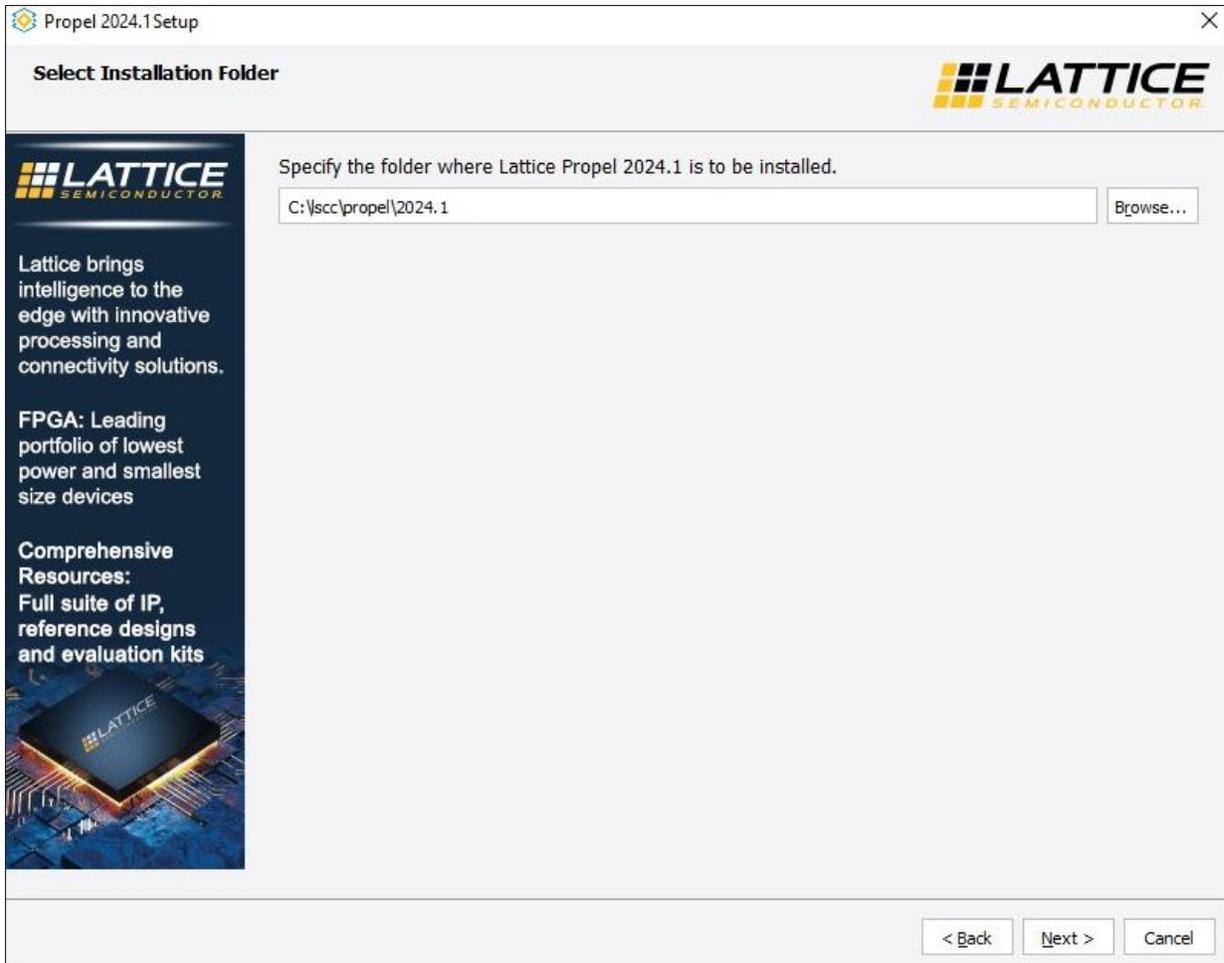
Figure 3.2. Selecting Installation Folder

4. Click **Next.** The **Select Component(s)** dialog opens (Figure 3.3). Select Propel 2024.1. The Propel 2024.1 component must be installed.
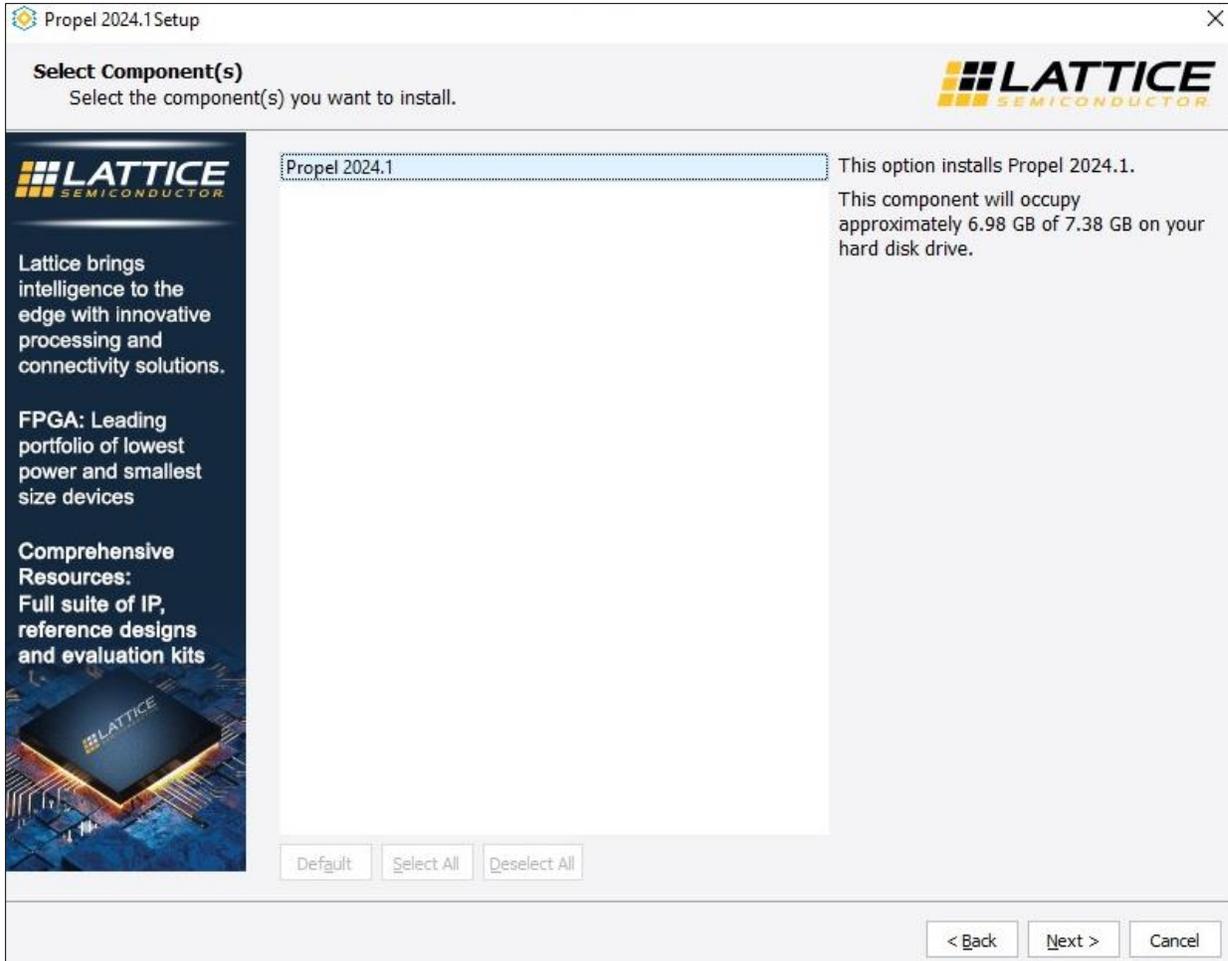
Figure 3.3. Selecting Component(s)

5. Click **Next**. The **License Agreement** dialog opens (Figure 3.4).
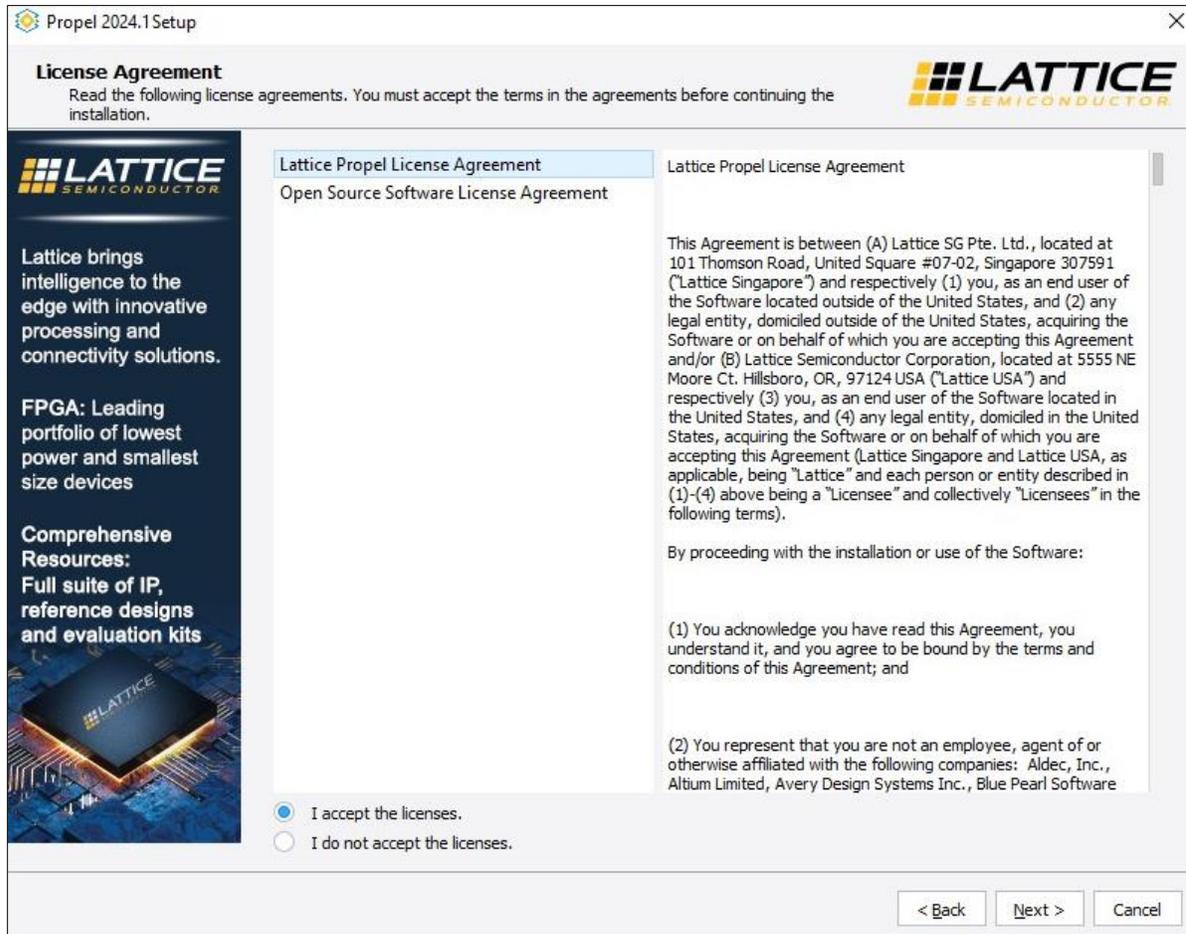
Figure 3.4. Accepting License Agreements

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 3.5).
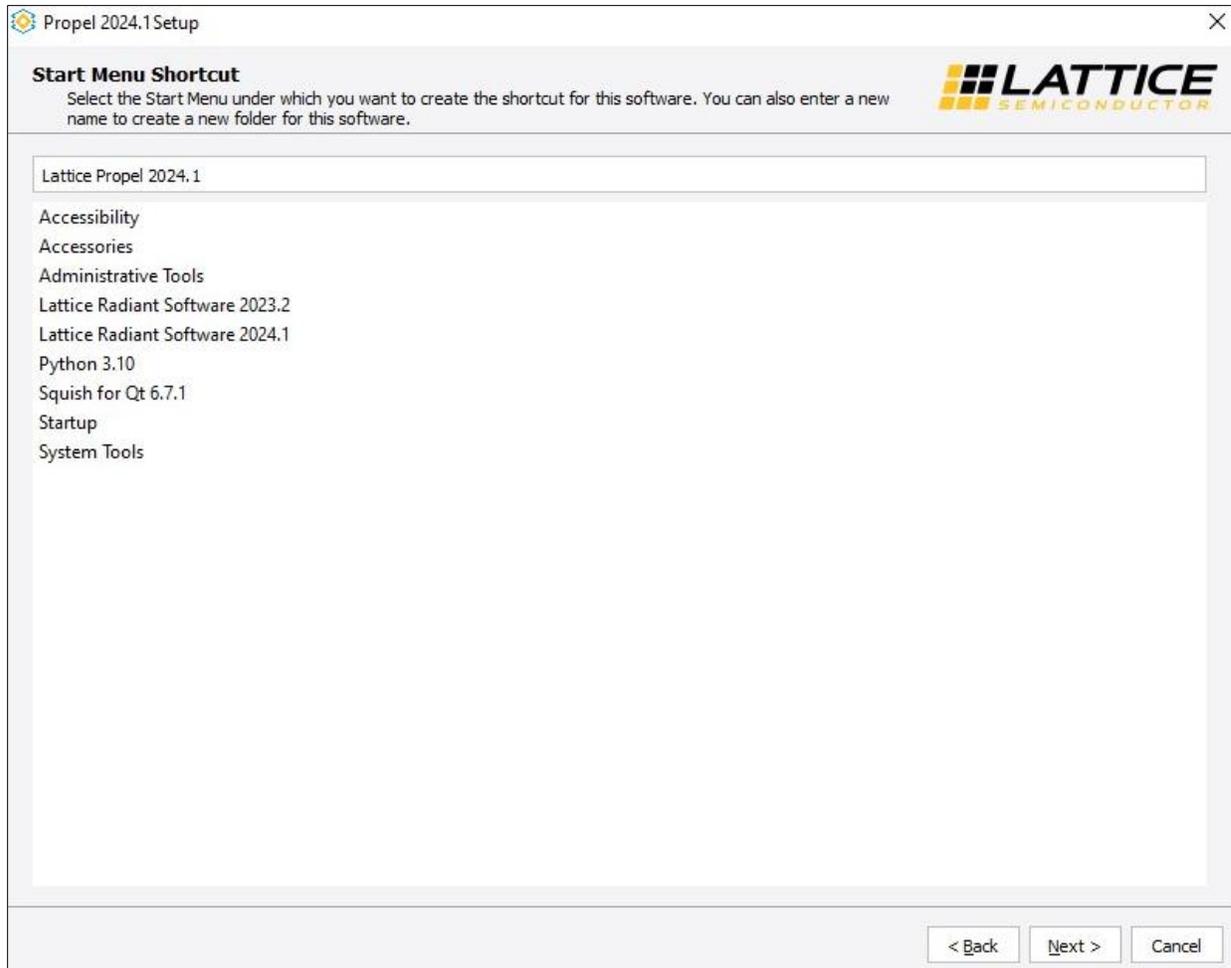
Figure 3.5. Selecting Windows Program Group

7. Select the Start menu where you want to create the program shortcut.
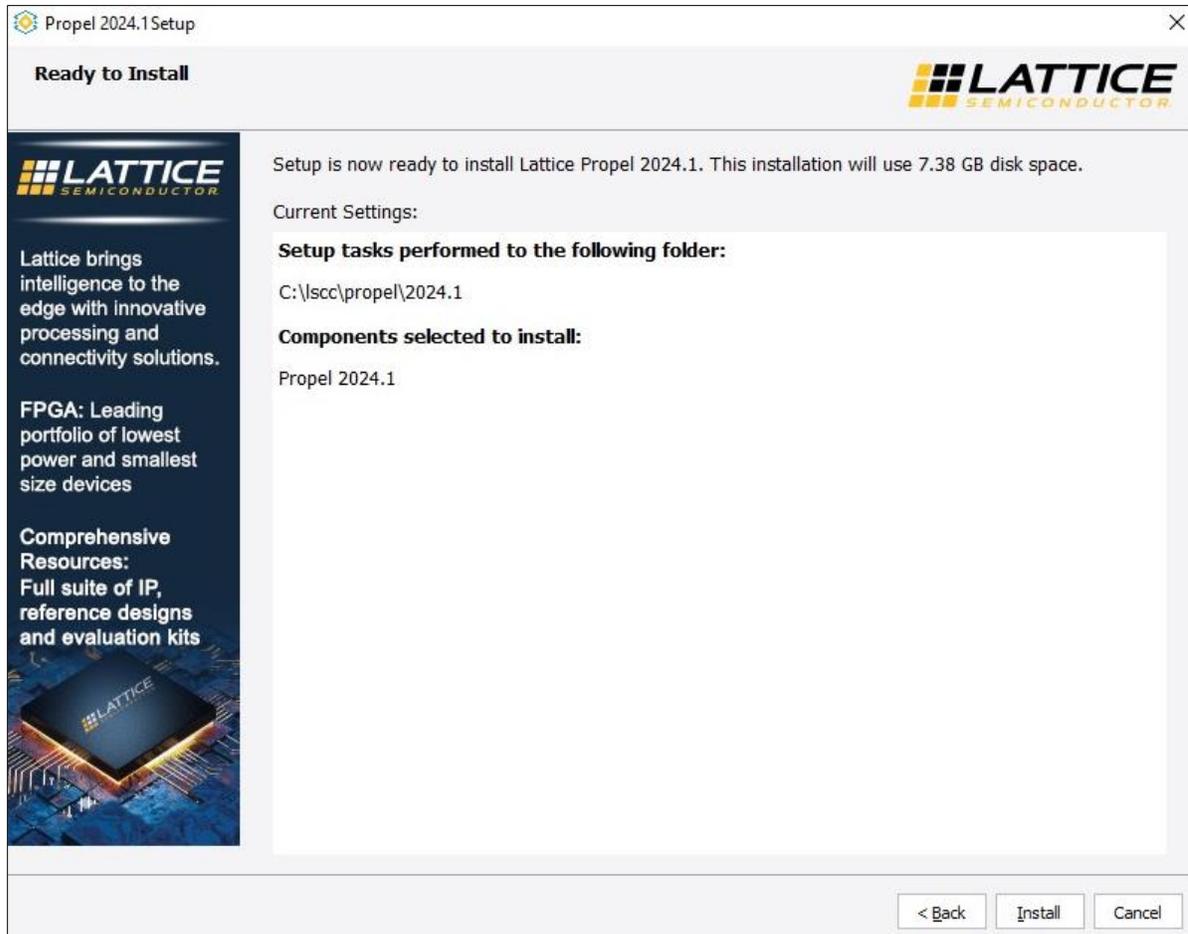8. Click **Next**. The **Ready to Install** dialog opens (Figure 3.6).

Figure 3.6. Installing Components

9. Review the current settings, the destination folder and the selected components. If everything is correct, click **Install** to start the installation (Figure 3.7).
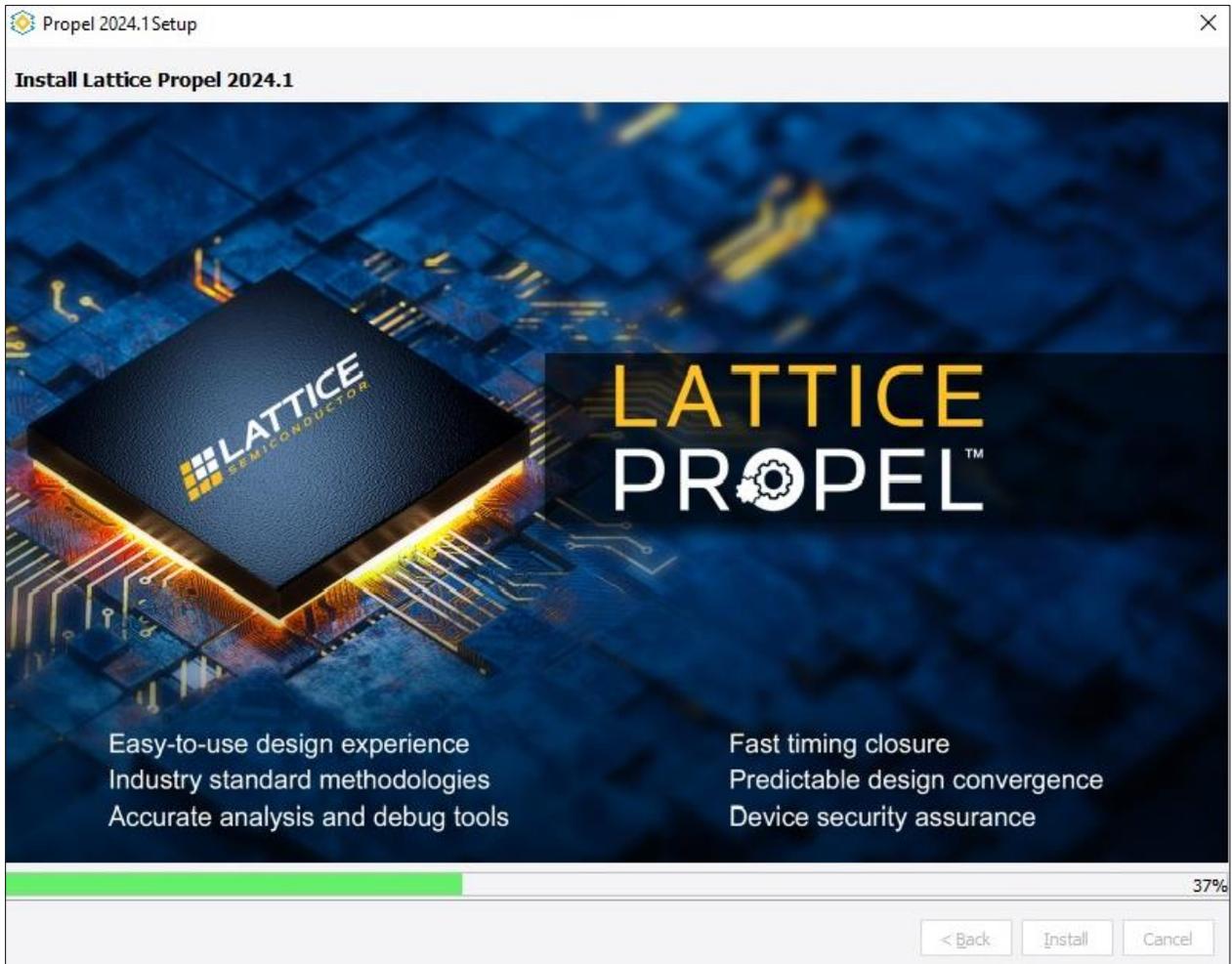
Figure 3.7. Installing Propel 2024.1

10. When the installation is completed, the **Lattice Propel 2024.1 Installation Completed** wizard pops up (Figure 3.8).
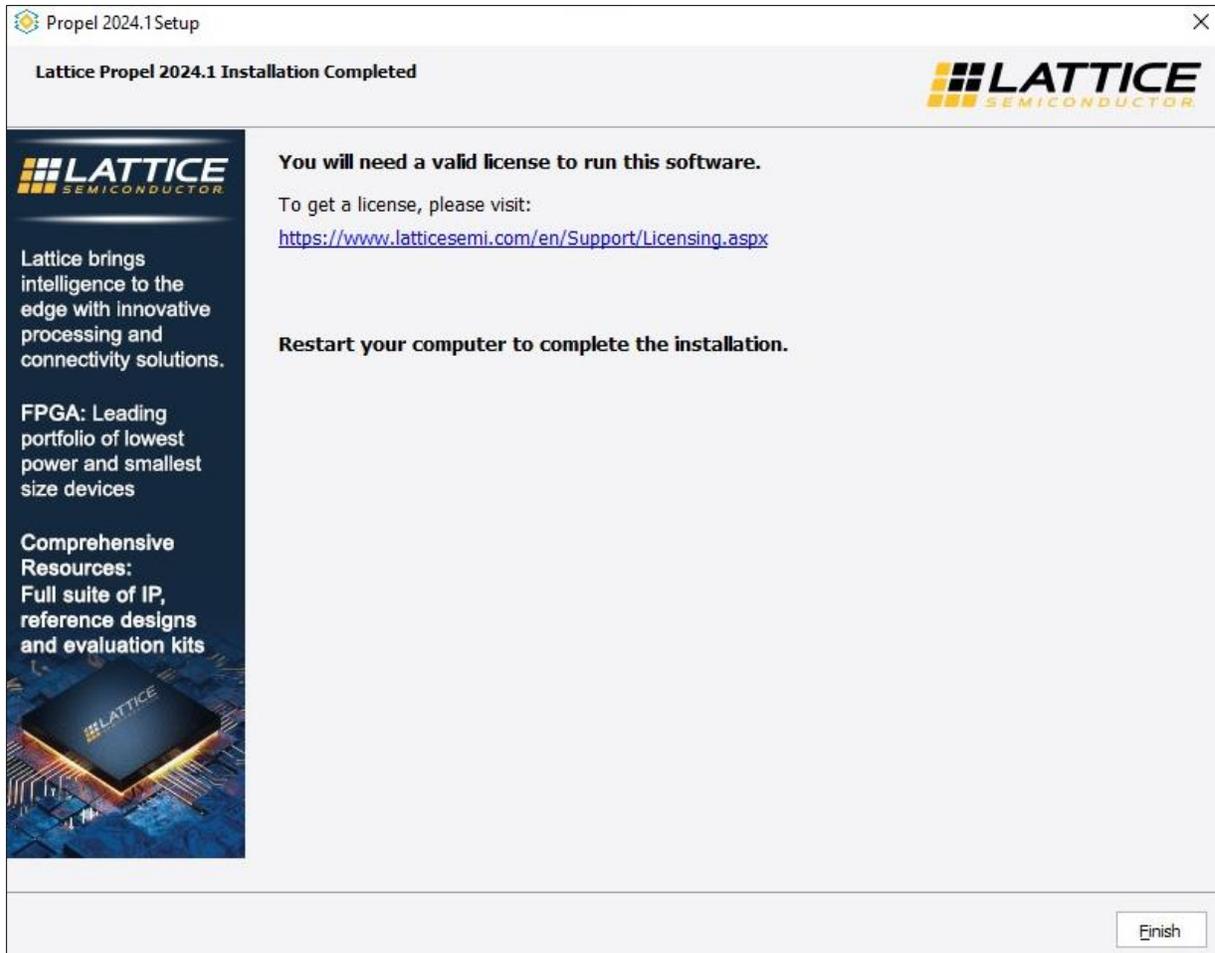
Figure 3.8. Installation Completed

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 2024.1** and **Lattice Propel Builder 2024.1** can be found from the Start menu (Figure 3.9). The **Lattice Propel 2024.1** shortcut icon and the **Lattice Propel Builder 2024.1** shortcut icon can be found on your computer Desktop (Figure 3.9). You can invoke Lattice Propel 2024.1 or Lattice Propel Builder 2024.1 by choosing from the Start menu or double clicking the shortcut icon.
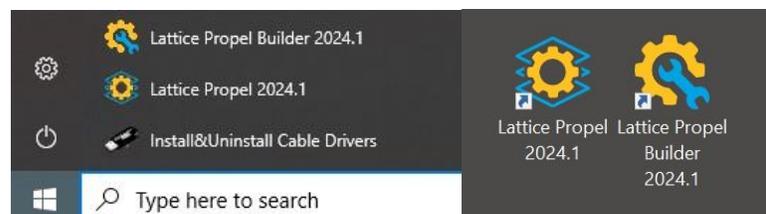

Figure 3.9. Lattice Propel 2024.1 and Lattice Propel Builder 2024.1 in Start Menu and Shortcut Icons

4. Licensing for Lattice Propel 2024.1

By obtaining Lattice Propel 2024.1 license, you can access all the related features in Lattice Diamond and Lattice Radiant software.

To obtain a license file for your Propel 2024.1 software:

1. Go to Propel Licensing Form.
2. Follow the instructions step-by-step.
3. 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 4.1) of MS Windows accordingly pointing to the exact directory where you place license.dat. Before invoking Lattice Propel 2024.1, make sure the environment variable is correctly set.
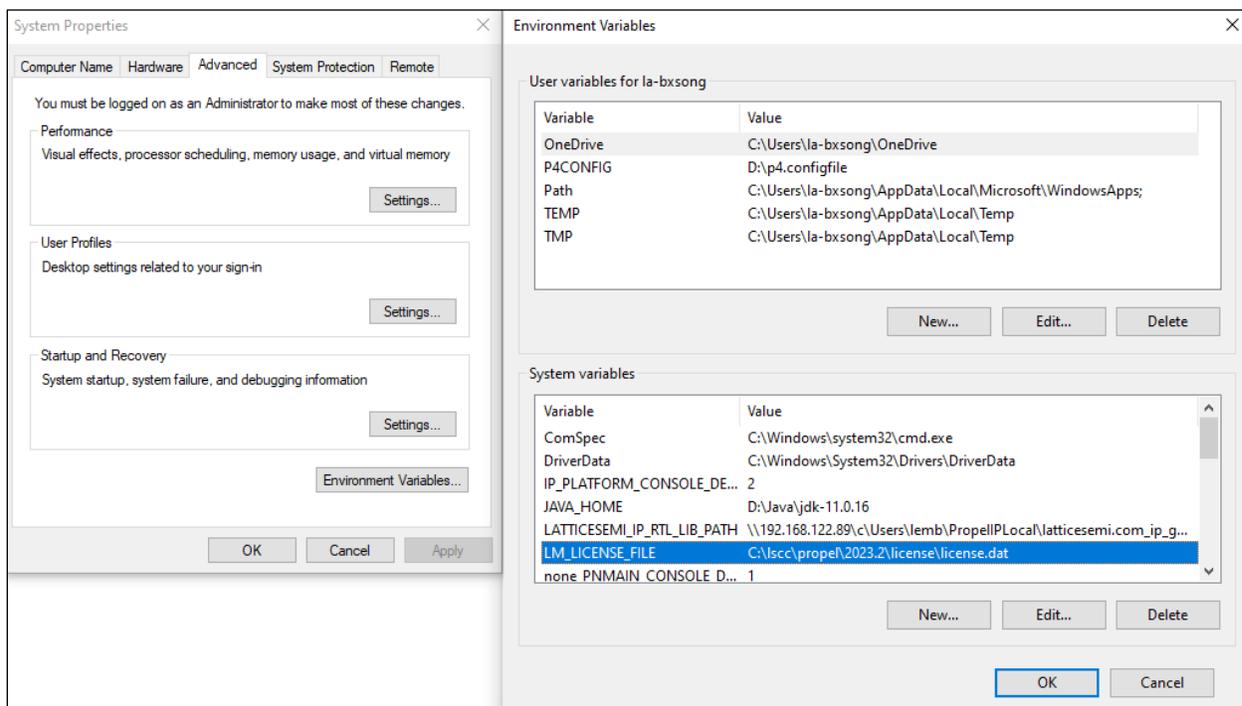

Figure 4.1. Environment Variables in System Properties Dialog

5.   Running Propel 2024.1 Software

After Lattice Propel 2024.1 software is installed, you can open it by using either of the following two methods:

Invoking Propel 2024.1 from Start Menu

To invoke Propel 2024.1:

- In Windows 10/11, choose **Apps** > **Lattice Propel 2024.1** > **Lattice Propel 2024.1**.

  The Propel main window opens.

To invoke Propel Builder 2024.1:

- In Windows 10/11, choose **Apps** > **Lattice Propel 2024.1** > **Lattice Propel Builder 2024.1.**

  The Propel Builder main window opens.

Invoking Propel 2024.1 from Desktop Icon

To invoke Propel 2024.1:

- In Windows 10/11, double-click Lattice Propel 2024.1 icon from desktop.

  The Propel main window opens.

To invoke Propel Builder 2024.1:

- In Windows 10/11, double-click Lattice Propel Builder 2024.1 icon from desktop.

  The Propel Builder main window opens.

6.   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 10/11, choose **Apps** > **Lattice Propel 2024.1** > **Install&Uninstall Cable Drivers**.

Driver(s) installation options (Figure 6.1):

- 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.

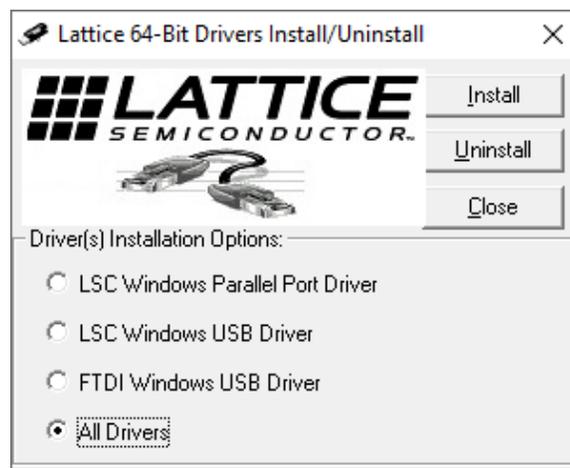- All Drivers — Supports all the above three drivers.

Figure 6.1. Driver(s) Installation Options

To install a driver:

1. In the Drivers Install/Uninstall dialog box (Figure 6.1), 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.

Revision History

Revision 1.0, June 2024

Section	Change Summary
All	Production release.

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