Lattice Propel 1.1

Release Notes

FPGA-AN-02029-1.0

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About Lattice Propel™ 1.1

Welcome to the Lattice Propel 1.1 design environment for Lattice FPGA system design. Lattice Propel is a complete set of graphical and command-line tools to create, analyze, compile, and debug both FPGA-based hardware and software processor systems.

This release of Lattice Propel 1.1 is backward compatible with Lattice Propel 1.0.

New Device Family Support

- Lattice CrossLink™-NX
- Lattice Certus™-NX

Lattice Propel SDK

- Supports cable port and device detection and selection during on-chip debug.
- Supports creating C project for SoC project with multiple memory regions.
- Supports importing Lattice System on Chip (SoC) projects into workspace.
- Adds synchronizing C project with SoC project.
- Adds Lattice Diamond®, Lattice Radiant™, and Propel Builder bridges.
- Adds directory settings for Lattice Diamond /Lattice Radiant location.
- Supports peripherals view with register description during debug session.
- Supports hardware description language syntax highlighting.

Lattice Propel Builder

- Adds standalone Propel Builder icon to the start menu and the desktop.
- Supports creating SoC project and SoC verification in project wizard Graphic User Interface.
- Adds Lattice Diamond, Lattice Radiant, and Propel SDK bridges.
- Adds directory settings for user IP/Lattice Diamond/Lattice Radiant/Questasim location.
- Generates simulation environment, testbench, and script.
- Integrates OEM ModelSim.

Template Design and System Simulation

- Provides CrossLink-NX template design, the HelloWorld Project.
- Provides Certus-NX template design, the HelloWorld Project.
- Supports functional verification using system-level simulation environment for templates.

Release Contents

Lattice Propel 1.1 software (Propel_1.1.exe)

Supported Validation Platforms

- MachXO3D Breakout Board (REV A P/N: LCMXO3D-9400HC-B-EVN)
- MachXO3D PFR Demo Board (REV A P/N: LCMXO3D-PFR-EVN)
- Newly-added CrossLink-NX Evaluation Board (REV B P/N: LIFCL-40-ENV)
System Requirements
The basic system requirements for Propel 1.1 on Microsoft Windows platform:
- Intel Pentium or Pentium-compatible PC
- 64-bit Operating System
- Windows 7 or Windows 10. Windows 10 is recommended.
- Free Disk Space: approximately 5 GB
- Computer Memory Requirement: 2 GB minimum; 3 GB recommended
- Network adapter and network connectivity for IP server access

Release Limitations
This release of Propel 1.1 has the following limitations:
- Propel 1.1 does not support Linux platform.

Technical Support
For assistance, submit a technical support case at www.latticesemi.com/techsupport.