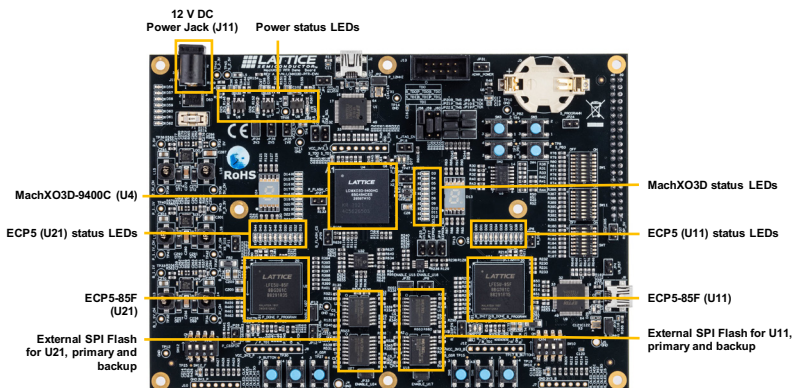


This document provides a brief introduction to the Lattice Sentry Demo Board for MachXO3D.



1

Check Kit Contents

The Lattice Sentry Demo Board for MachXO3D includes the following items:

- Lattice Sentry Demo Board for MachXO3D
- 12 V AC/DC Adapter
- USB Cable for Programming via PC (USB-A to Mini-B)
- Quick Start Guide

2

Using the Board

The Board contains one MachXO3D-9400C (U4) and two ECP5-85F (U11, U21) FPGA devices.

The board comes pre-loaded with the demonstration program described below. The MachXO3D program image is contained in its on-board flash. The ECP5 images are contained in their respective external SPI Flash devices (U17, U18, U27, U28).

3**Installing the software**

The Board is pre-programmed with a basic demonstration.

To develop your own solutions, download and use the Lattice Diamond software (version 3.11, SP1 or SP3 or later), downloadable from www.latticesemi.com/software.

If you only need to re-program to board, you can use the Diamond Programmer stand-alone software (version 3.11.2 or later). You can download this at www.latticesemi.com/programmer.

4**Powering the Board & Observing the Demo Program**

Connect the supplied power adapter to the 12 V DC power input (J11) on the board. A few LEDs should light, indicating the board is powered.

The LEDs next to the MachXO3D-9400C device (D3-D12) should move through a series of patterns before settling on 0110 0110 within a few seconds. This indicates that all three FPGAs are configured correctly. There will also be a blinking status LED next to each ECP5-85F (D53, D39) indicating the demo program is running.

5**Doing More with the Lattice Sentry Demo Board for MachXO3D**

Check the Lattice website at www.latticesemi.com/sentryboard1 to download the full User's Guide, PC-based software tools to interact with the demonstration program, and other resources.

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