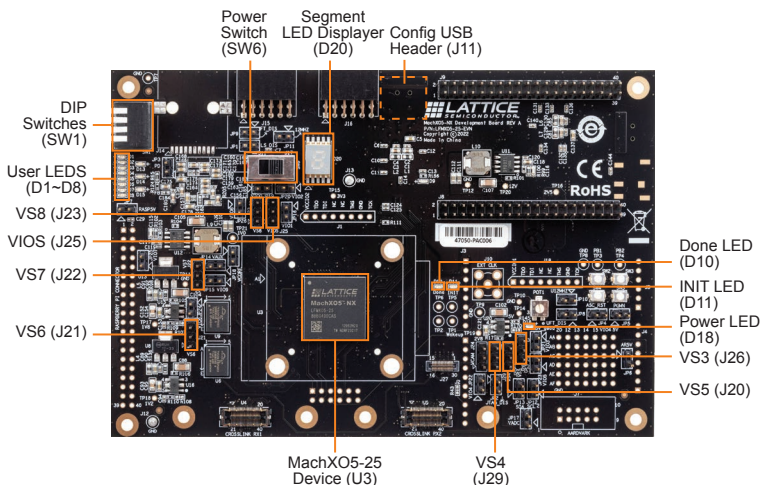


This document provides a brief introduction to the MachXO5™-NX Development Kit.



1

Check Kit Contents

The MachXO5-NX Development Board kit contains the following items:

- MachXO5-NX Development Board
- 12 V AC/DC Adapter and International Plug Adapters
- USB Cable for Programming via PC (USB-A to mini-B)
- Quick Start Guide
- Lattice Radiant software download information

2

Using the MachXO5-NX Development Board

The MachXO5-NX Development Board as shipped supports Internal Flash boot-based configuration. The internal Flash Configuration Memory is pre-loaded with a LED blink demonstration program.

3

Installing the software

The MachXO5-NX Development Board is pre-programmed with a basic demonstration.

To develop your own solutions, download and use the Lattice Radiant design software (version 3.1 or later) in www.latticesemi.com/software.

If you only need to re-program the board, you can use the Radiant Programmer Stand-alone software (version 3.1 or later).

4

Powering the Boards and Observing the Demo Program

Make sure that the following jumpers are installed already for selected power suppliers.

| MachXO5™-NX Development Kit | |
|-----------------------------|---|
| Jumper | Pins to Connect |
| J20 | Pin 1 to Pin 2 (VCCIO5 to 1.2 V) |
| J21 | Pin 1 to Pin 2 (VCCIO6 to 1.2 V) |
| J22 | Pin 1 to Pin 2 (VCCIO7 to 3.3 V) |
| J23 | Pin 1 to Pin 2 (VCCIO8 to 3.3 V) |
| J25 | Pin 1 to Pin 2 (VCCIO0/VCCIO2 to 3.3 V) |
| J26 | Pin 1 to Pin 2 (VCCIO3 to 3.3 V) |
| J29 | Pin 2 to Pin 3 (VCCIO4 to 1.2 V) |

The USB cable should be connected from backside Mini-USB header J11 to a PC, and switch LEFT the SW6 to power on the board. The following LEDs will light up indicating the board is powered.

| | |
|---------|------------|
| LED D18 | Blue Light |
|---------|------------|

Configuration of the MachXO5-25 (U3) from the internal Flash memory is completed almost immediately. After configuration.

| | |
|-----------|--|
| LED D10 | Green light indicate boot done |
| LED D11 | Not light indicate no failure during boot |
| LED D1~D8 | Red light illuminated in a repeating pattern |
| LED D20 | All segments are blinking |

5

Doing More with the MachXO5-NX Development Board

Check the Lattice website at www.latticesemi.com/MachXO5-NX-Development-Board to download the full User's Guide, the full source code of the default demo, and other resources. You can use the Lattice Radiant software to develop and program your own demos.

Additional Terms and Conditions Applicable to Lattice Programming and Development Hardware

Lattice device programmers, programming cables, socket adapters, and other hardware sold for use in conjunction with Lattice software ("Programming Hardware") and Lattice evaluation boards and development kits sold for use in conjunction with evaluating Lattice products ("Development Hardware") are designed and intended for use solely with semiconductor components manufactured by Lattice Semiconductor Corporation. Programming and Development Hardware is warranted to meet Lattice specifications only for a period of ninety (90) days; in all other respects the terms and conditions of sale of Programming and Development Hardware shall be Lattice's standard terms and conditions set forth in Lattice's Sales Order Acknowledgment. Additionally, Lattice specifications for Programming and Development Hardware limit their use to low-volume engineering applications only, and not for volume production use. The warranty for Programming and Development Hardware will not apply to any Programming or Development Hardware used in production, used with worn or improperly installed hardware, or used with incompatible systems or components.

Technical Support

www.latticesemi.com/support

Copyright © 2022 Lattice Semiconductor Corporation. Lattice Semiconductor, L (stylized) Lattice Semiconductor Corp., Lattice (design) are either registered trademarks or trademarks of Lattice Semiconductor Corporation in the United States and/or other countries. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.