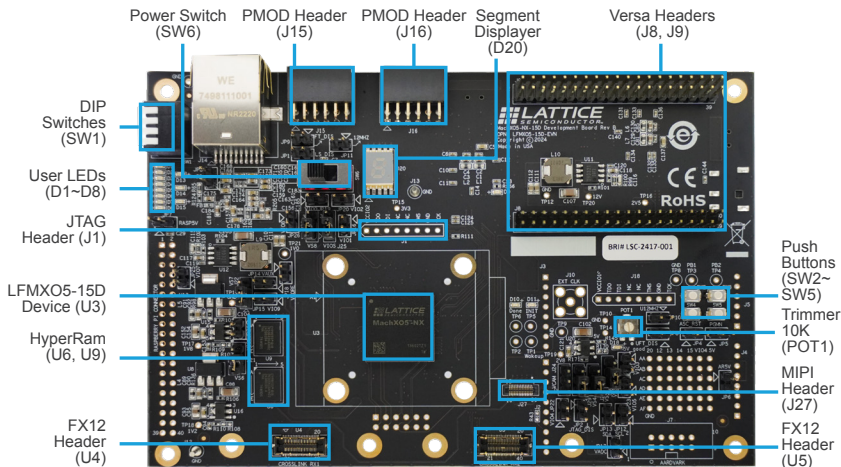


This document provides a brief introduction to the MachXO5™-NX-15D Development Board.



1 Check Kit Contents

The MachXO5-NX-15D Development Board kit contains the following items:

- MachXO5-NX-15D 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 with Lattice Radiant software download information

2 Using the MachXO5-NX-15D Development Board

The MachXO5-NX-15D Development Board as shipped supports Internal Flash boot based configuration. The internal Flash Configuration Memory is pre-loaded with a demonstration program.

3 Installing the software

The MachXO5-NX-15D Development Board is pre-programmed with a basic demonstration.

To develop your own solutions, download and use the Lattice Radiant design software (version 2023.2 or later) in lattice.com/software.

If you only need to re-program the board, you can use the Radiant Programmer Standalone software (version 2023.2 or later).

Notes: Two Radiant license feature will be required including LSC_CTL_LFMXO5-15D and LSC_ESFBK_CS.

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Powering the Board and Observing the Demo Program

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

| MachXO5-NX-15D Development Board | |
|----------------------------------|----------------------------------------|
| Jumper | Pin 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 3.3V) |
| 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 LFMXO5-15D (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, D3, D5, D7 | Keep Light |
| LED D2, D4, D6 | Keep Dark |
| LED D8 | Keep Blinking |
| LED D20 | Keep show "1" |

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Doing More with the MachXO5-NX-15D Development Board

Check the Lattice website at latticesemi.com/machxo5-nx-15d-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.

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www.latticesemi.com/support

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