This document provides a brief introduction to the Crosslink-NX Voice and Vision Machine Learning Board. The board is pre-programmed to demonstrate the Human Counting Demo.

**Check Kit Contents**

The Crosslink-NX Voice and Vision Machine Learning Board kit contains the following items:

- CrossLink-NX Voice and Vision Machine Learning Board
- HM360 camera sensor (1 sensor, mounted on board)
- USB Cable for Programming via PC (USB-A to Micro-B)
- USB Cable for video output (Micro-B to USB-A)
- Limited license with unique serial number for Lattice Radiant development software (optional to use)
- Quick Start Guide

**Preparing the Hardware and Running the Demonstration**

Follow the steps below to prepare the hardware and start the demonstration, which is pre-programmed on the board.

- Connect USB2 cable from PC to Config USB (J2). This will power the board with a 5 V supply.
- Connect USB3 cable from Video Out USB3 to PC (J3)
- No jumpers need to be placed on board
Set SW1 inputs to the 1000 setting (ON side=0)

Open the AMCcap or VLC application and select the FX3 Device as source. For AMCcap, it will appear in the Devices menu. For VLC, it will appear under the Media -> Open Capture Device menu.

The output of the demo will be observed on the monitor as a single video stream.

This is the human counting demo. Demo output will contain bounding boxes for detected humans in a given frame and it will display total number of detected humans in a given frame on PC.

Done!

Congratulations! You have successfully demonstrated the Human Presence Detection demo on the Crosslink-NX Voice and Vision Machine Learning Board. This demo is intended to show basic functionality of the kit as shipped. This kit can be reprogrammed and/or connected to additional hardware (available separately) to demonstrate a number of bridging solutions. To learn more about these solutions and download full documentation for this kit, including schematics for all the boards, visit the Lattice website at: www.latticesemi.com/evdkit.

Development with the Lattice Crosslink-NX FPGA is supported by the Lattice Radiant Software. You can learn more and download the latest version from the Lattice website at www.latticesemi.com/radiant.

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Technical Support

www.latticesemi.com/support

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