



Getting started with the HWD-XO-USB MachXO Starter Kit

Introduction

The MachXO Starter Evaluation kit is a complete working solution for the MachXO crossover programmable logic technology. The MachXO Starter Kit is a simple, yet versatile solution allowing for detailed analysis of the MachXO performance and technology. The board is also a convenient platform to help you get started with your own MachXO design.

Key Features

- LCMXO640C-3TN144C (TQFP-144 fine pitch package)
- Built in USB download capability (USB Controller and MachXO256 device)
- Power-Supply and JTAG via USB
- Step-Down-Converter with 3V3
- 24 MHz Oscillator
- 8 LEDs - one Port
- Power-LED
- One Push Button Switch and 4-DIP-Switch
- USB-A-connector incl. 1,8m USB-Cable (A-A)
- Lattice Starter Software on DVD and a CD containing Data and Tutorials

First Steps

If you do not have the Lattice Software installed please insert the DVD and follow the instructions on the read me file.

This will enable you to install and license the ispLEVER Starter software which will provide a complete design environment for the MachXO device and other Lattice devices such as the LatticeECP2 and LatticeXP families of FPGAs. It can be used to take a Lattice device design completely through the design process from concept to device JEDEC or Bitstream programming file output.

Also included is the ispVM System which is a comprehensive design download package that provides an efficient method of programming Lattice devices using the JEDEC and Bitstream files generated by ispLEVER.

Tutorials such as FPGA Schematic and HDL design are included in the Software and IP section of the enclosed CD and also on the Lattice website.

Now connect the USB cable provided between your PC and the MachXO board and you will be ready to program the MachXO640 device with your own files.