ZLE30250 Evaluation Board Quick Start Guide

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Purpose

This document is designed to help users get the ZLE30250 evaluation board running in a typical configuration quickly and easily.

Related Documents

1. ZLE30250 Evaluation Board Hardware Guide
2. ZL30250 Evaluation System Software User Manual
3. Applicable device datasheet (Since the ZLE30250 board supports several devices, refer to the applicable datasheet for complete descriptions of supported features and device configurations.)

Quick Start Steps

Follow these steps to get started:

1. Verify all jumpers and switches are positioned as described in *Default Positions of Jumpers and Switches* below.

2. Optionally follow a recommendation in *Jumper Changes for Alternate Oscillators* below.

3. Plug the included AC-DC converter into an AC outlet and connector J3 (labeled "5V Adapter") on the evaluation board.

4. Connect a USB cable from connector JDR1 (labeled "USB") to a PC running Windows 7 (preferred) or Windows XP.

5. On the PC, start the evaluation software GUI by double-clicking the ZL30250 shortcut on the desktop. See the ZL30250 Evaluation System Software User Manual for more details on the GUI. This manual can be opened from the Windows Start menu under All Programs → Microsemi ZL30250 → ZL30250 User Manual.

Jumper Changes for Alternate Oscillators

To bring the oscillator clock signal in through SMA connector J8 (labeled "OSC_IN OSC_OUT") jumper JP23 1-2 and move the JP25 jumper to 2-4 (upper 2 pins in the right column). On the backside of the board remove any daughter card from JP22 and on JP22 jumper 3-4 (2 pins in the middle column).

If Microsemi provided a daughter card with as 6-pin socket, remove the jumper from JP22 on the backside of the board and connect the daughter card to JP22. On the front of the board, remove the jumpers from JP21 and JP23.

If Microsemi provided a daughter card with a 10-pin header, move the JP21 jumper to 1-2 and move the JP25 jumper 1-3 (upper 2 pins the left column). On the backside of the board remove any daughter card from JP22 and on JP22 jumper 3-4 (2 pins in the middle column).

To use the 5x7mm XO at Y4, move the JP21 jumper to 5-6 (2 bottom pins) and move the JP25 jumper to 4-6 (2nd and 3rd pins from the top in the right column). On the backside of the board remove any daughter card from JP22 and on JP22 jumper 3-4 (2 pins in the middle column).

To use a 5x3.2mm XO at Y2, move the JP21 jumper to 3-4 (2 middle pins) and move the JP25 jumper to 3-5 (2nd and 3rd pins from the top in the left column). On the backside of the board remove any daughter card from JP22 and on JP22 jumper 3-4 (2 pins in the middle column).

Default Positions of Jumpers and Switches

Front side of the board (oriented with red power jacks at the top edge)

From the top edge of the board:
JP6 (2x4) no jumpers
JP1 (labeled "PWREN#") jumper 1-2
JP5 (2x4) no jumpers
JP3 (2x5) no jumpers
4xSwitch SW2: switches 1 and 2 up, other switches down
8xSwitch SW1: switches 5 and 6 down, other switches up

Half-way down the board on the left:
JP7: jumper 1-2

Between the IC2P and IC2N jacks:
JP27: jumper 2-3
JP28: jumper 1-2

In the middle of the board next to the IC3 jack
JP33: jumper 1-2
JP34: jumper 1-2
JP2: jumper 2-3

Left of the IC2P and IC1N jacks:
JP16, JP11, JP12
all jumper 1-3 (the top two pins in the left column)

Right edge of the board down to the lower-right corner:
First 5: JP14, JP13, JP15, JP19, JP18
all jumper 1-3 (the top two pins in the left column)
In the corner: JP17
jumper 1-3 (right two pins in the top row)

From the lower-left corner across the bottom:
JP10: jumper 1-2
JP21: jumper 5-6 (2 bottom pins)
JP26: no jumper
JP20 (2x5 socket): nothing inserted
JP24: no jumper
JP25: jumper 4-6 (2nd and 3rd pins from the top in the right column)
JP23: jumper 1-2

Back side of the board (oriented with red power jacks at the top edge)
JP22 (2x3) jumper 3-4 (2 pins in the middle column)
JP29: no jumper
JP30: no jumper

Among other things, these defaults configure the board so that a 3.3V XO at Y4 is connected to the device's XA pin and the device's IC2 input is single-ended on IC2P.

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