Zynq-7000 All Programmable SoC ZC702 Evaluation Kit Quick Start Guide

The Zynq® - 7000 All Programmable SoC ZC702 Evaluation Kit provides a platform for evaluating the Zynq -7000 AP SoC devices. The ZC702 kit contains the necessary hardware, tools, and IP to quickly evaluate and start the development of your embedded system.

This guide provides a kit overview and step-by-step instructions to set up and configure the board, run the built-in self-test (BIST), install the Xilinx tools, and redeem the license voucher.

ZC702 Evaluation Kit



For more information visit www.xilinx.com/zc702.



BIST Demo Setup

STEP 1

Install Driver/Terminal Emulator

Install the Silicon Labs® CP210X driver and a terminal emulator for the USB-UART on your PC.

Instructions on installing the CP210X driver can be found at www.xilinx.com/kits/cp210x.

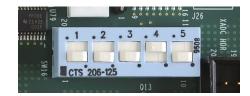
Xilinx recommends using Tera Term for Windows terminal emulation and instructions for installing Tera Term can be found at www.xilinx.com/kits/teraterm.

Note: If switches, jumpers, or FLASH images have been changed, please refer to www.xilinx.com/kits/zc702default.

STEP 2

Set Switches

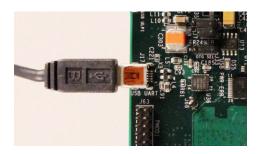
Set DIP switches on SW16 to the configuration shown below (00010).



STEP 3

Connect USB to UART Cable

Connect the mini USB cable to your PC (Standard-A) and J17 (Mini-B) on the ZC702 board.



STEP 4

Connect Power

Connect the 6-pin power plug and turn the board on with SW11.



STEP 5

Setup Terminal Emulator: COM Port

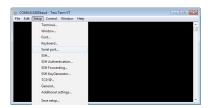
Open Tera Term, select **Serial**, and choose the COM port that correlates with the Silicon Labs CP210X. Click **OK**. Note the assigned COM port for <u>Step 7</u>.



STEP 6

Setup Terminal Emulator: Serial Select

Go to **Setup** and click **Serial port** to configure the terminal serial port setting.





STEP 7

Set Up Terminal Emulator: Serial Setup

Select the same COM port assigned in Step 5 and set the **Baud rate** to **115200**, the **Data** to **8 bit**, the **Parity** to **none**, **Stop** to **1 Bit** and **Flow control** to **none**.

Click **OK** to save the settings.



STEP 8

Initialize Configuration

Press **SW1 POR_B** to reinitialize the configuration for the ZC702 board.

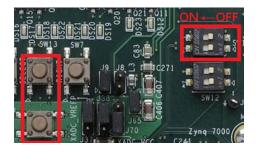


STEP 9

Terminal Display

After the ZC702 board is configured, the text shown below appears in the terminal emulator window. Type the number or the letter associated with a listed option to run a test application. For example, type 2 to run the LED Test application.

Note: DIP switches (SW15-1 and -2) are tied in parallel to push buttons 13 and 14, respectively. Either use the DIP switches, or set SW15-1 and -2 to OFF and use push buttons 13 and 14.





Install Xilinx Tools and Redeem the License Voucher

A Vivado® Design Suite: Design Edition, node-locked, device-locked license voucher code is included with this ZC702 Evaluation Kit and listed below in Step 10.

STEP 10

To redeem the voucher code, go to www.xilinx.com/getlicense and enter the voucher code shown below. After it is redeemed, the licenses will appear in your entitlement account, and you can generate a license file, which will be emailed to you. For additional assistance redeeming your voucher, go to www.xilinx.com/kits/voucher.

Note: This code can only be used once and must be redeemed within one year of purchase.

Important

Important

STEP 11

Install Vivado Design Suite

- To install the Vivado Design Suite, insert and load the installation DVD. For the latest version, go to <u>www.xilinx.</u> com/download.
- b. When you get to the Xilinx License Configuration Manager GUI in the install flow, under the Acquire a License tab, select Locate Existing License then click Next; In the Manage Xilinx License tab, click on the Load License button, and navigate to where you saved the attached license file that was emailed to you in Step 10.
- c. If you need assistance, please review the Vivado install guide found at www.xilinx.com/kits/vivadoinstall.

NEXT STEPS

Learn More

The ZC702 Evaluation Kit product page has an extensive collection of resources, including tutorial and instructional videos, a detailed reference design guide, schematics, a hardware user guide, and other reference designs to move you from the evaluation and learning phase to developing your own product.

Visit the ZC702 Evaluation Kit product page at www.xilinx.com/zc702.

Download the Zynq-7000 All Programmable SoC ZC702 Base Targeted Reference Design (UG925) for additional reference designs and demonstration content.

- For support options related to this product, see Xilinx support website at www.xilinx.com/support/index.htm.
- For product warranty, go to www.xilinx.com/kits/warranty.

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