**Document No. : 18-054610 Rev A**

**Title : EVAL-CN0506-FMCZ Customer Evaluation Board Test Procedure**

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| REVISION HISTORY | | | | |
| **Revision** | **ECR #** | **Description of Change** | **Date** | **Author** |
| A |  | Initial Draft | 09/01/2020 | Glenn Amparo |

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| --- | --- |
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## Equipment Needed

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| --- | --- |
| **Item** | **Number** |
| EVAL-CN0506-FMCZ Evaluation Board | 1 |
| Xilinx ZC706 FPGA Platform | 1 |
| ZC706 12V Power Supply |  |
| Keyboard | 1 |
| Mouse | 1 |
| OTG (USB to USB Micro) | 1 |
| USB Hub | 1 |
| Monitor | 1 |
| SD Card with CN0506 Test Image | 1 |
| HDMI Cable | 1 |
| Ethernet Cable | 1 |

## Test Setup

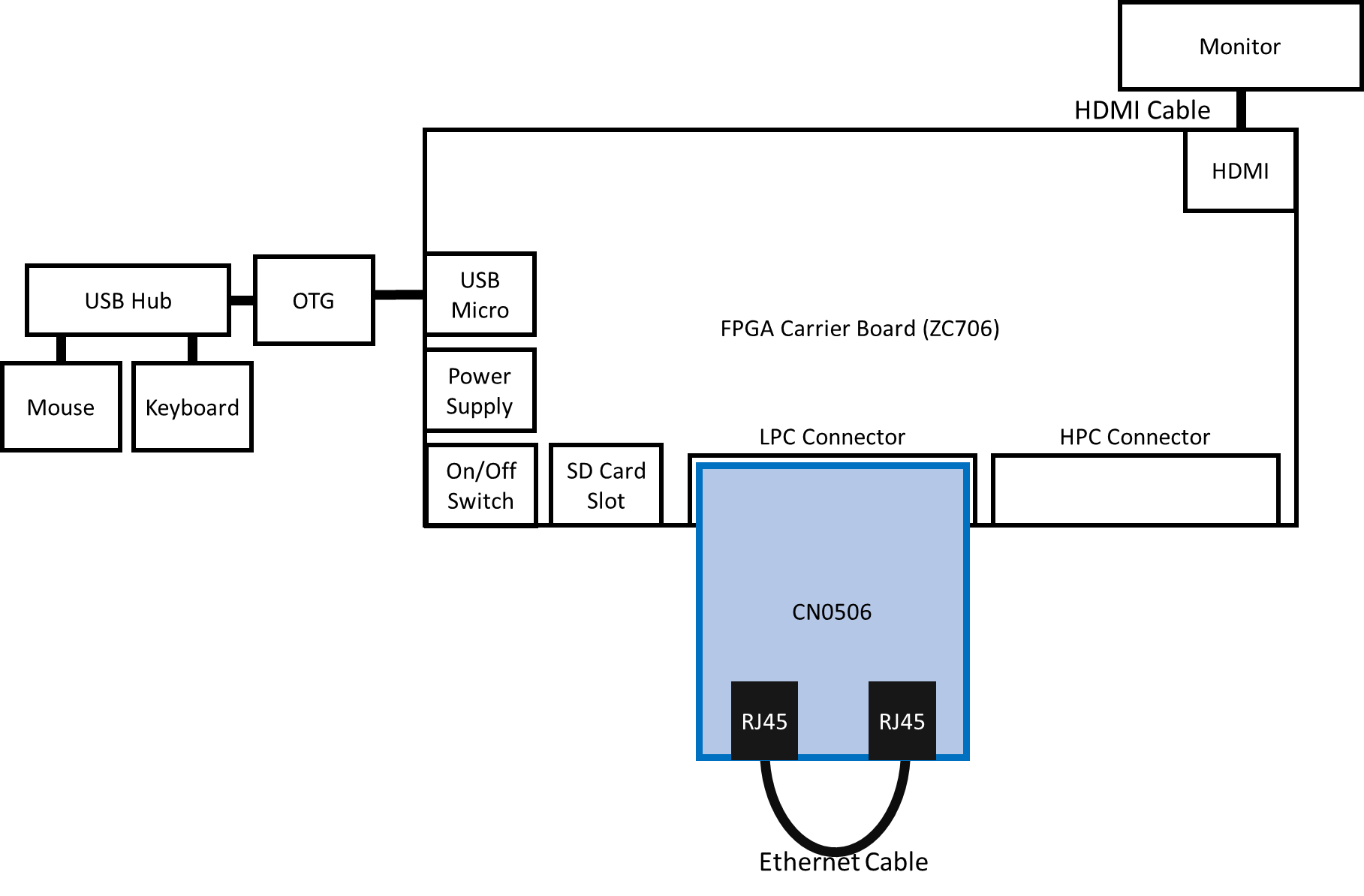


Figure 1. Hardware Setup.

Setup the equipment according to the diagram above

1. Attach the monitor to the HDMI port using the HDMI cable
2. Insert the provided SD card containing the test software.
3. Attach the Mouse and Keyboard to the USB Hub
4. Attach the USB hub to the OTG
5. Attach the OTG to the USB Micro Slot
6. Attach an ethernet cable to loopback on itself through the RJ45 connectors of the CN0506
7. Mount the CN0506 to the LPC connector of the ZC706 FPGA Carrier Board
8. Attach the power supply of the ZC706
9. Turn on the switch

### Running the Test

1. **Double click** the CN0506 Test Desktop Icon (or Click and press enter) to start the test program. A console window will open asking for the password. Click the window and type the password: **analog**

(Nothing will be shown as you type the password. This is normal. Just press enter after typing the password.)

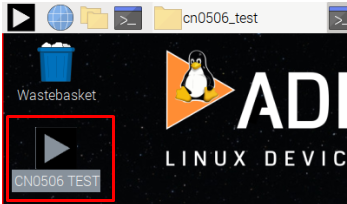


Figure 2. Starting the Test.

1. Follow the on-screen prompt as shown in the Figure 3.

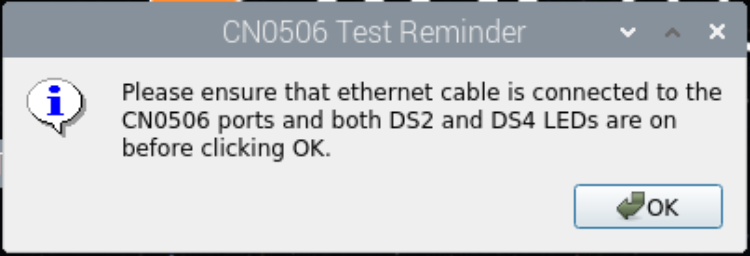


Figure 3. Test Reminder.

1. After clicking the OK button, an input box for the board **Serial Number** will appear. See Figure 4. Enter the serial number of the board to be tested and click the **OK** button. If you click the cancel button, this will stop the test. Go back to step 1 to re-run the test.

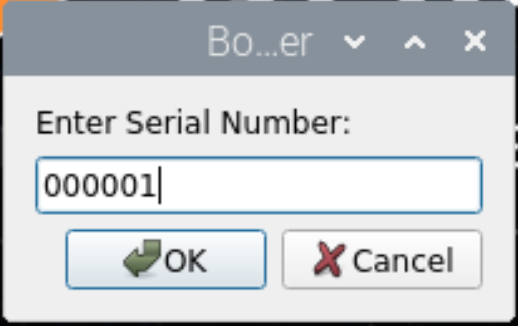


Figure . Serial Number Dialog Box.

1. As soon as the OK button is clicked, the console window will display some text. This will take around 30 seconds to finish. While the test is being executed, text display similar to figure 5 will be displayed in the console window.

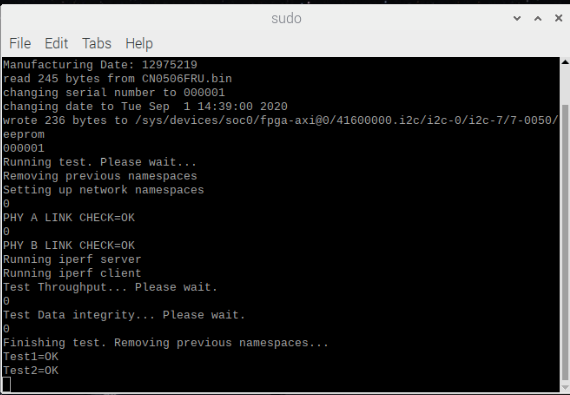


Figure 5. Console Display During Test Execution.

1. If the **test passed**, a dialog box as shown in Figure 6 will appear. Clicking OK will end the test. You can rerun the test to re-enter the serial number if there was a mistake in the entry.

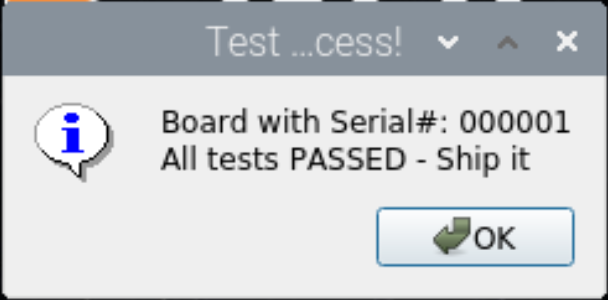


Figure 6. TEST PASSED Dialog Box.

1. If the **test fail**, a dialog box as shown in Figure 7 will appear. If you click the OK button, a dialog box as shown in Figure 8 will be giving you the option to rerun the test. If you select OK to rerun the test, Figure 4 will be displayed again. If click cancel from the rerun dialog box, it will end the test.

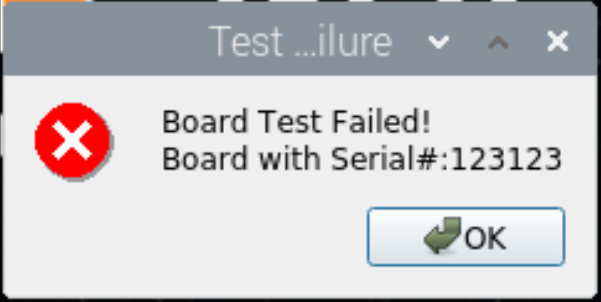


Figure 7. TEST FAILED Dialog Box.

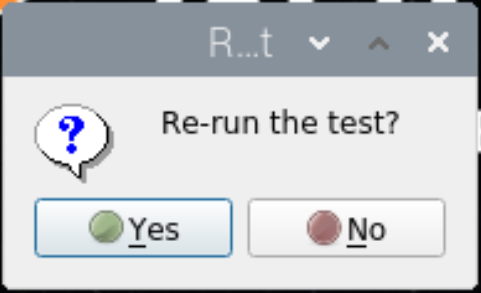


Figure 8. RERUN TEST Dialog Box.

1. After testing, POWER OFF the ZC706 by shutting it down through the Menu in the upper left corner and/or by turning the power switch off.
2. Remove the Tested CN0506 and remove the Ethernet cable from the RJ45 connectors of the board.
3. Restart a new test by attaching the ethernet cable to the RJ45 connectors of a new CN0506 to be tested, power on the zc706, and Restart from step 1 of the “Running the Testing” section.