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ZCU104 Board Interface Test

June 2018

Revision History

Date	Version	Description
06/18/18	3.0	Updated for 2018.2.
04/09/18	2.0	Updated for 2018.1.
03/29/18	1.0	Initial version.

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ZCU104 Board Interface Test Overview

- ZCU104 Software Install and Board Setup
- ZCU104 Board Interface Test Setup
- Running the Board Interface Test
- Appendix
- References

ZCU104 Software Install and Board Setup

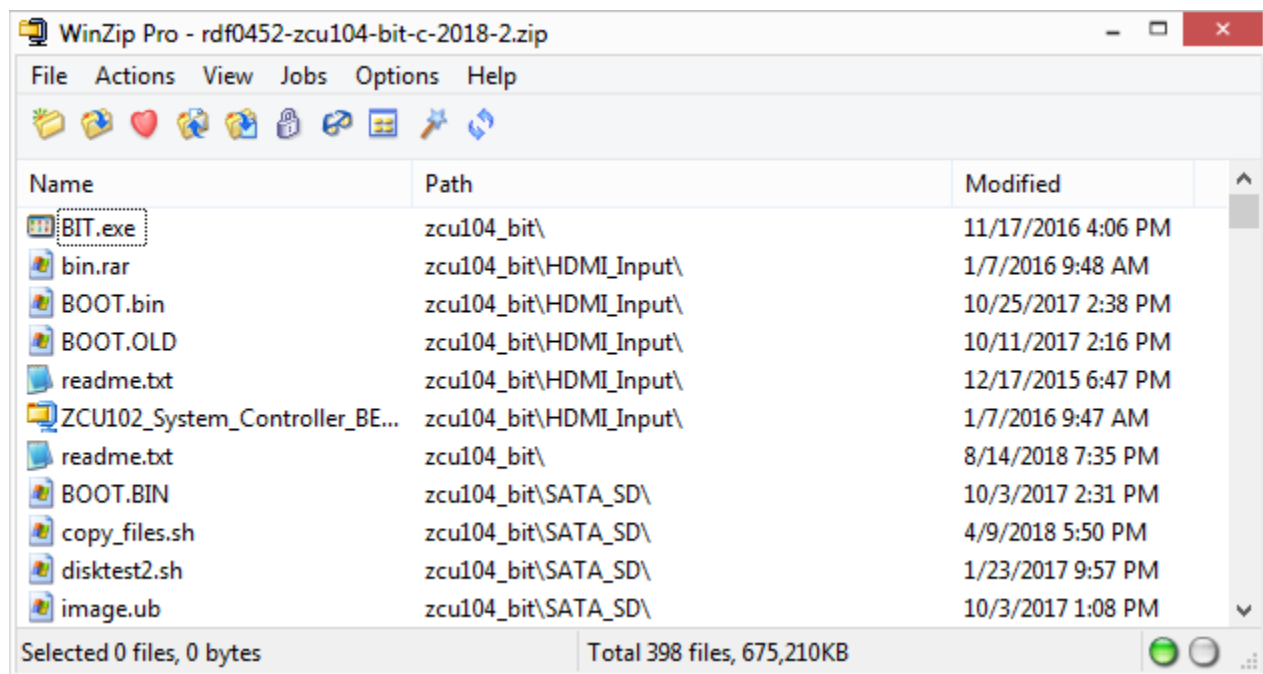
➤ Refer to XTP504 – ZCU104 Software Install and Board Setup for details on:

- Software Requirements
- ZCU104 Board Setup
- UART Driver Install



ZCU104 Board Interface Test Setup

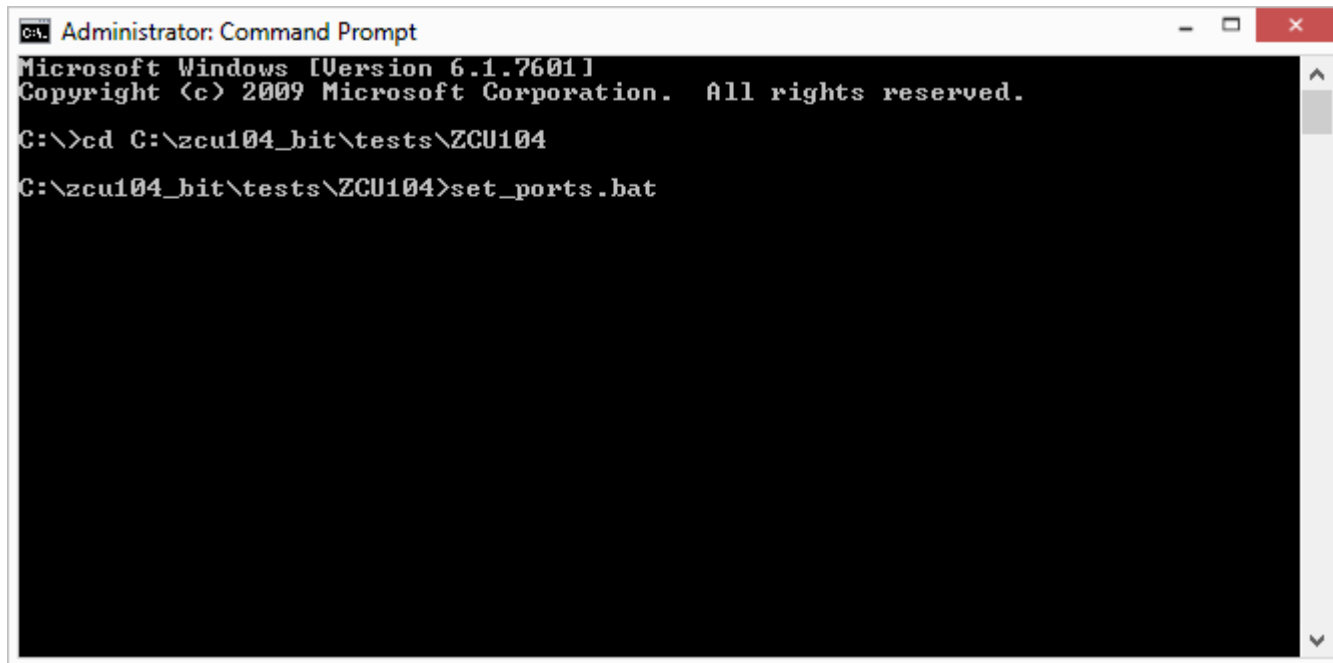
- Open the RDF0452 – ZCU104 Board Interface Test Files (2018.2 C) ZIP file
 - Extract these files to your C:\ drive



ZCU104 Board Interface Test Setup

- Prior to running BIT, the COM ports must be set
- From a Command Prompt, type:

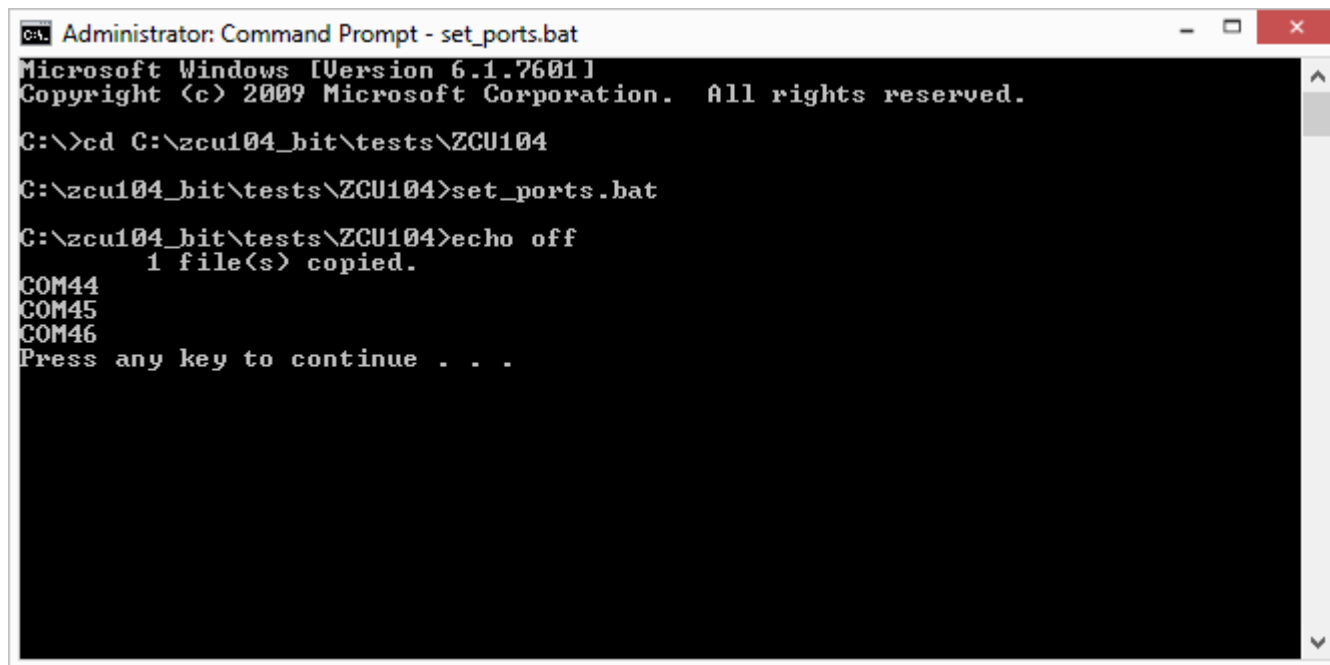
```
cd C:\zcu104_bit\tests\ZCU104  
set_ports.bat
```



```
Administrator: Command Prompt  
Microsoft Windows [Version 6.1.7601]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
  
C:\>cd C:\zcu104_bit\tests\ZCU104  
C:\zcu104_bit\tests\ZCU104>set_ports.bat
```

ZCU104 Board Interface Test Setup

- This modifies the defaults.json file to match the COM ports as enumerated on your PC
 - In this case, COM Port B is **COM44**, COM Port C is **COM45**, and COM Port D is **COM46**
 - Your PC will enumerate the ports differently for each Xilinx board that uses the FTDI chip
 - Run this script when you connect a new or a different ZCU104 board

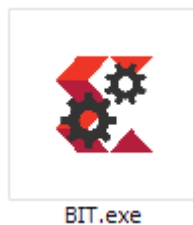


```
Administrator: Command Prompt - set_ports.bat
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\>cd C:\zcu104_bit\tests\ZCU104
C:\zcu104_bit\tests\ZCU104>set_ports.bat
C:\zcu104_bit\tests\ZCU104>echo off
1 file(s) copied.
COM44
COM45
COM46
Press any key to continue . . .
```

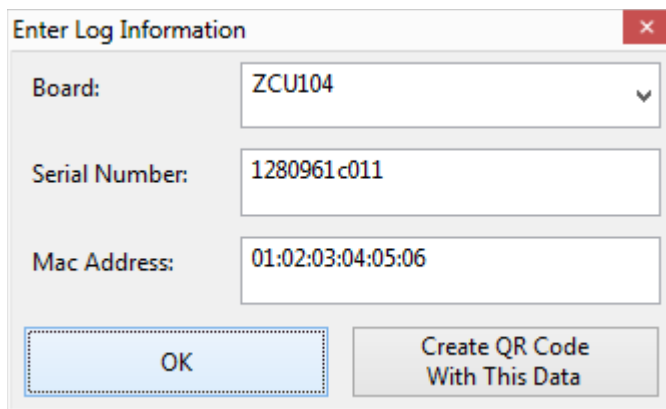
Running the Board Interface Test

➤ From C:\zcu104_bit, double click on BIT.exe



Running the Board Interface Test

➤ Enter the Board **Serial Number** and **Mac Address** and click **OK**



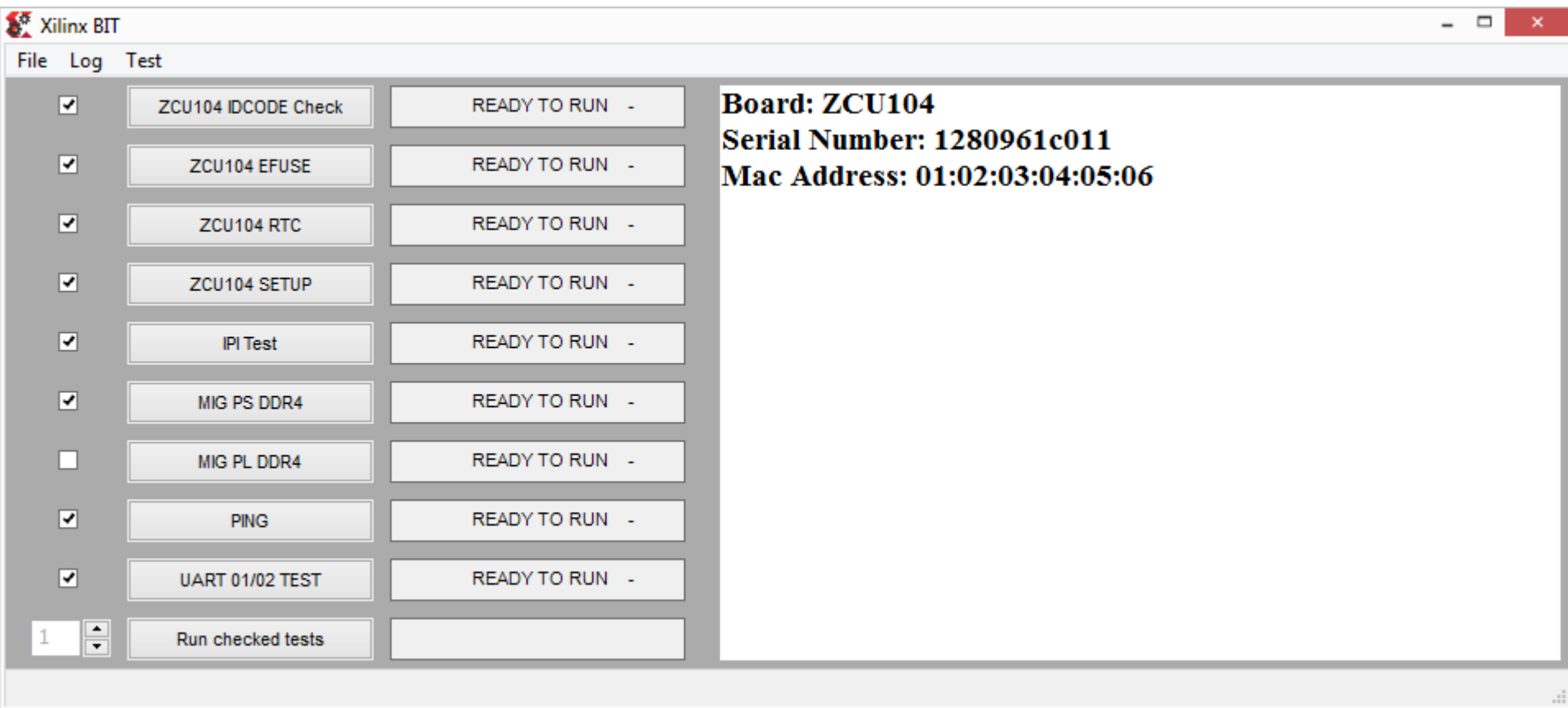
The image shows a software dialog box titled "Enter Log Information". It contains three input fields: "Board:" with a dropdown menu showing "ZCU104", "Serial Number:" with a text box containing "1280961c011", and "Mac Address:" with a text box containing "01:02:03:04:05:06". At the bottom, there are two buttons: "OK" (highlighted with a blue dashed border) and "Create QR Code With This Data".

Field	Value
Board:	ZCU104
Serial Number:	1280961c011
Mac Address:	01:02:03:04:05:06

Note: Presentation applies to the ZCU104

Running the Board Interface Test

➤ Click the **Run checked tests** button



Note: Presentation applies to the ZCU104

Running the Board Interface Test

➤ All selected tests passed

The screenshot displays the Xilinx BIT application window. The interface includes a menu bar (File, Log, Test) and a list of tests on the left. Each test has a checkbox, a name, and a status bar. The status bars for most tests are green and labeled 'PASSED'. The 'MIG PL DDR4' test is grey and labeled 'READY TO RUN'. The 'Run checked tests' button is at the bottom left. The right pane shows the test log, which includes the UART test results and a summary of the test duration.

Test Name	Status
ZCU104 IDCODE Check	PASSED
ZCU104 EFUSE	PASSED
ZCU104 RTC	PASSED
ZCU104 SETUP	PASSED
IPI Test	PASSED
MIG PS DDR4	PASSED
MIG PL DDR4	READY TO RUN
PING	PASSED
UART 01/02 TEST	PASSED
Run checked tests	

Testing UART
115200,8,N,1
Hello world!
UART 02 Test Passed

disconnect

step finished

step finished

Info: Result for step 0: Pass
step finished

Info: Result for step 1: Pass
Info: Result for step 2: Pass
Info: Result for step 3: Pass
Info: Result for step 4: Pass
Info: Result for step 5: Pass

Info: The test took 0 hours, 00 minutes, and 52 seconds. 0:00:52

Note: Presentation applies to the ZCU104

Test Details

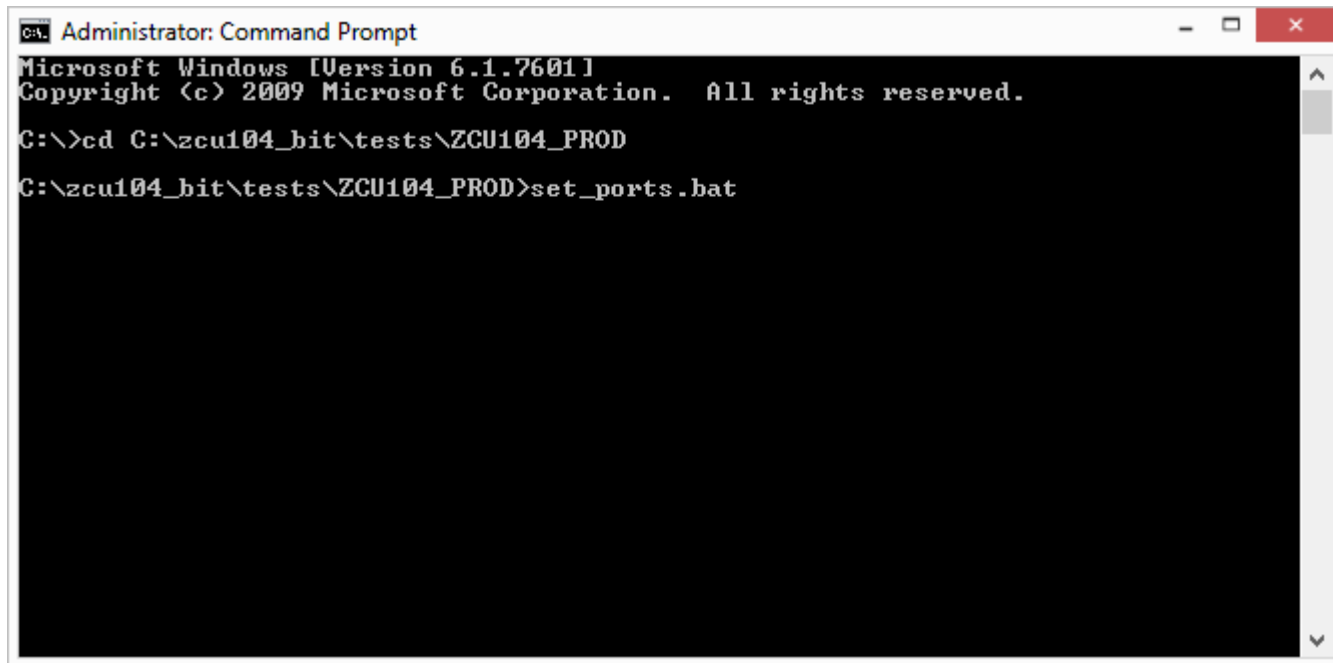
- Ensure that you have followed all instructions in XTP504, ZCU104 Software Install and Board Setup
- Ensure that no other Terminal program is connected to the ZCU104's COM ports while the Board Interface Test is running
 - See XTP504, for details on COM Ports
- Only one board can be connected to your PC during the test
 - Disconnect any other board UARTs or Programming Cables
- If you missed any set-up instructions and experience problems, then please follow these steps:
 1. Recheck your setup
 2. End any hw_server processes and cycle board power
 3. Open Vivado Hardware Manager and test PC-board JTAG connectivity

Appendix

ZCU104 Production Board Interface Test Setup

- Prior to running BIT, the COM ports must be set
- From a Command Prompt, type:

```
cd C:\zcu104_bit\tests\ZCU104_PROD  
set_ports.bat
```



```
Administrator: Command Prompt  
Microsoft Windows [Version 6.1.7601]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
  
C:\>cd C:\zcu104_bit\tests\ZCU104_PROD  
C:\zcu104_bit\tests\ZCU104_PROD>set_ports.bat
```

ZCU104 Production Board Interface Test Setup

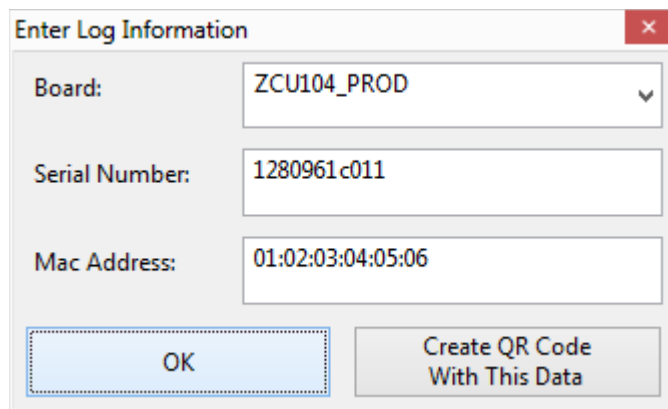
- This modifies the defaults.json file to match the COM ports as enumerated on your PC
 - In this case, COM Port B is **COM44**, COM Port C is **COM45**, and COM Port D is **COM46**
 - Your PC will enumerate the ports differently for each Xilinx board that uses the FTDI chip
 - Run this script when you connect a new or a different ZCU104 board

```
Administrator: Command Prompt - set_ports.bat
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\>cd C:\zcu104_bit\tests\ZCU104_PROD
C:\zcu104_bit\tests\ZCU104_PROD>set_ports.bat
C:\zcu104_bit\tests\ZCU104_PROD>echo off
1 file(s) copied.
COM44
COM45
COM46
Press any key to continue . . .
```

Running the Production Board Interface Test

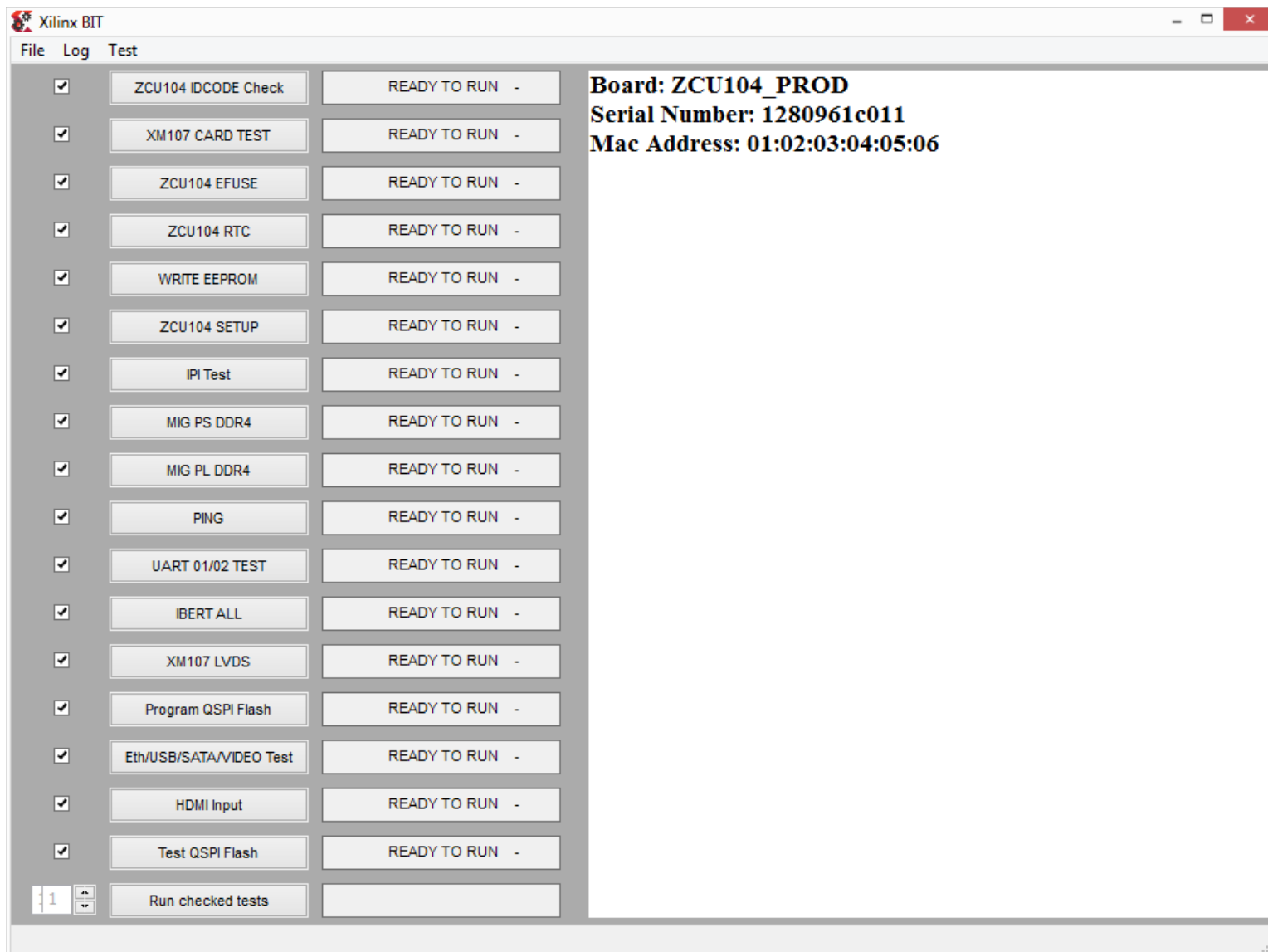
- Select **ZCU104_PROD**
- Enter the Board **Serial Number** and **Mac Address** and click **OK**



The screenshot shows a dialog box titled "Enter Log Information" with a red close button in the top right corner. The dialog contains three input fields: "Board:" with a dropdown menu showing "ZCU104_PROD", "Serial Number:" with the text "1280961c011", and "Mac Address:" with the text "01:02:03:04:05:06". At the bottom, there are two buttons: "OK" (highlighted with a blue dashed border) and "Create QR Code With This Data".

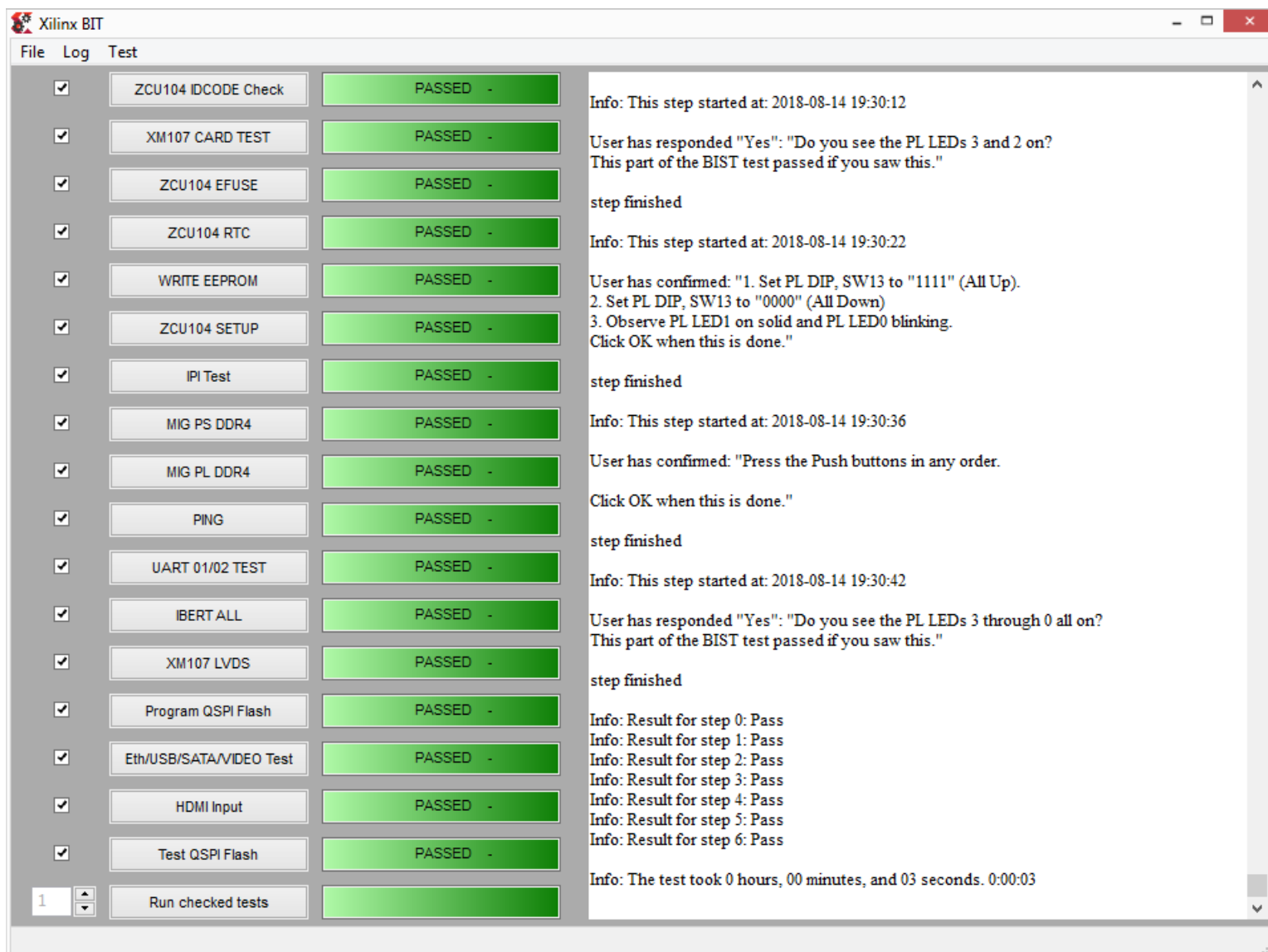
Running the Production Board Interface Test

➤ Click the **Run checked tests** button



Running the Production Board Interface Test

➤ All selected tests passed



The screenshot shows the Xilinx BIT application window. The left pane contains a list of tests, each with a checkbox and a status bar. The right pane displays the detailed results for the selected test, 'Run checked tests'.

Test Name	Status
ZCU104 IDCODE Check	PASSED
XM107 CARD TEST	PASSED
ZCU104 EFUSE	PASSED
ZCU104 RTC	PASSED
WRITE EEPROM	PASSED
ZCU104 SETUP	PASSED
IPI Test	PASSED
MIG PS DDR4	PASSED
MIG PL DDR4	PASSED
PING	PASSED
UART 01/02 TEST	PASSED
IBERT ALL	PASSED
XM107 LVDS	PASSED
Program QSPI Flash	PASSED
Eth/USB/SATA/VIDEO Test	PASSED
HDMI Input	PASSED
Test QSPI Flash	PASSED
Run checked tests	PASSED

Run checked tests Results:







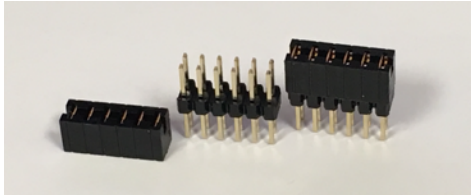
- Info: This step started at: 2018-08-14 19:30:12
- User has responded "Yes": "Do you see the PL LEDs 3 and 2 on? This part of the BIST test passed if you saw this."
- step finished
- Info: This step started at: 2018-08-14 19:30:22
- User has confirmed: "1. Set PL DIP, SW13 to "1111" (All Up). 2. Set PL DIP, SW13 to "0000" (All Down) 3. Observe PL LED1 on solid and PL LED0 blinking. Click OK when this is done."
- step finished
- Info: This step started at: 2018-08-14 19:30:36
- User has confirmed: "Press the Push buttons in any order. Click OK when this is done."
- step finished
- Info: This step started at: 2018-08-14 19:30:42
- User has responded "Yes": "Do you see the PL LEDs 3 through 0 all on? This part of the BIST test passed if you saw this."
- step finished
- Info: Result for step 0: Pass
- Info: Result for step 1: Pass
- Info: Result for step 2: Pass
- Info: Result for step 3: Pass
- Info: Result for step 4: Pass
- Info: Result for step 5: Pass
- Info: Result for step 6: Pass
- Info: The test took 0 hours, 00 minutes, and 03 seconds. 0:00:03

Test Details

- Review the following pages to make sure the board is set up for the Production Board Interface Test
- The FTDI UART flashing test is only used during initial board manufacture, and is not needed again
- Ensure that no other Terminal program is connected to the ZCU104's COM ports while the Board Interface Test is running
 - See XTP504, for details on COM Ports
- Only one board can be connected to your PC during the test
 - Disconnect any other board UARTs or Programming Cables
- If you missed any set-up instructions and experience problems, then please follow these steps:
 1. Recheck your setup
 2. End any hw_server processes and cycle board power
 3. Open Vivado Hardware Manager and test PC-board JTAG connectivity

Test Equipment

➤ This test requires optional equipment

- [Whizz FMC XM107](#) board 
- HDMI and DP monitors plus cables
- 4k HDMI source; tested with [NVIDIA 4K Shield](#) 
- USB Thumb drive; tested with [SDCZ43 32GB](#) 
- SATA Flash drive; tested with [TS128GMTS400](#) 
- DDR4 SODIMM; tested with [KVR21SE15S8/4](#) 
- Two microSD cards, programmed with the contents of SATA_SD, and HDMI_Input
- Two Ethernet ports on host, set to 192.168.1.2 and 192.168.0.2
 - Tested with: [Anker USB to Ethernet](#) adapters 
- Shunt jumpers on PMODs
 - Suggested [MNT-106-BK-G](#) and [S2021EC-06-ND](#); 2ea, combined as shown to the rightmost 

Test Equipment

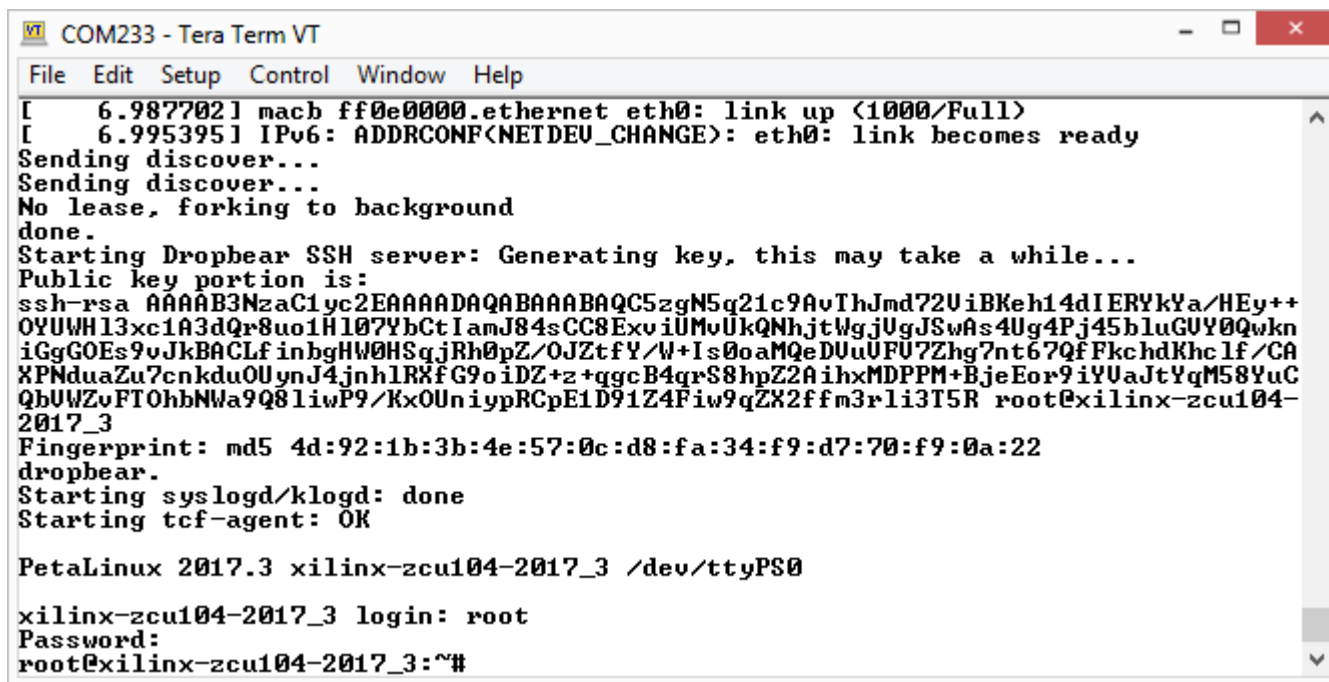
➤ This test requires optional equipment

- EZ-11B or EZ-22B remote power switch, setup to IP address of 192.168.0.12
 - Setup details are available later in this Appendix
 - If this is not available, the following tests will require manual power cycling:
 - XM107 CARD TEST
 - ZCU104 RTC
 - WRITE EEPROM
 - ZCU104 SETUP
 - PING
 - UART 01/02 TEST (twice)
 - XM107 LVDS
 - Program QSPI Flash
 - Eth/USB/SATA/VIDEO Test
 - HDMI Input
 - Test QSPI Flash

Flash SATA Drive Setup

► Formatting a Flash SATA Drive

- Insert an SD card with the SATA_SD image into the ZCU104
- Set mode switch SW6 to "E" (Up, Down, Down, Down)
- Cycle power and boot Linux
- At the prompt, type "**root**" for the username and password



```
COM233 - Tera Term VT
File Edit Setup Control Window Help
[ 6.987702] macb ff0e0000.ethernet eth0: link up <1000/Full>
[ 6.995395] IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready
Sending discover...
Sending discover...
No lease, forking to background
done.
Starting Dropbear SSH server: Generating key, this may take a while...
Public key portion is:
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQAC5zgN5q21c9AvThJmd72ViBKeh14dIERyKYa/HEy++
OYUWH13xc1A3dQr8uo1H107YbCtIamJ84sCC8ExviUMvUkQNhjtWgjUgJSwAs4Ug4Pj45bluGUY0Qwkn
iGgGOEs9vJkBACLf inbgHW0HSqjRh0pZ/OJZtfY/W+Is0oaMQeDUuUFU7Zhg7nt67QfFkchdKhc1f/CA
XPNduaZu7cnkduOUynJ4jnh1RXfG9oiDZ+z+ggcB4qrS8hpZ2AihxMDPPM+BjeEor9iYUaJtYqM58YuC
QbUWZvFTOhbNWa9Q8liwP9/KxOUUniyppRCpE1D91Z4Fiw9qZX2ffm3rli3T5R root@xilinx-zcu104-
2017_3
Fingerprint: md5 4d:92:1b:3b:4e:57:0c:d8:fa:34:f9:d7:70:f9:0a:22
dropbear.
Starting syslogd/klogd: done
Starting tcf-agent: OK

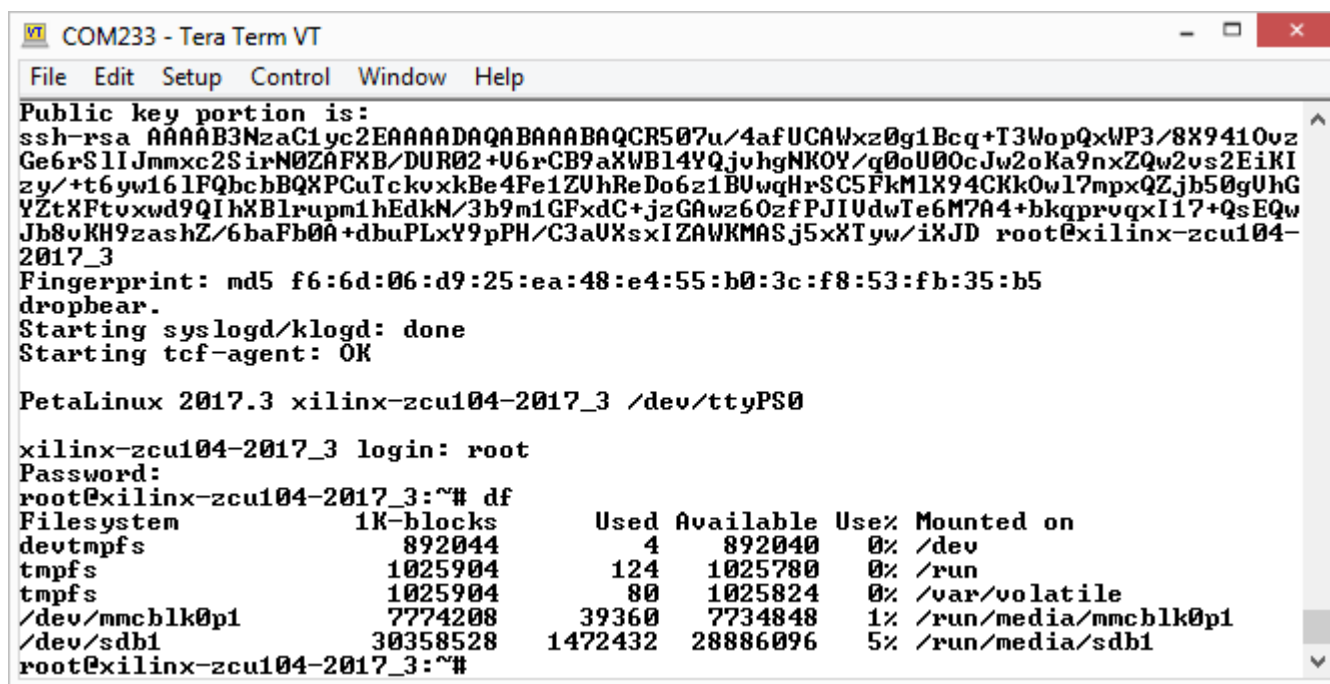
PetaLinux 2017.3 xilinx-zcu104-2017_3 /dev/ttyPS0

xilinx-zcu104-2017_3 login: root
Password:
root@xilinx-zcu104-2017_3:~#
```

Flash SATA Drive Setup

► Formatting a Flash SATA Drive

- Type “df”
- Notice that /dev/sda1 is missing
- The USB drive, /dev/sdb1, is mounted on /run/media/sdb1
- If the SATA drive were missing, the USB drive would be /dev/sda1



```
COM233 - Tera Term VT
File Edit Setup Control Window Help
Public key portion is:
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCR507u/4afUCAWxz0g1Bcq+T3WopQxWP3/8X9410vz
Ge6rS1Ijmmxc2S irN0ZAFXB/DUR02+U6rCB9aXWB14YQjvhgNK0Y/q0oU00cJw2oKa9nxZQw2vs2EiKI
zy/+t6yw161FQbcbBQXPCuTckvxkBe4Fe1ZUhReDo6z1BUwqHrSC5FkM1X94CKkOwl7mpxQZjb50gUhG
YZtXFt0xwd9QIhXB1rupm1hEdkN/3b9m1GFxdC+jzGAwz60zfPJIUdwTe6M7A4+bkqprvqxI17+QsEQw
Jb8vKH9zashZ/6baFb0A+dbuPLxY9pPH/C3aUXsxIZAWKMASj5xXTyw/iXJD root@xilinx-zcu104-
2017_3
Fingerprint: md5 f6:6d:06:d9:25:ea:48:e4:55:b0:3c:f8:53:fb:35:b5
dropbear.
Starting syslogd/klogd: done
Starting tcf-agent: OK

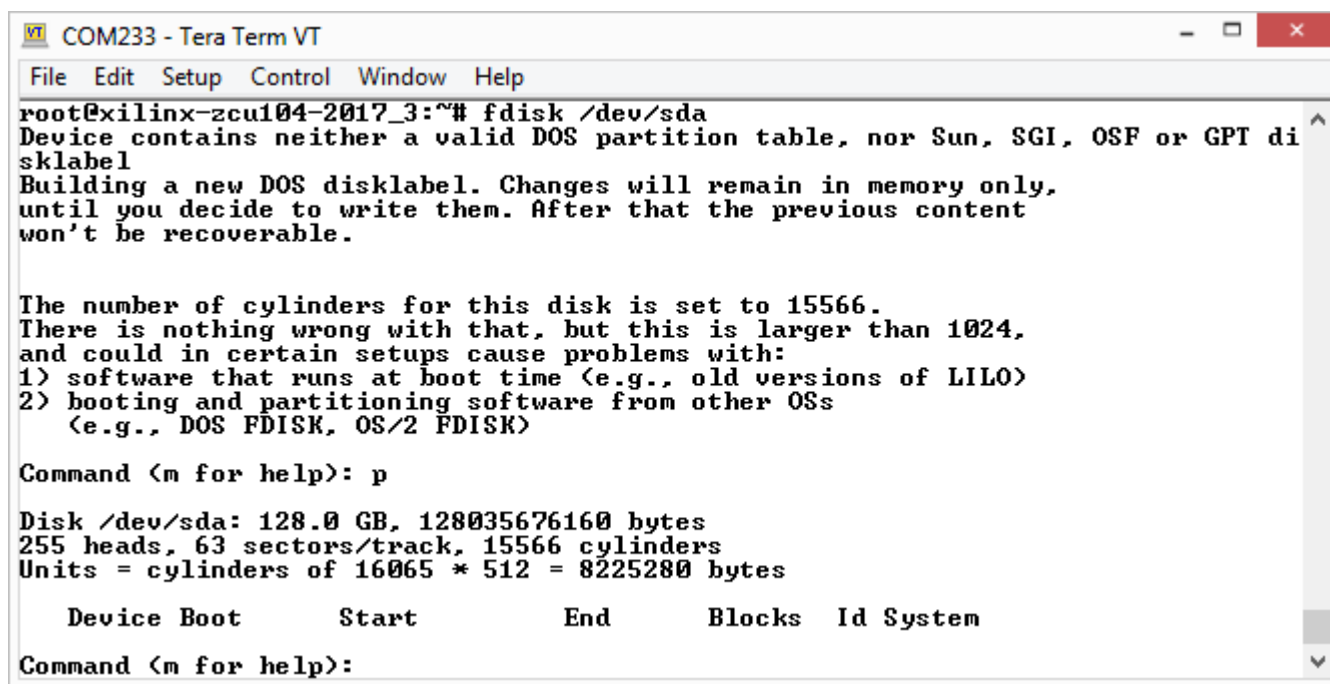
PetaLinux 2017.3 xilinx-zcu104-2017_3 /dev/ttyPS0

xilinx-zcu104-2017_3 login: root
Password:
root@xilinx-zcu104-2017_3:~# df
Filesystem            1K-blocks      Used Available  Use% Mounted on
devtmpfs                892044         4    892040     0% /dev
tmpfs                  1025904        124   1025780     0% /run
tmpfs                  1025904         80   1025824     0% /var/volatile
/dev/mmcblk0p1         7774208      39360   7734848     1% /run/media/mmcblk0p1
/dev/sdb1              30358528    1472432  28886096     5% /run/media/sdb1
root@xilinx-zcu104-2017_3:~#
```

Flash SATA Drive Setup

➤ Formatting a Flash SATA Drive

- Type “**fdisk /dev/sda**” to start fdisk on the SATA drive
- Type “**p**” to see the partition table is empty



```
COM233 - Tera Term VT
File Edit Setup Control Window Help
root@xilinx-zcu104-2017_3:~# fdisk /dev/sda
Device contains neither a valid DOS partition table, nor Sun, SGI, OSF or GPT di
sklabel
Building a new DOS disklabel. Changes will remain in memory only,
until you decide to write them. After that the previous content
won't be recoverable.

The number of cylinders for this disk is set to 15566.
There is nothing wrong with that, but this is larger than 1024,
and could in certain setups cause problems with:
1) software that runs at boot time (e.g., old versions of LILO)
2) booting and partitioning software from other OSs
   (e.g., DOS FDISK, OS/2 FDISK)

Command (m for help): p

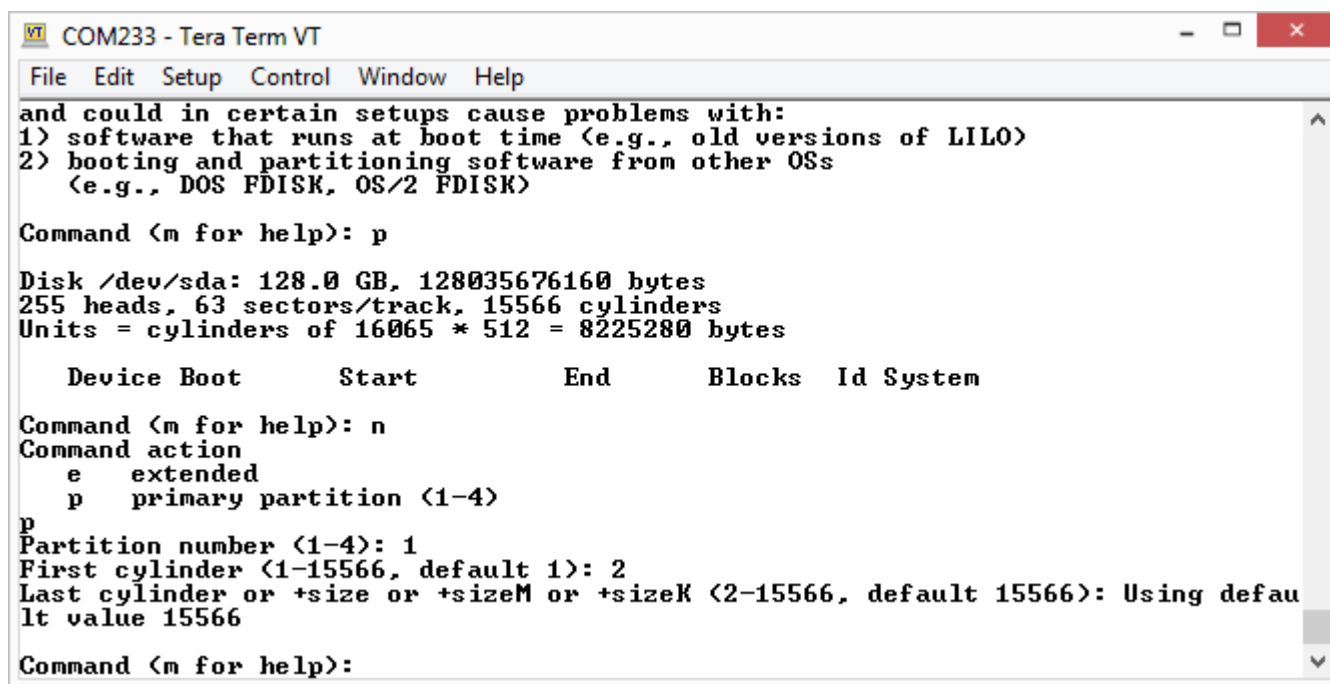
Disk /dev/sda: 128.0 GB, 128035676160 bytes
255 heads, 63 sectors/track, 15566 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System
Command (m for help):
```


Flash SATA Drive Setup

➤ Formatting a Flash SATA Drive

- Type “n” to create a new partition
- Type “p” for primary partition
- Type “1”, followed by “2”
- Type **enter** to accept default last cylinder



```
COM233 - Tera Term VT
File Edit Setup Control Window Help
and could in certain setups cause problems with:
1) software that runs at boot time (e.g., old versions of LILO)
2) booting and partitioning software from other OSs
   (e.g., DOS FDISK, OS/2 FDISK)

Command (m for help): p

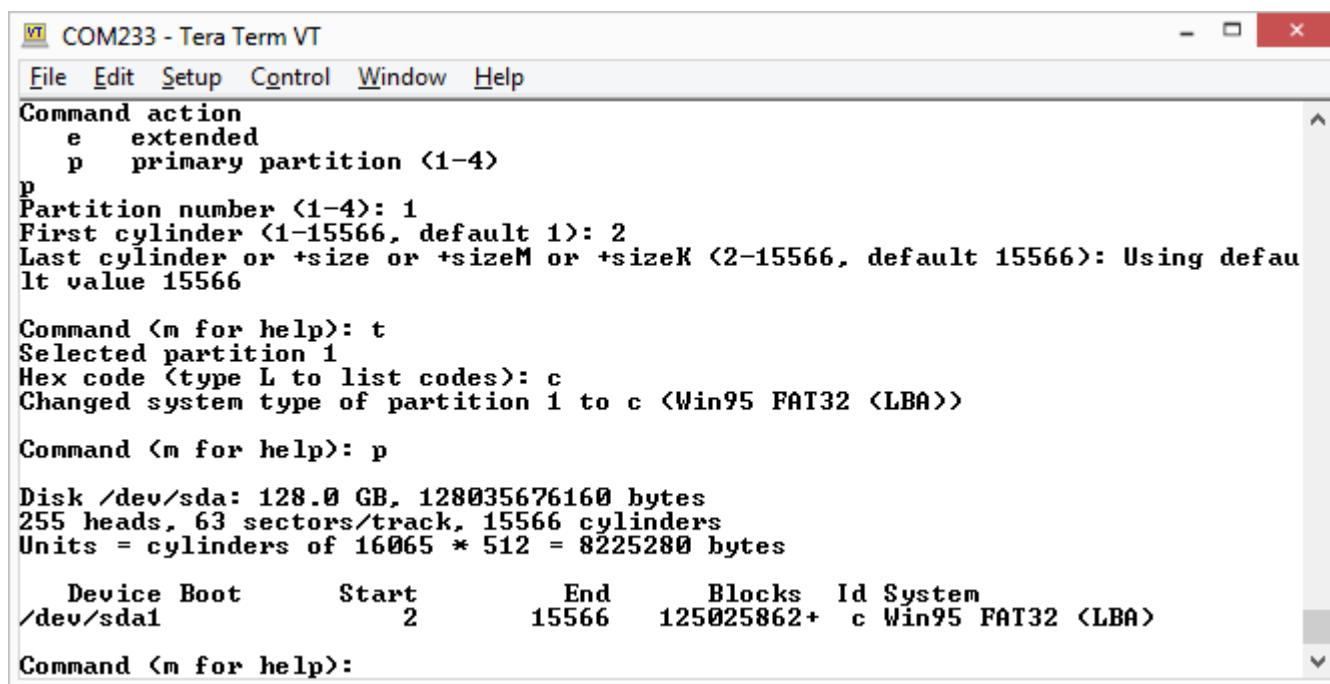
Disk /dev/sda: 128.0 GB, 128035676160 bytes
255 heads, 63 sectors/track, 15566 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System
Command (m for help): n
Command action
   e   extended
   p   primary partition (1-4)
p
Partition number (1-4): 1
First cylinder (1-15566, default 1): 2
Last cylinder or +size or +sizeM or +sizeK (2-15566, default 15566): Using default value 15566
Command (m for help):
```

Flash SATA Drive Setup

➤ Formatting a Flash SATA Drive

- Type “t” to set the partition type
- Type “c” set it to “Win95 FAT32 (LBA)”
- Type “p” to verify your settings



```
COM233 - Tera Term VT
File Edit Setup Control Window Help
Command action
  e extended
  p primary partition <1-4>
p
Partition number <1-4>: 1
First cylinder <1-15566, default 1>: 2
Last cylinder or +size or +sizeM or +sizeK <2-15566, default 15566>: Using default value 15566

Command <m for help>: t
Selected partition 1
Hex code <type L to list codes>: c
Changed system type of partition 1 to c <Win95 FAT32 <LBA>>

Command <m for help>: p

Disk /dev/sda: 128.0 GB, 128035676160 bytes
255 heads, 63 sectors/track, 15566 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

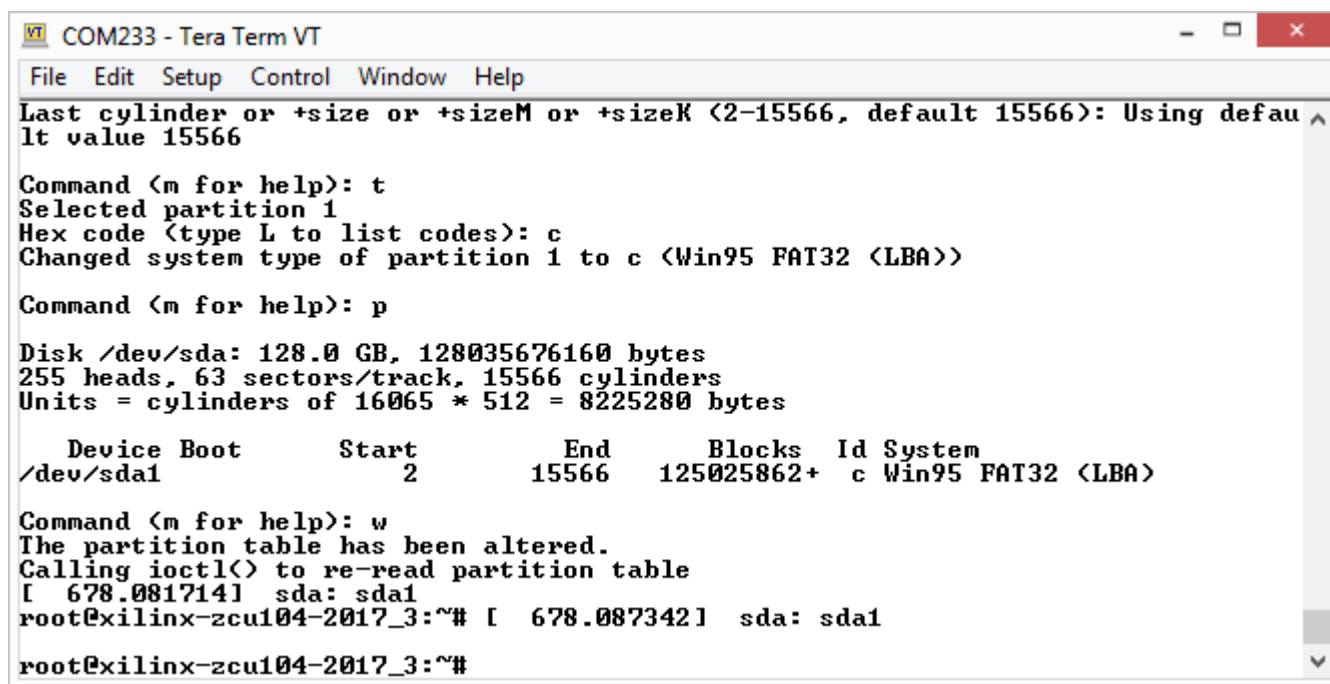
   Device Boot      Start         End      Blocks   Id  System
/dev/sda1            2         15566     125025862+   c  Win95 FAT32 <LBA>

Command <m for help>:
```

Flash SATA Drive Setup

► Formatting a Flash SATA Drive

- If everything is correct, type “w” to write the partition
- Otherwise, type “q” to quit without making any changes



```
COM233 - Tera Term VT
File Edit Setup Control Window Help
Last cylinder or +size or +sizeM or +sizeK (2-15566, default 15566): Using default value 15566

Command (m for help): t
Selected partition 1
Hex code (type L to list codes): c
Changed system type of partition 1 to c (Win95 FAT32 (LBA))

Command (m for help): p

Disk /dev/sda: 128.0 GB, 128035676160 bytes
255 heads, 63 sectors/track, 15566 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

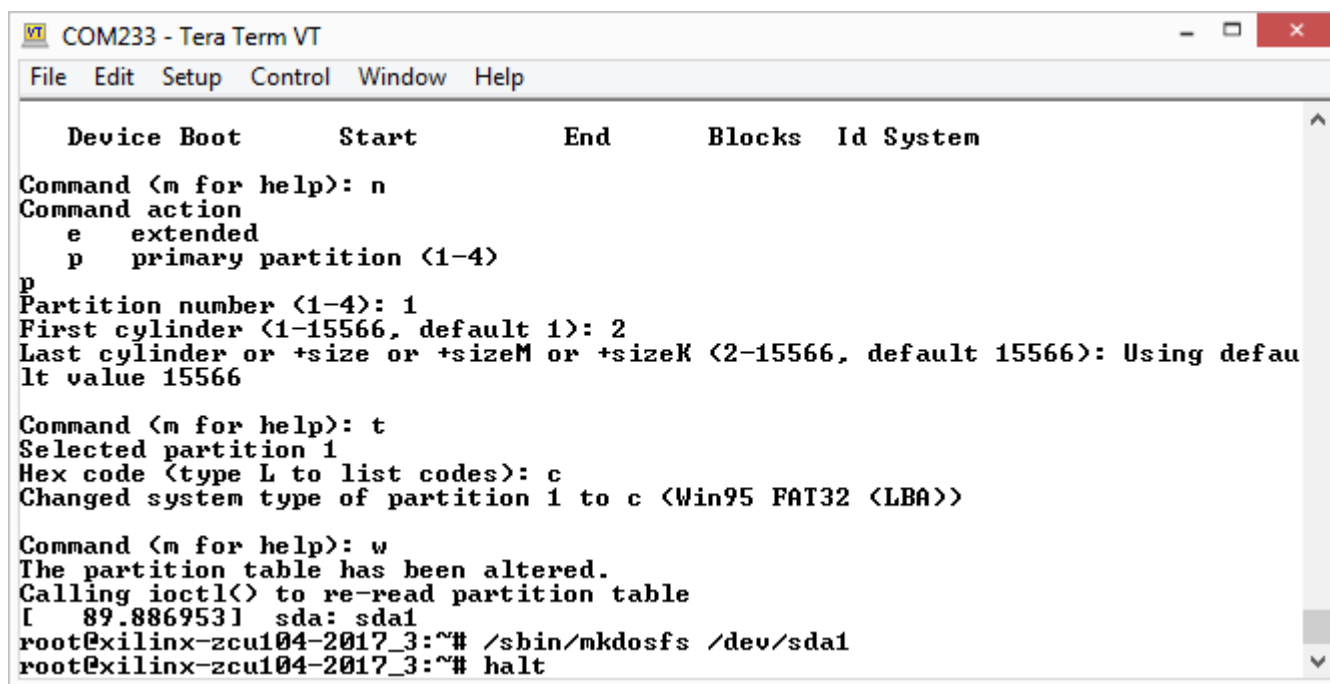
   Device Boot      Start         End      Blocks   Id  System
/dev/sda1                2        15566    125025862+   c  Win95 FAT32 (LBA)

Command (m for help): w
The partition table has been altered.
Calling ioctl() to re-read partition table
[ 678.081714] sda: sda1
root@xilinx-zcu104-2017_3:~# [ 678.087342] sda: sda1
root@xilinx-zcu104-2017_3:~#
```

Flash SATA Drive Setup

► Formatting a Flash SATA Drive

- Type “**/sbin/mkdosfs /dev/sda1**” to add the dos file system
- Type “**halt**”; when it says “reboot: Power down”, cycle power and log in again



The screenshot shows a terminal window titled "COM233 - Tera Term VT". The window has a menu bar with "File", "Edit", "Setup", "Control", "Window", and "Help". The terminal output shows the following sequence of commands and responses:

```
Device Boot      Start         End      Blocks   Id System
Command (m for help): n
Command action
  e   extended
  p   primary partition (1-4)
p
Partition number (1-4): 1
First cylinder (1-15566, default 1): 2
Last cylinder or +size or +sizeM or +sizeK (2-15566, default 15566): Using default value 15566
Command (m for help): t
Selected partition 1
Hex code (type L to list codes): c
Changed system type of partition 1 to c (Win95 FAT32 (LBA))
Command (m for help): w
The partition table has been altered.
Calling ioctl() to re-read partition table
[ 89.886953] sda: sda1
root@xilinx-zcu104-2017_3:~# /sbin/mkdosfs /dev/sda1
root@xilinx-zcu104-2017_3:~# halt
```

Flash SATA Drive Setup

► Formatting a Flash SATA Drive

- Type “df” to see SATA mounted drive
- SATA disk is now ready to use in full test

```
COM233 - Tera Term VT
File Edit Setup Control Window Help
LR5qmHnZ1IBQ5bY+503ga7/3PYBMkpAWYDiTb00D/iY3tMWIkL8ESLQL7e0w3X5U4M/JW6DBdpc.jM91n
w/dbFApKghUq/tWsQOaDT7o289Sb8qQDRbEOkoIHBIJ/3GWeIqLc6guA9TnB9RgoqcWCrSGlhuenBkC
aeDdHIp5oeIrNmcjaP0kEbEZbq7wmRywzMR7yNIu2eY4h1ltTsdurSg+eWPdUa9/7/Z99/y98VFzIemw
f2XweN8eQ7iP+fr1f5hj/cLQHMaMXkN5sptQMqy4H5imuBQBePgwe33zYuUJ root@xilinx-zcu104-
2017_3
Fingerprint: md5 54:59:1d:53:13:4b:1c:72:16:d3:f3:91:9f:b8:34:3f
dropbear.
Starting syslogd/klogd: done
Starting tcf-agent: OK

PetaLinux 2017.3 xilinx-zcu104-2017_3 /dev/ttyPS0

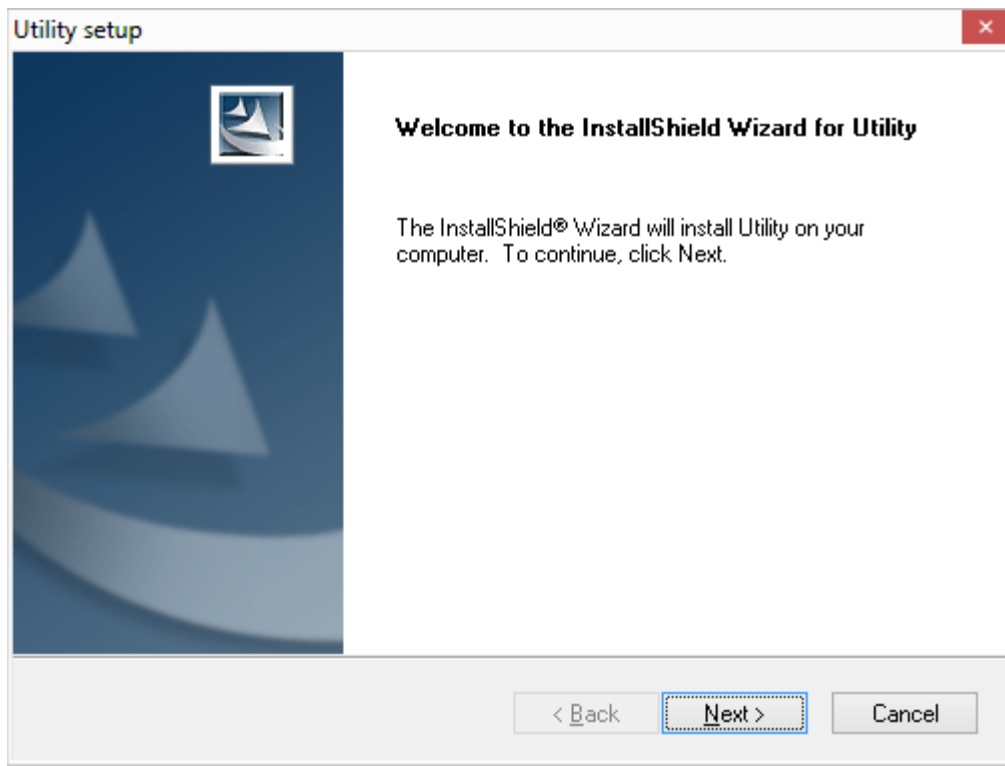
xilinx-zcu104-2017_3 login: root
Password:
root@xilinx-zcu104-2017_3:~# df
Filesystem            1K-blocks      Used Available Use% Mounted on
devtmpfs                892044         4    892040   0% /dev
tmpfs                   1025904        128    1025776   0% /run
tmpfs                   1025904         84    1025820   0% /var/volatile
[ 76.945656] random: crng init done
/dev/sda1              124964832      1216 124963616   0% /run/media/sda1
/dev/mmcblk0p1          7774208        39360  7734848   1% /run/media/mmcblk0p1
/dev/sdb1               30358528     1472432 28886096   5% /run/media/sdb1
root@xilinx-zcu104-2017_3:~#
```

EZ-11B Setup

➤ How to setup an EZ-11B (or EZ-22B) for use in Production tests

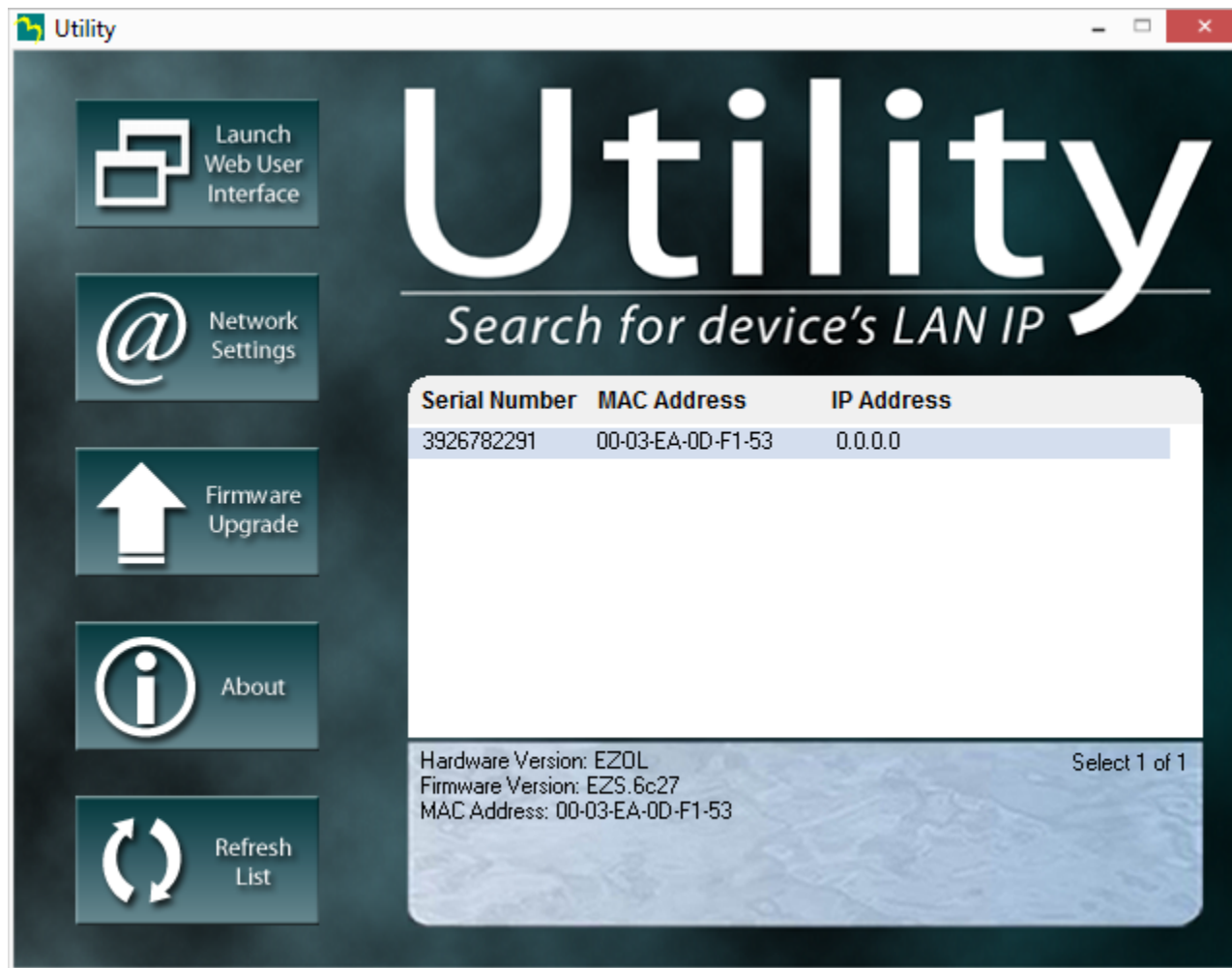
- Connect EZ-11B to Power
- Connect Ethernet cable (192.168.0.2)
- Install EZ-11B Utility (one time install)

C:\zcu104_bit\tests\ZCU104_PROD\bat\utility.exe



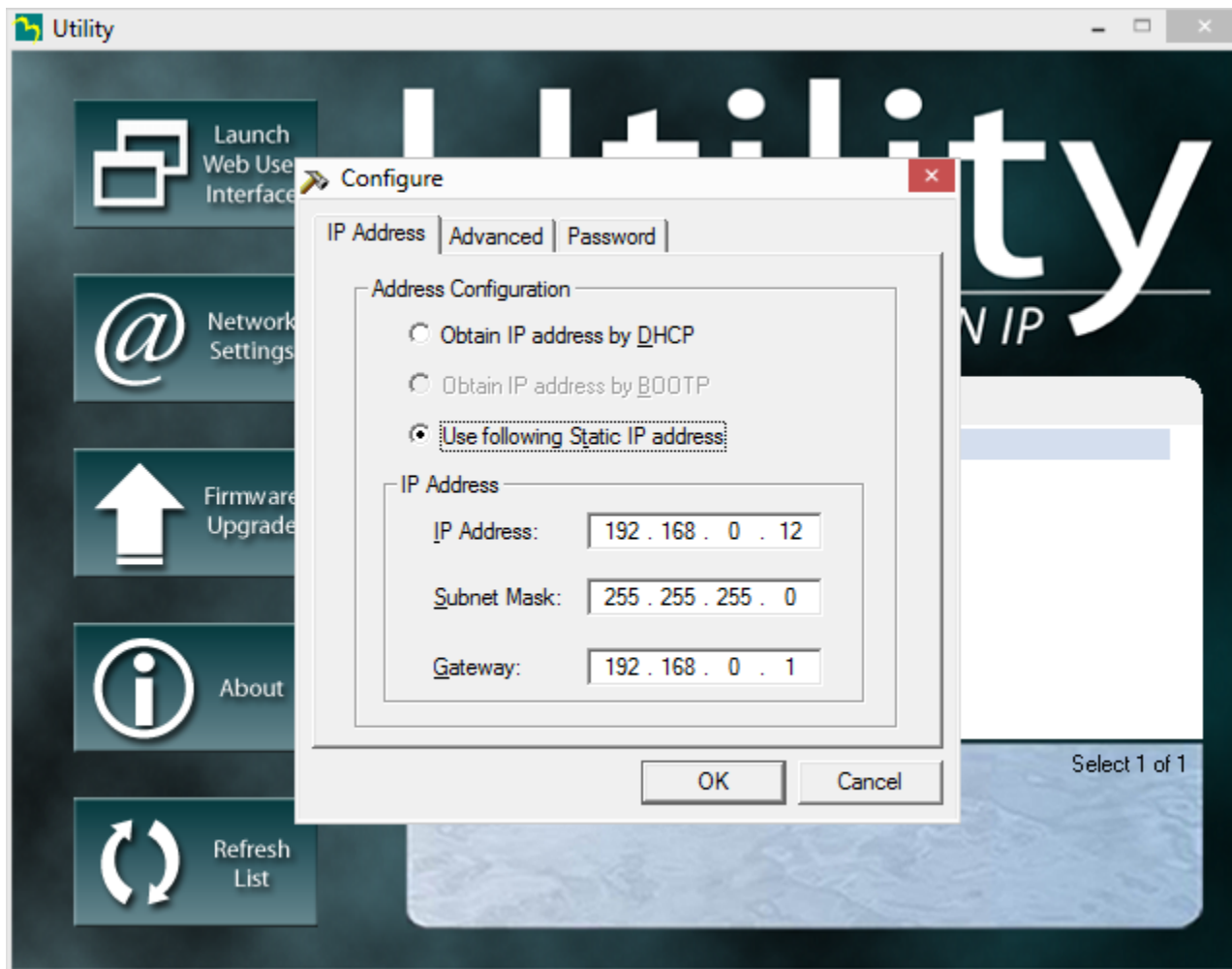
EZ-11B Setup

- Run Utility from the Start menu and it will detect an unconfigured EZ-11B attached to the host



EZ-11B Setup

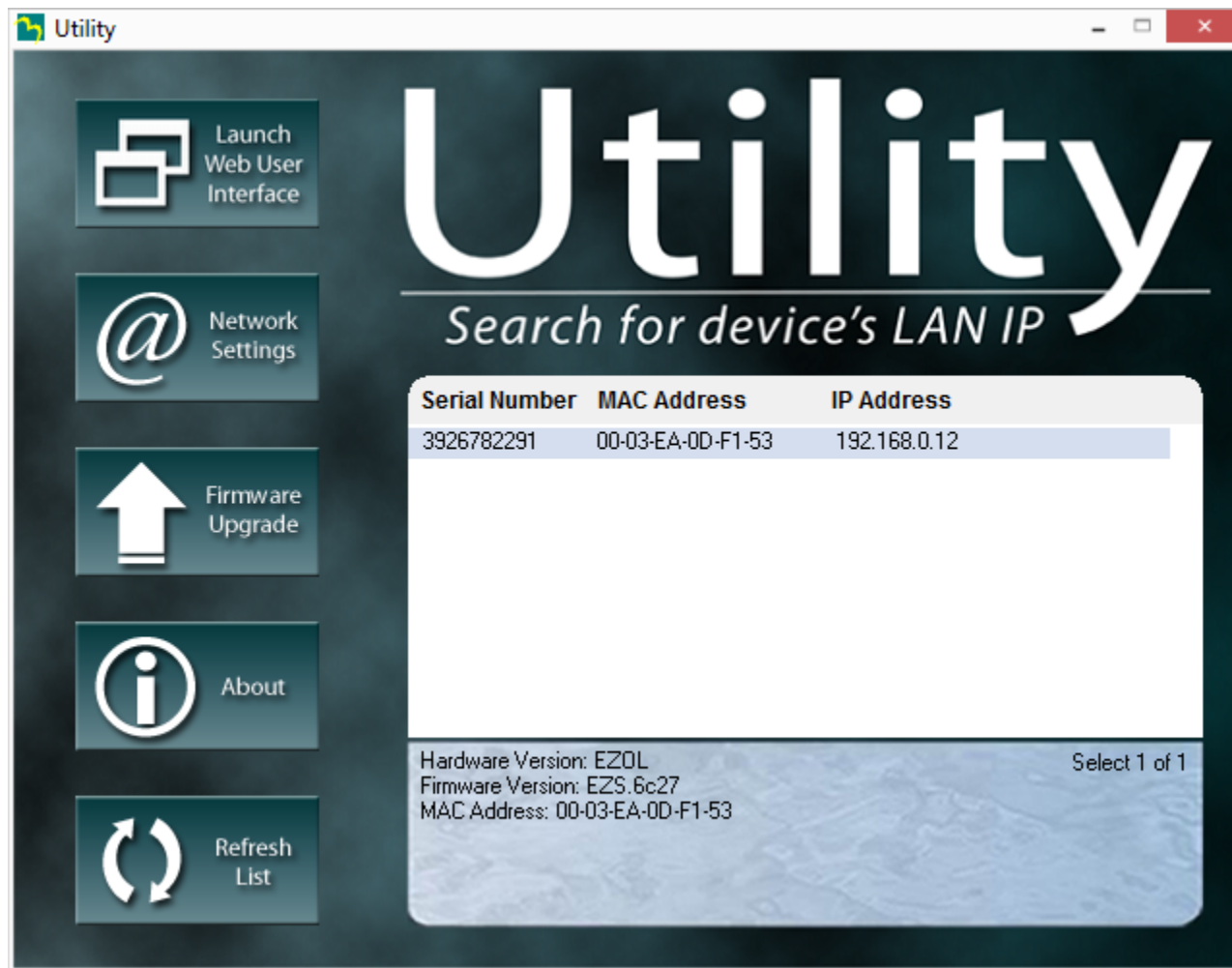
➤ Click Network settings and set to 192.168.0.12



Note: Presentation applies to the ZCU104

EZ-11B Setup

➤ Setup is done:

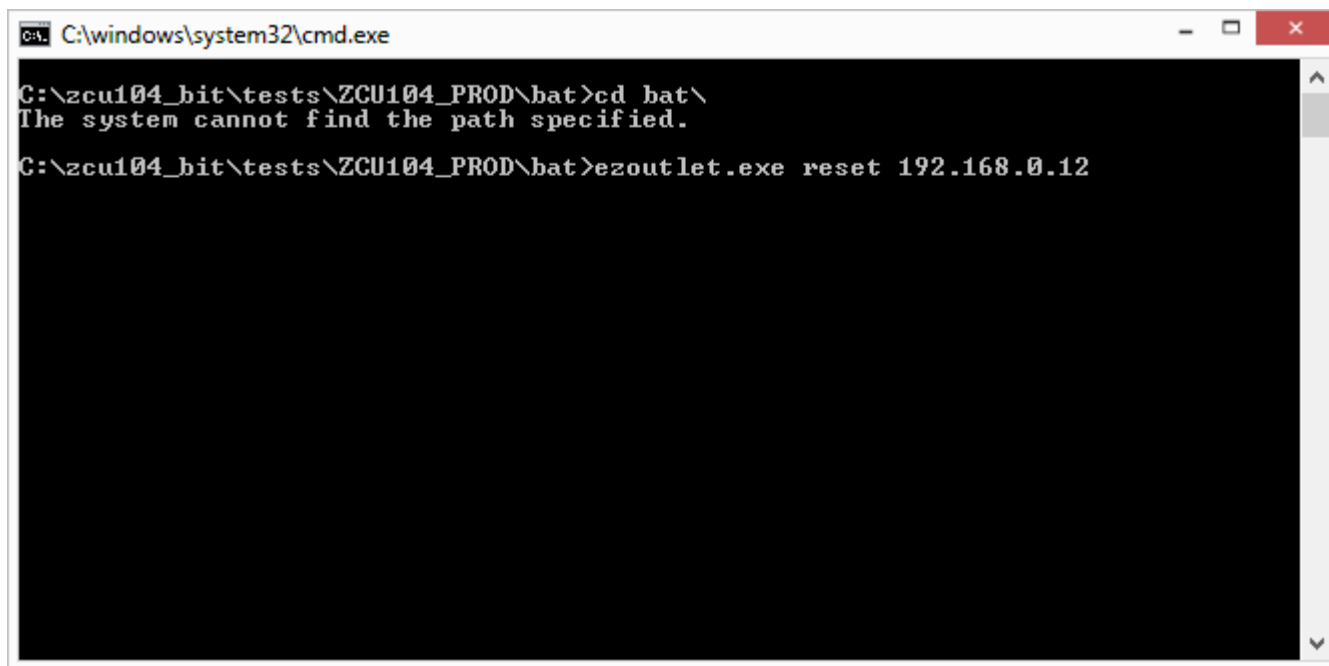


Note: Presentation applies to the ZCU104

EZ-11B Setup

➤ Test the EZ11-B

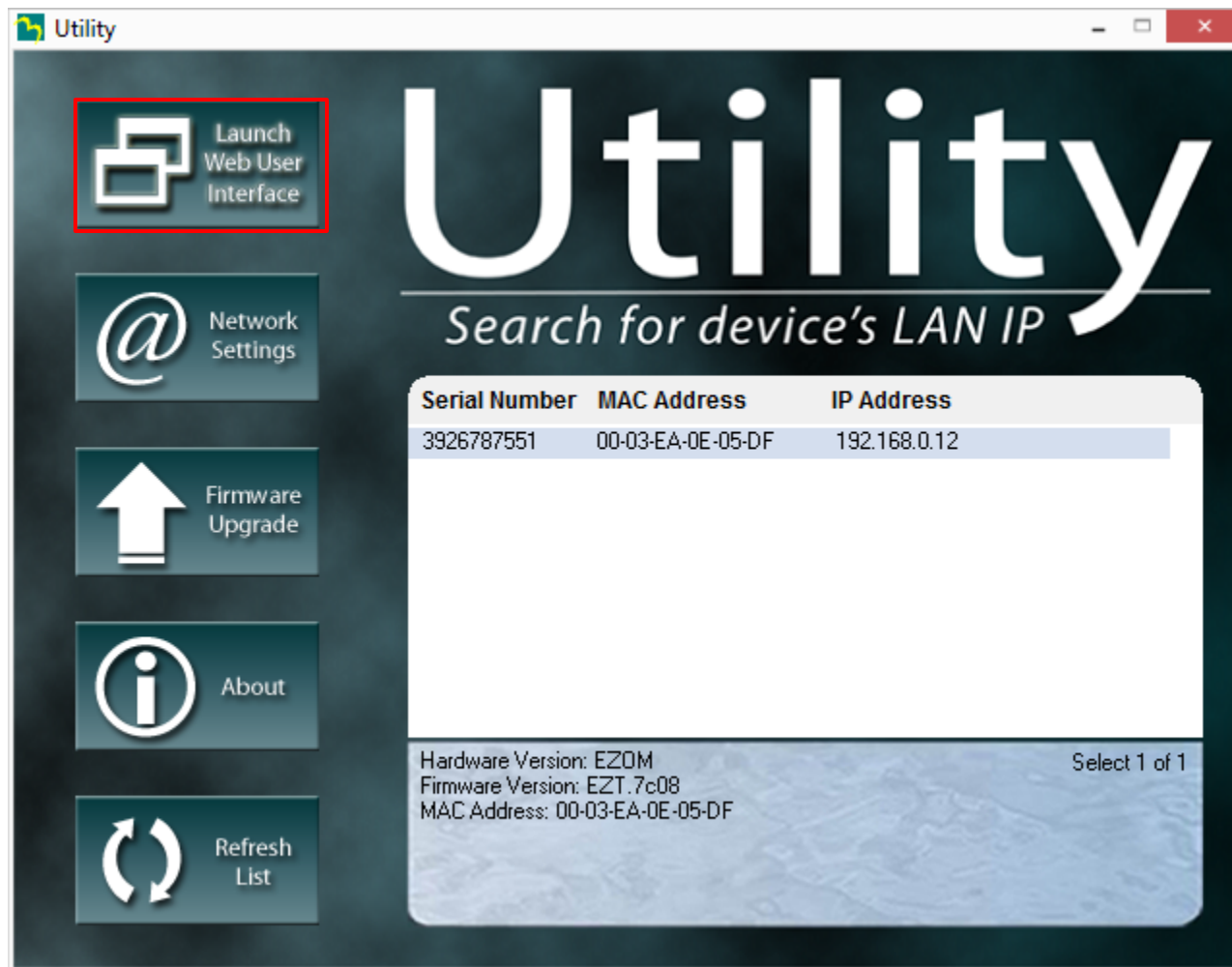
- To test, connect Board power supply to outlet on EZ11B and run “**cycle_power.bat**” in test folder.
- Power should go off for a few seconds then turn on again
- BIT will call this during the test to cycle power



```
C:\windows\system32\cmd.exe
C:\zcu104_bit\tests\ZCU104_PROD\bat>cd bat\
The system cannot find the path specified.
C:\zcu104_bit\tests\ZCU104_PROD\bat>ezoutlet.exe reset 192.168.0.12
```

EZ-22B Setup

- If using the new EZ-22B (replacement for the EZ-11B)
 - Click Launch Web User Interface



EZ-22B Setup

- Under **Settings**, clear the **Username**, **Password**, and **Confirm Password** fields, click **Confirm**; will now work same as EZ-11B

The screenshot shows a web browser window titled 'ezOutlet2' with the address bar displaying '192.168.0.12'. The browser's address bar also shows 'Apps', 'CRs - JIRA', and 'Home - Board Files'. On the left side, there is a blue sidebar with the following menu items: 'Status', 'Network', 'Settings >>' (highlighted with a red box), 'Schedule', 'Ping Address', and 'Save/Restore'. The main content area displays the 'Settings' page. It includes the following fields and controls:

- Outlet Mode:** A dropdown menu set to 'Manual Control'.
- Ping Delay After Power On:** A text input field with '0' and a range '0 ~ 1440 minute(s)'.
- Power On Delay:** A text input field with '3' and a range '3 ~ 240 second(s)'.
- No of Resets:** A dropdown menu set to '1x'.
- Reset Only:** A dropdown menu set to 'Off'.
- Time between pings:** A dropdown menu set to '15' with the unit 'second(s)'.
- Time Zone:** A dropdown menu set to 'GMT'.
- Daylight Saving Time:** Two text input fields separated by a tilde '~', with the unit 'MM/dd hh:mm (Blank is disabled)'.
- Username:** A text input field with the label '(for web login only)'.
- Password:** A text input field.
- Confirm Password:** A text input field.

At the bottom of the settings area, there are two buttons: 'Confirm' and 'Revert'. The 'Username', 'Password', and 'Confirm Password' fields are grouped together and highlighted with a red box.

References

References

➤ Vivado Release Notes

- Vivado Design Suite User Guide - Release Notes – UG973
 - https://www.xilinx.com/support/documentation/sw_manuals/xilinx2018_2/ug973-vivado-release-notes-install-license.pdf
- Vivado Design Suite 2018 - Vivado Known Issues
 - <https://www.xilinx.com/support/answers/70860.html>

➤ Vivado Programming and Debugging

- Vivado Design Suite Programming and Debugging User Guide – UG908
 - https://www.xilinx.com/support/documentation/sw_manuals/xilinx2018_2/ug908-vivado-programming-debugging.pdf

Documentation

Documentation

➤ Zynq UltraScale+

- Zynq UltraScale+ MPSoC

- <http://www.xilinx.com/products/silicon-devices/soc/zynq-ultrascale-mpsoc.html>

➤ ZCU104 Documentation

- Xilinx Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit

- <https://www.xilinx.com/products/boards-and-kits/zcu104.html>

- ZCU104 Board User Guide – UG1267

- https://www.xilinx.com/support/documentation/boards_and_kits/zcu104/ug1267-zcu104-eval-bd.pdf

- ZCU104 Evaluation Kit Quick Start Guide User Guide – XTP482

- https://www.xilinx.com/support/documentation/boards_and_kits/zcu104/xtp482-zcu104-quickstart.pdf