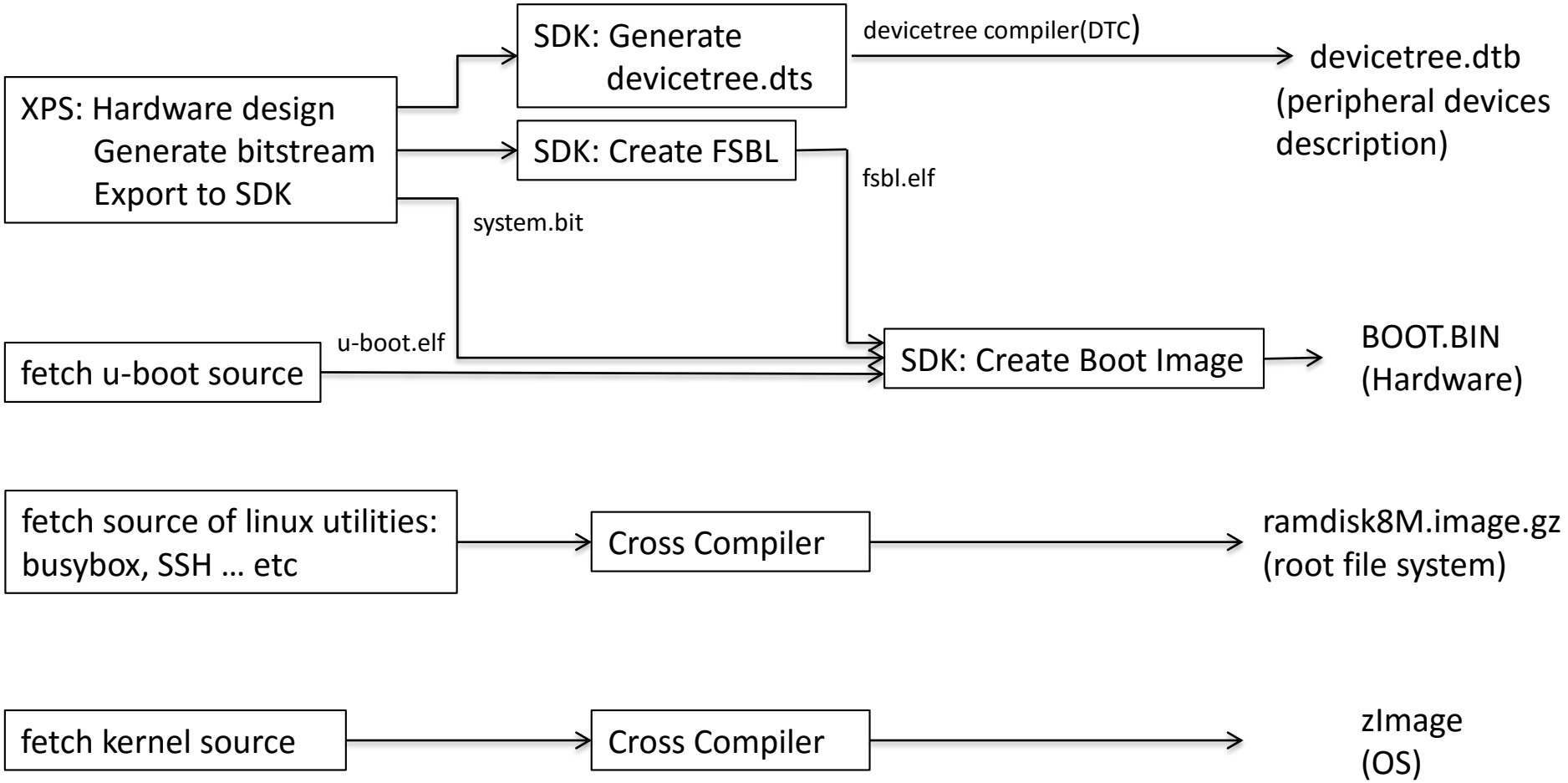
ZedBoard Lab 1
First Boot

Chun-Chen Tu
timtu@umich.edu

Lots of things to do



Start from a prebuilt image

- Download from here

Support Documents:

Doc #	Date	Categories	Description	
DSD-0000401	12/14/12	DP	This zip file contains the Out Of Box (OOB) SD card image and source. Documentation on how to obtain and build the Linux Kernel along with the hardware project and boot files is provided.	Download
DSD-0000412	1/16/13	PD	Getting Started with Embedded Linux - ZedBoard™	Download
DSD-0000414	1/16/13	DP	Linux Hardware Design for ISE 14.4	Download
DSD-0000415	1/16/13	DP	Linux Hardware Design for ISE 14.2	Download
DSD-0000417	4/16/13	PD	Embedded Linux Hands-on Tutorial - ZedBoard	Download

Document

Prebuilt files

Prepare your SD card

- You need FAT format for your SD card.
  - You can done this by formatting under Window or Linux
  - It's easy, google it!!
    - Key words for linux: fdisk, gparted
  - For running hadoop, you may need two partitions. One for FAT and the other for ext2, ext3 or ext4.

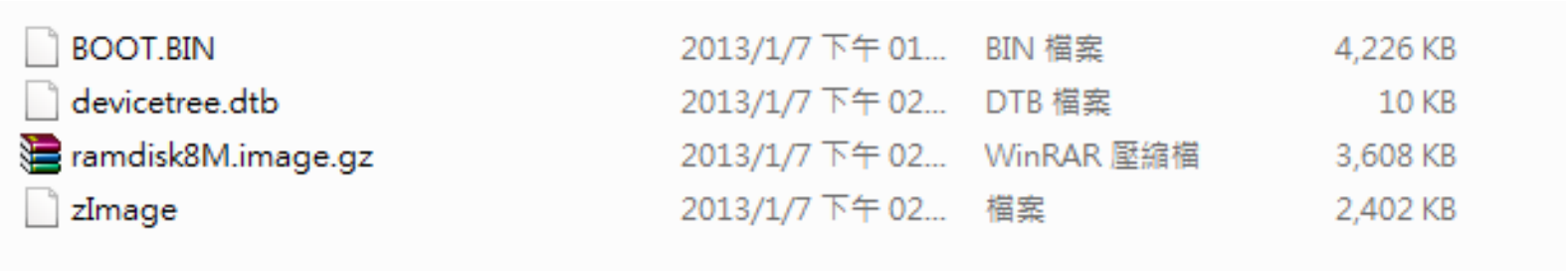
```
zynq> fdisk -l

Disk /dev/mmcblk0: 3986 MB, 3986685952 bytes
123 heads, 62 sectors/track, 1021 cylinders
Units = cylinders of 7626 * 512 = 3904512 bytes

        Device Boot      Start         End      Blocks   Id System
/dev/mmcblk0p1               1         276     1052357    b Win95 FAT32
```

What's in prebuilt zip?

- Unzip it and read the ProjectGuide.pdf under ***doc*** folder.
- What we need are 4 files under ***sd_image*** folder



Boot up

- Copy 4 file into SD card.
- Make sure the ZedBoard is under SD card booting configuration.

  MIO 6: set to GND

  MIO 5: set to 3V3

  MIO 4: set to 3V3

  MIO 3: set to GND

  MIO 2: set to GND

  VADJ Select: Set to 1V8

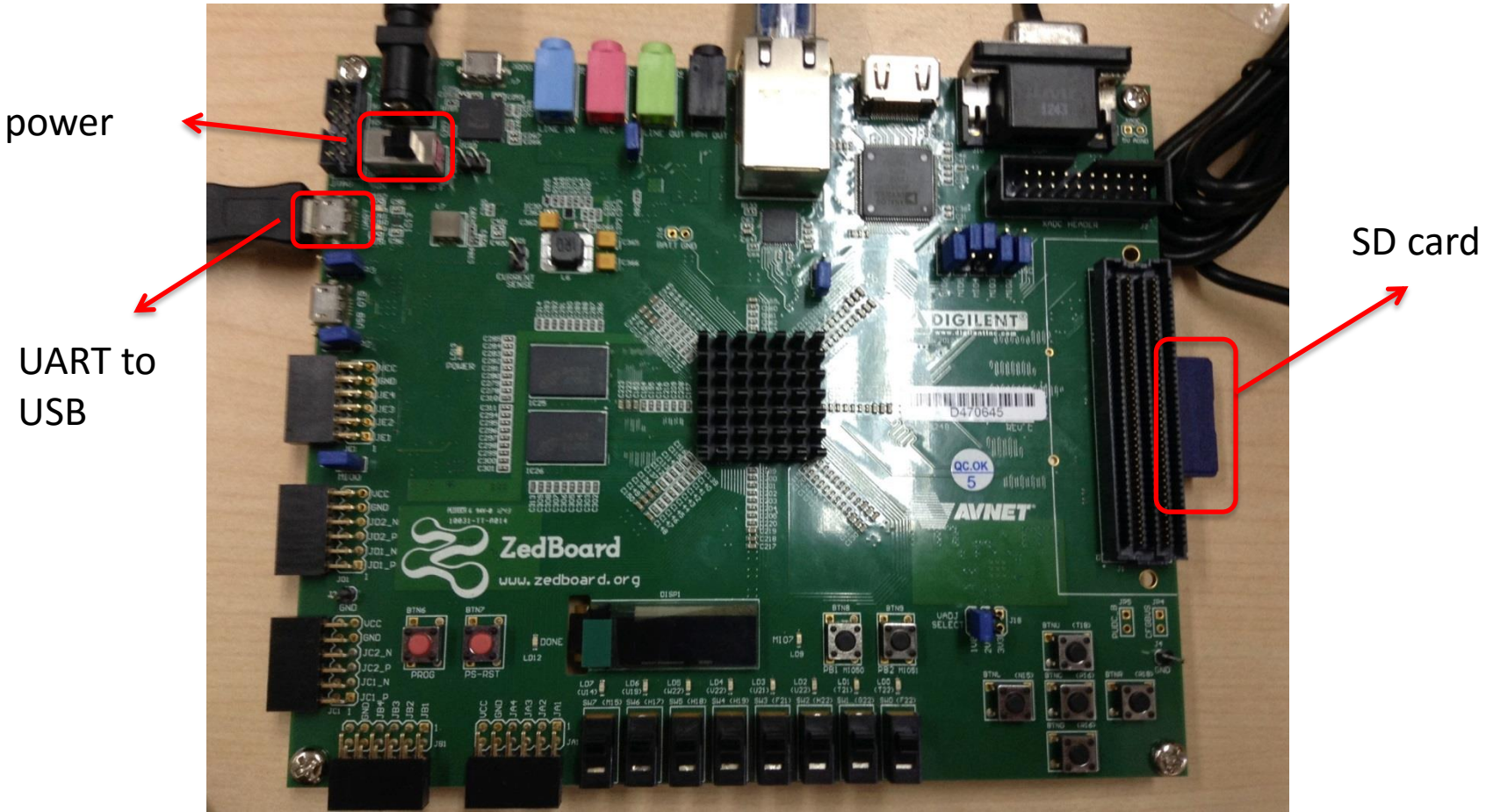
  JP6: Shorted

  JP2: Shorted

  All other jumpers should be left unshorted

Boot from basic prebuilt image

Insert the SD card in Zedboard and connect the UART to USB(PC).



Setup terminal

turn on the power

Linux:at terminal

sudo screen /dev/ttyACM0 115200

Or you can use Putty for the right COM port and buad rate =115200

```
Starting rcS...
++ Mounting filesystem
++ Setting up mdev
++ Configure static IP 192.168.1.10
++ Starting telnet daemon
++ Starting http daemon
++ Starting ftp daemon
++ Starting dropbear (ssh) daemon
++ Starting OLED Display
[    1.870000] spi_gpio spi_gpio.2: master is unqueued, this is deprecated
[    1.880000] pmodoled-gpio-spi [zed_oled] SPI Probing
++ Exporting LEDs & SWs
rcS Complete
zynq>
```

Easy, isn’t?