INSTALL UBUNTU ON RB-100/RB-110

(METHOD 1: USING USB CD-ROM)

DMP Electronics Inc
Robotic Division
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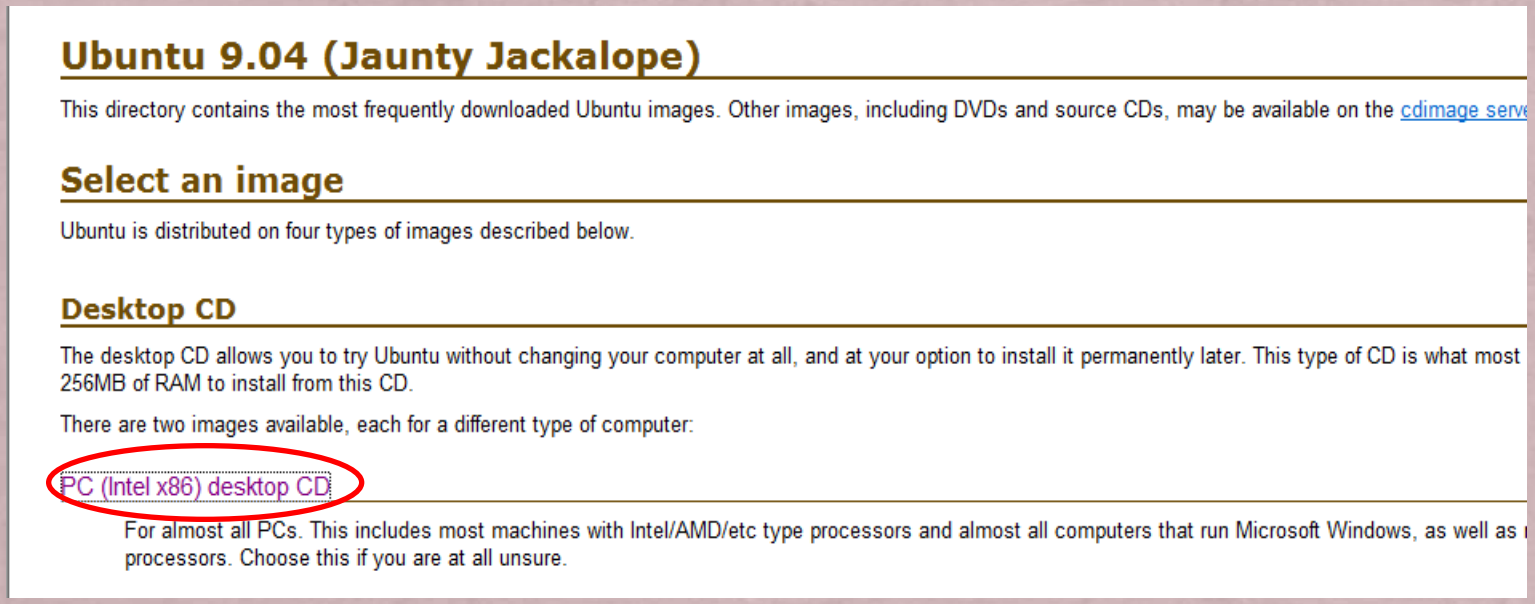
REQUIREMENTS

- Ubuntu ISO file
  - Here, we use Ubuntu 9.04 for example
- USB CD-ROM
- RoBoard RB-100/RB-110
- 8GB MicroSD card

STEP1.

+ Download Ubuntu-9.04-DESKTOP-I386.ISO file

  download web: http://releases.ubuntu.com/9.04/



Ubuntu 9.04 (Jaunty Jackalope)

This directory contains the most frequently downloaded Ubuntu images. Other images, including DVDs and source CDs, may be available on the cdimage serv

Select an image

Ubuntu is distributed on four types of images described below.

Desktop CD

The desktop CD allows you to try Ubuntu without changing your computer at all, and at your option to install it permanently later. This type of CD is what most
256MB of RAM to install from this CD.

There are two images available, each for a different type of computer:

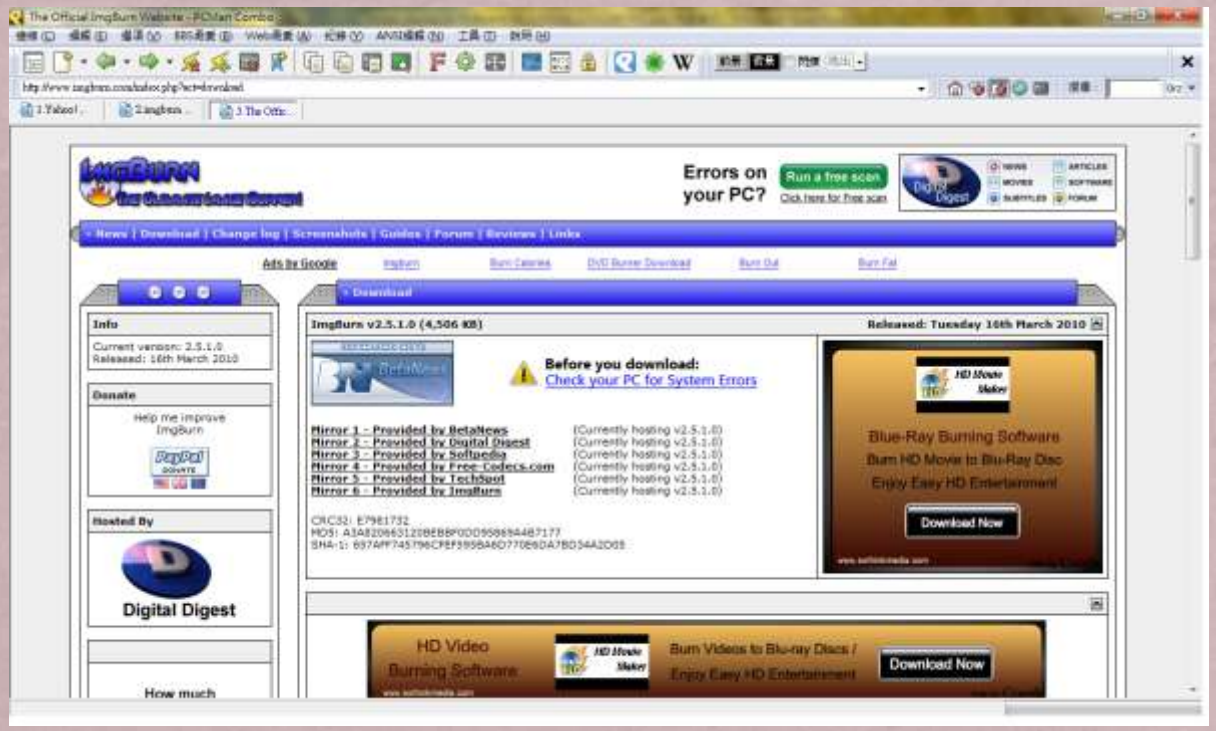
PC (Intel x86) desktop CD

For almost all PCs. This includes most machines with Intel/AMD/etc type processors and almost all computers that run Microsoft Windows, as well as
processors. Choose this if you are at all unsure.

STEP2.

- Make an installation CD with the Ubuntu ISO
  - In this example, we use ImgBurn to do this

    download web: http://www.imgburn.com/index.php?act=download



STEP3.

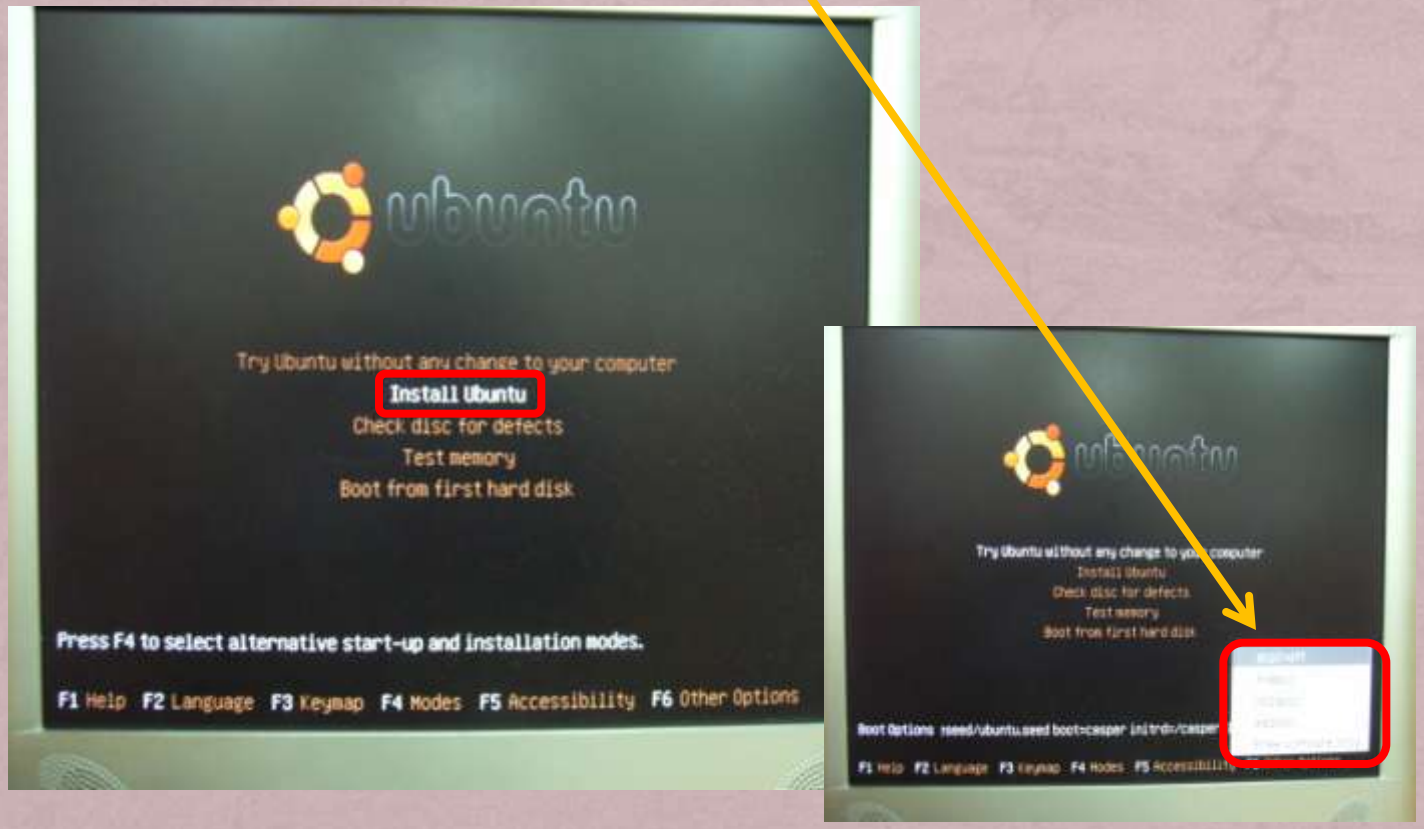
- Connect to the USB CD-ROM and plug the MicroSD card to your Roboard
- Put the installation CD into USB CD-ROM

STEP4.

- Power on RoBoard to start the Ubuntu installation
- Choose the language for installation process

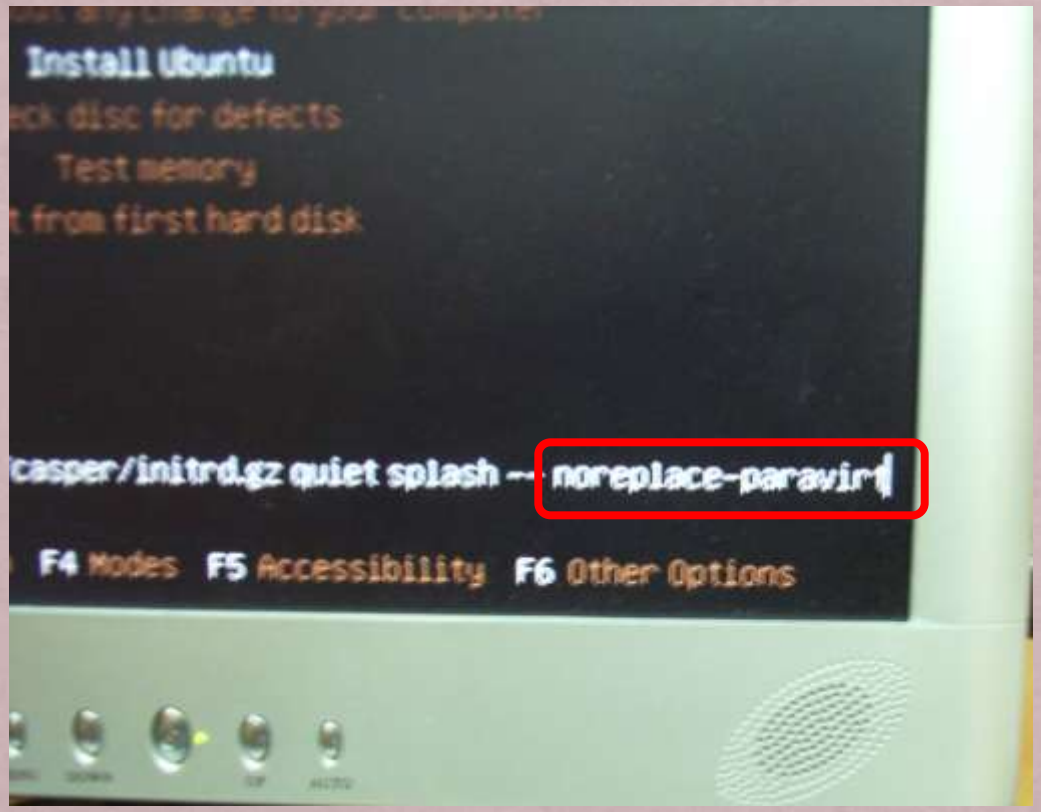
STEP5.

- Choose “Install Ubuntu” & press “F6”
- And then Press “Esc” to exit the submenu



STEP6.

- Type **`noreplace-paravirt`**
- Press Enter to continue

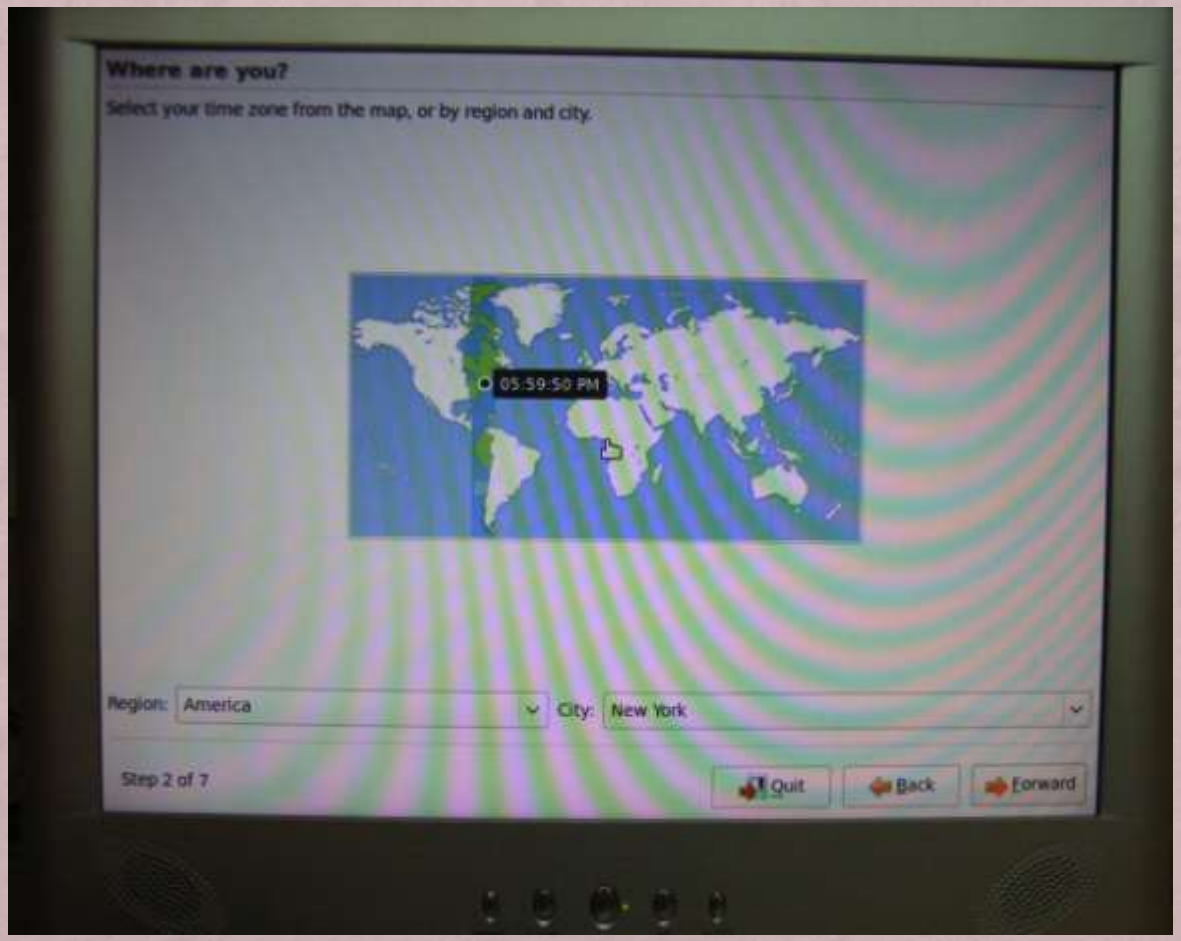


STEP7

+ Choose installation language

STEP8.

- Choose Region and City

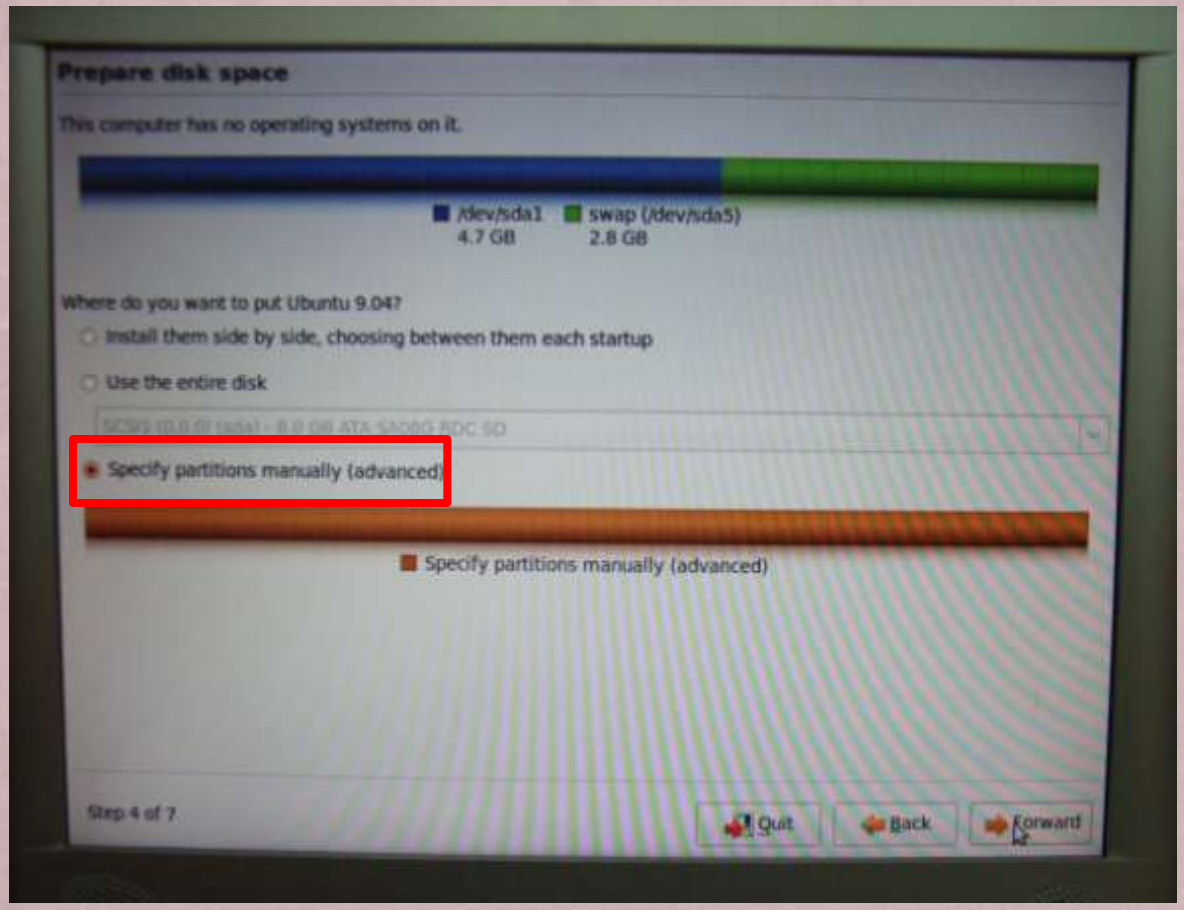


STEP9.

- Choose keyboard layout

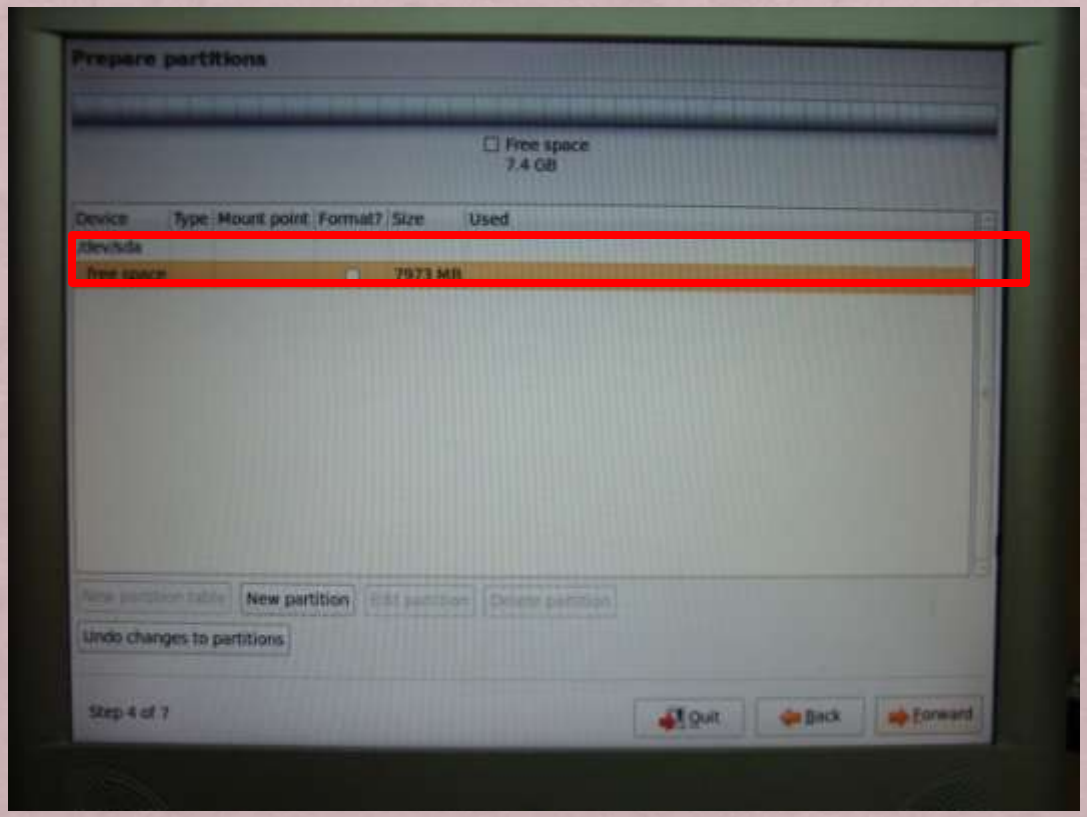
STEP10.

+ Choose “**specify partitions manually (advancecd)**”



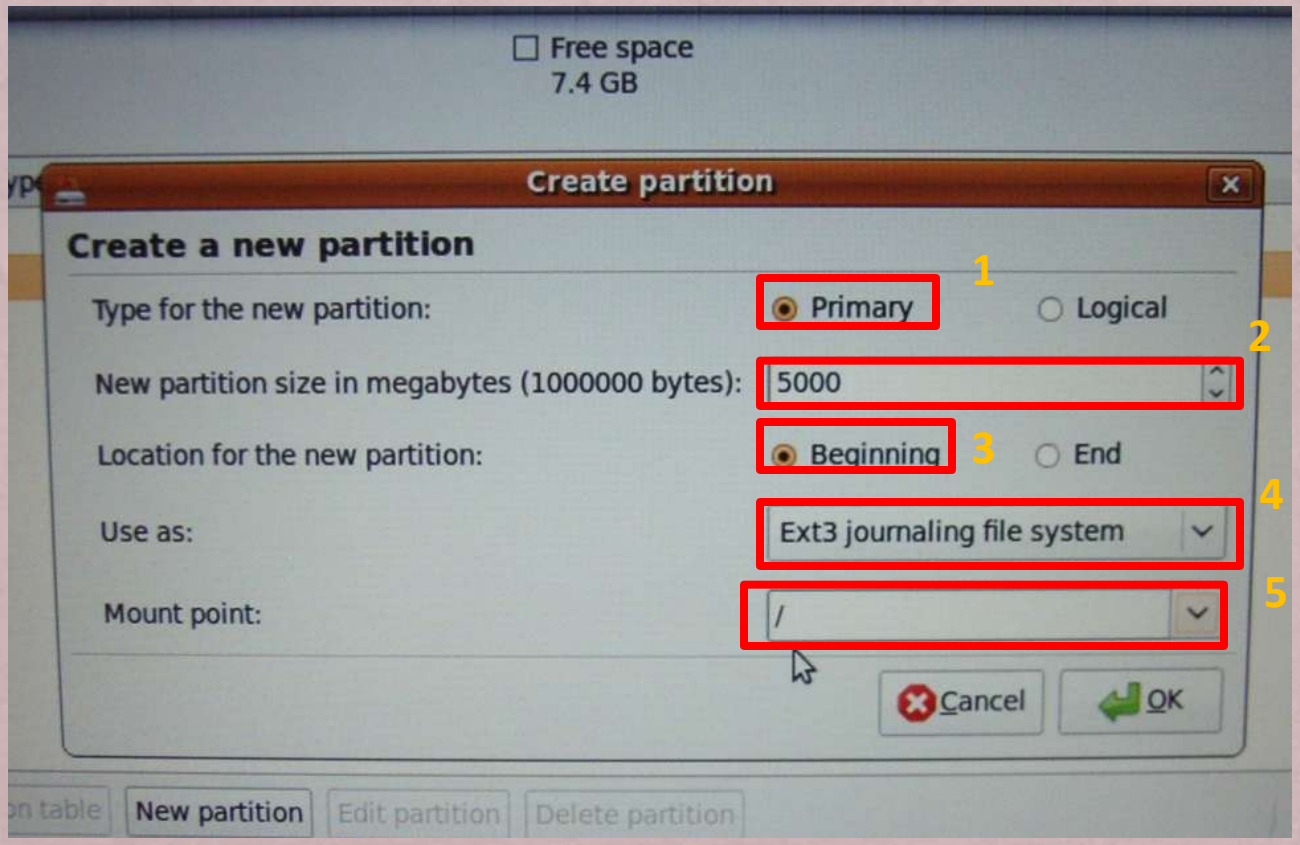
STEP10. [OPTION]

- Repartition the MicroSD card
  - 1. Delete the original partitions if they exist
  - 2. Create new partitions



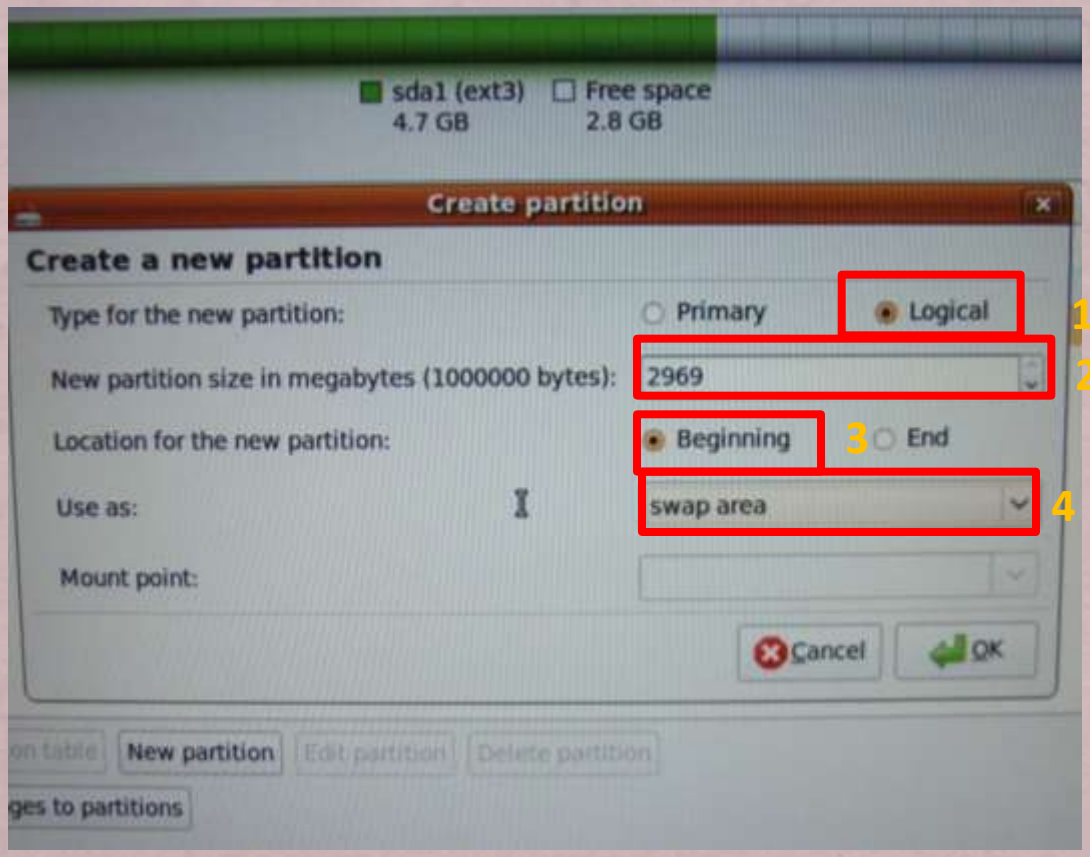
STEP10. [OPTION]

- Repartition the MicroSD card (cont.)
  - 3. Set the Primary partition



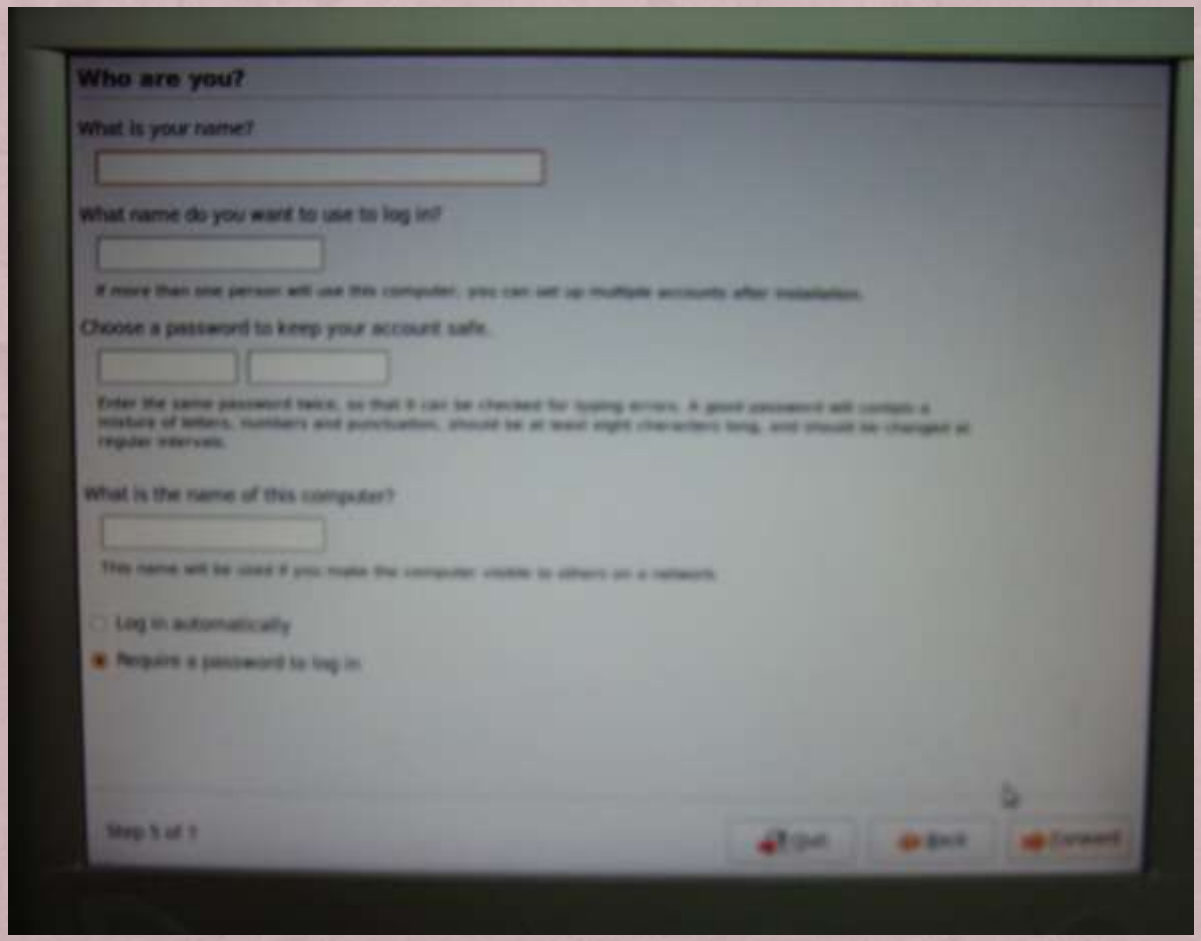
STEP10. [OPTION]

- Repartition the MicroSD card (cont.)
  - 4. Set the Logical partition



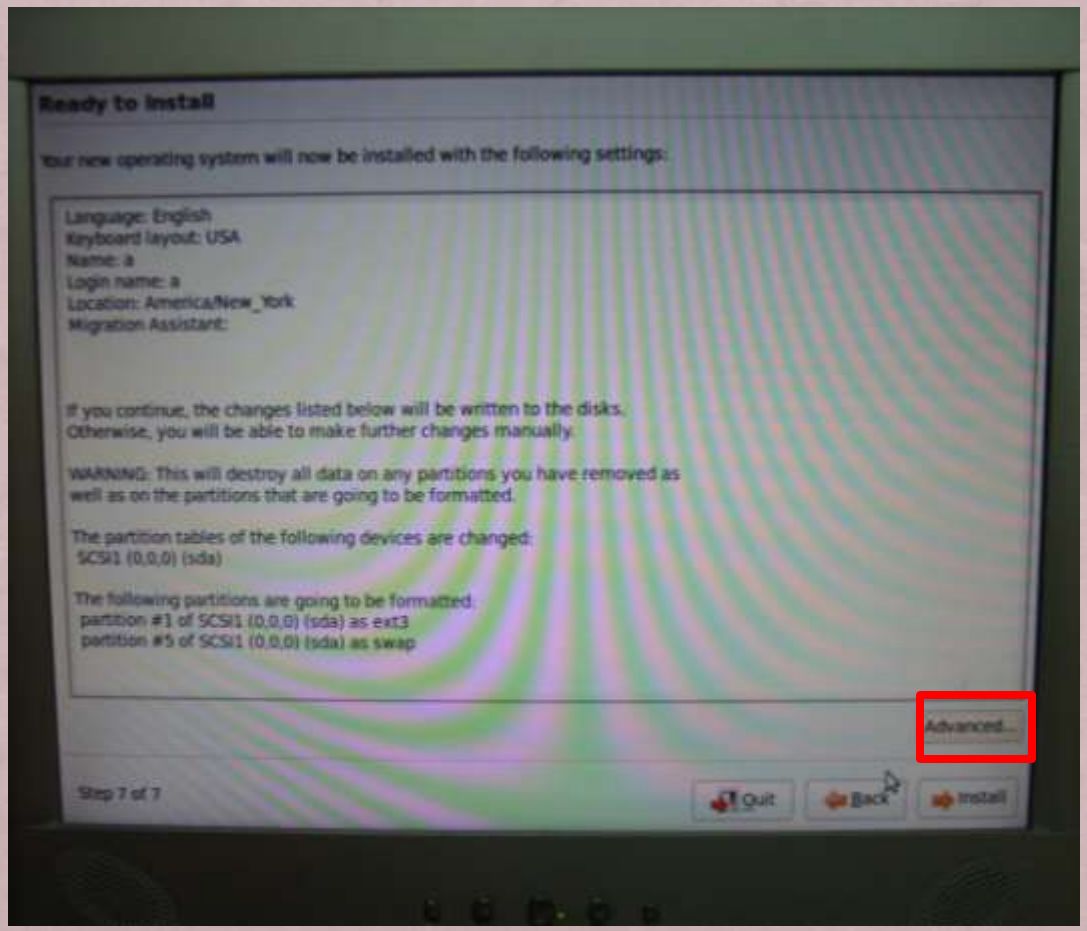
STEP11.

+ Set usename and password



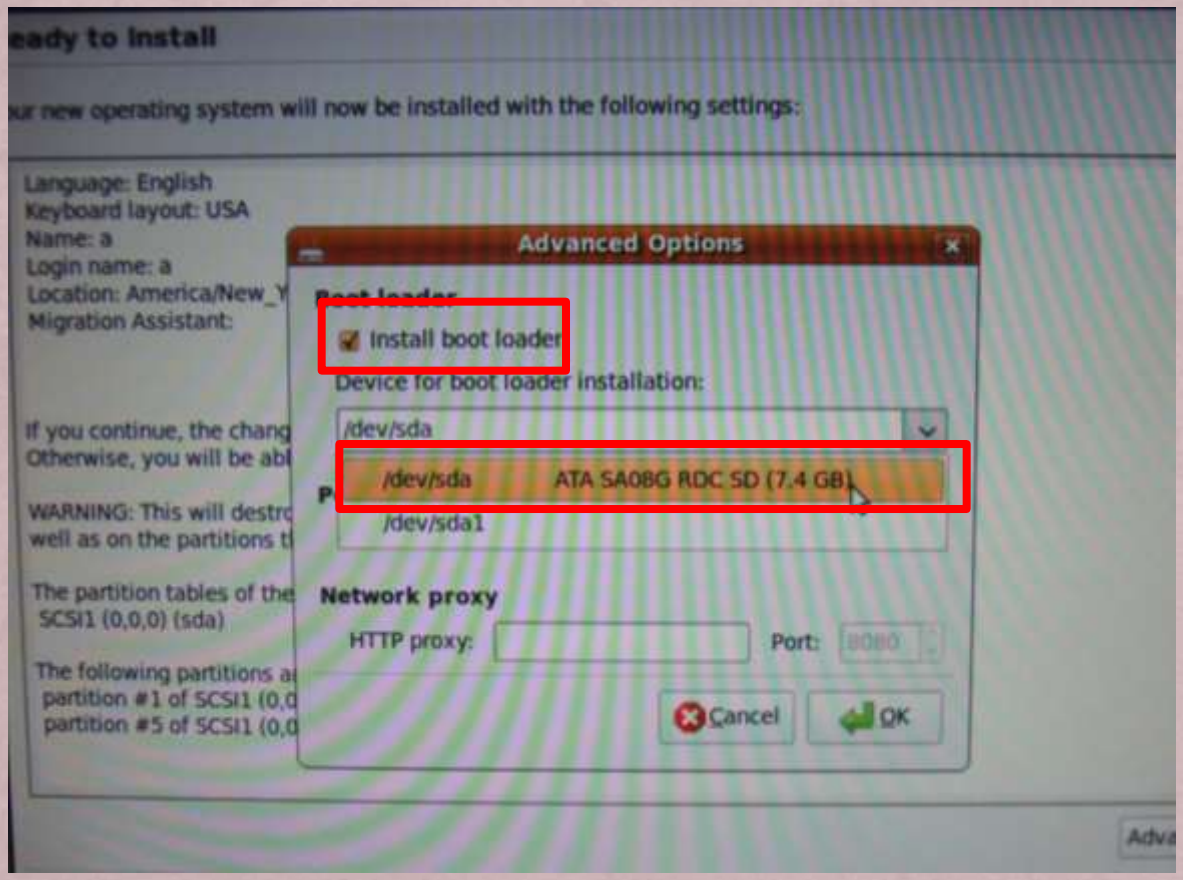
STEP12.

- Click “Advanced…”



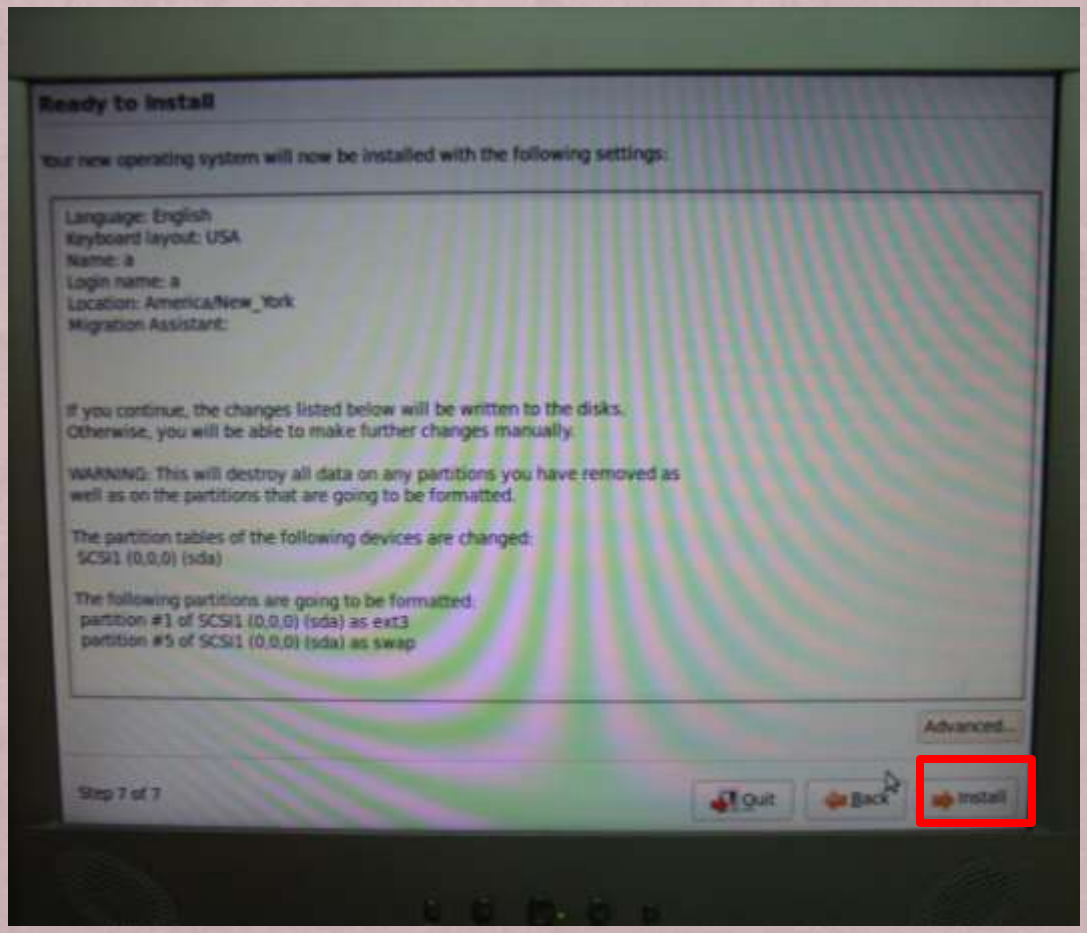
STEP13.

- Click “install boot loader” and choose the MicroSD card



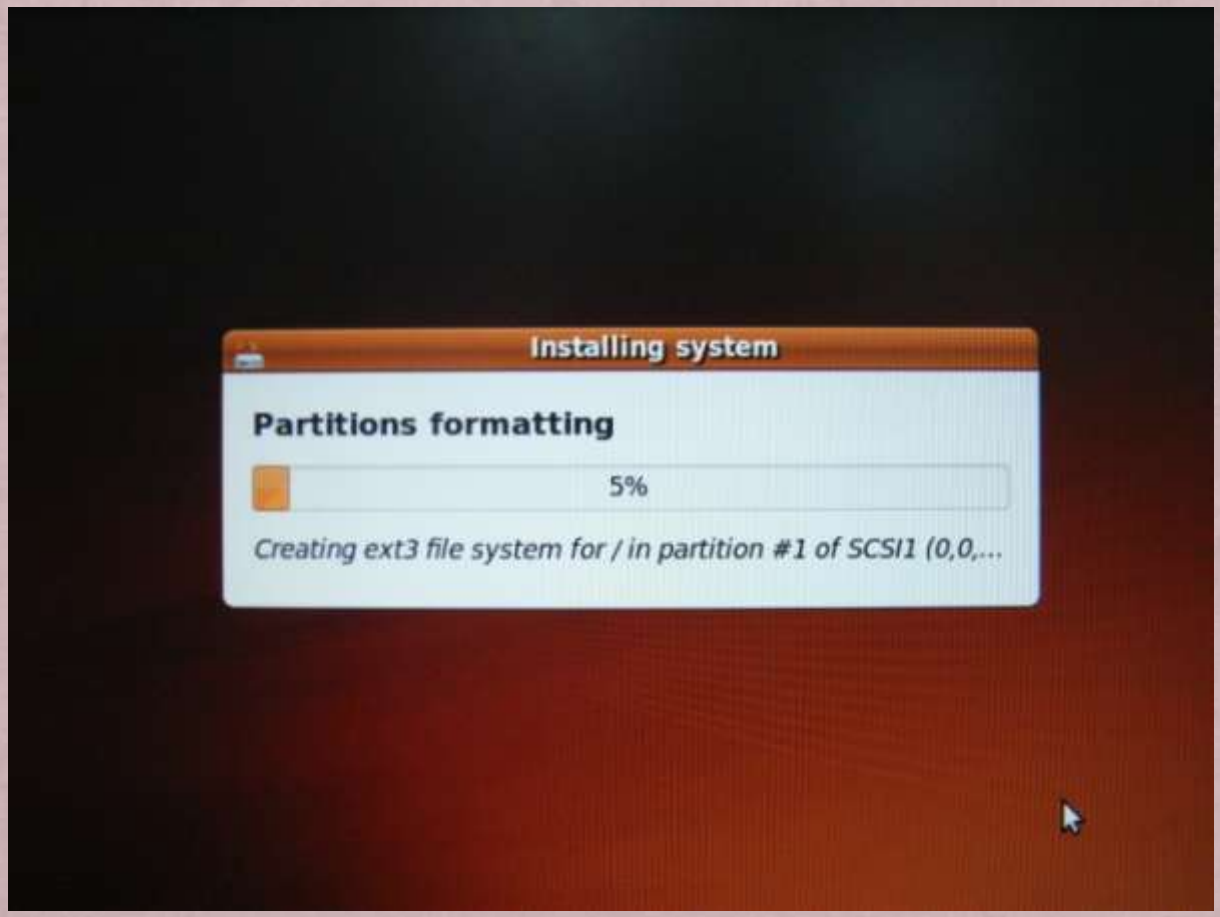
STEP14.

+ Click “Install”



STEP15.

- Partitions formatting

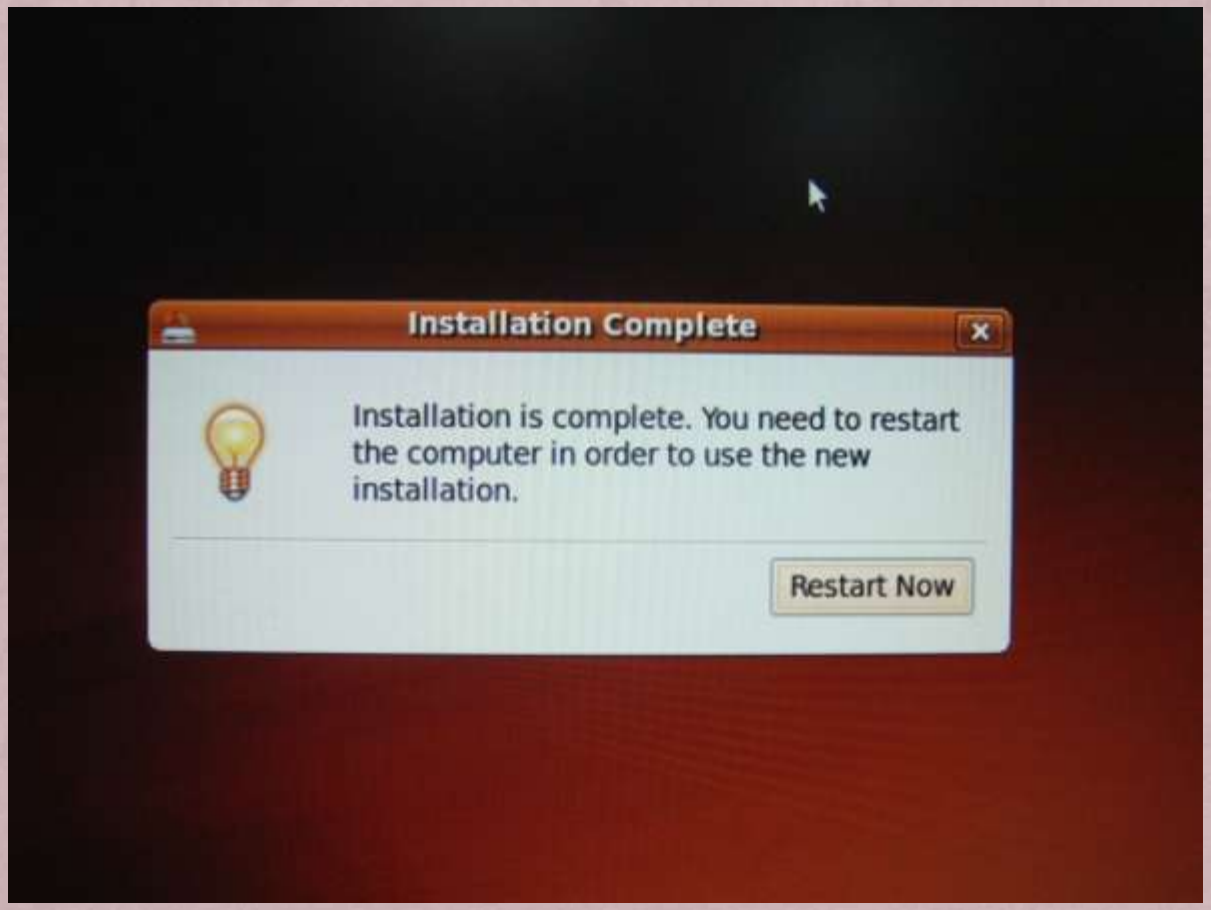


STEP16.

- Installing system

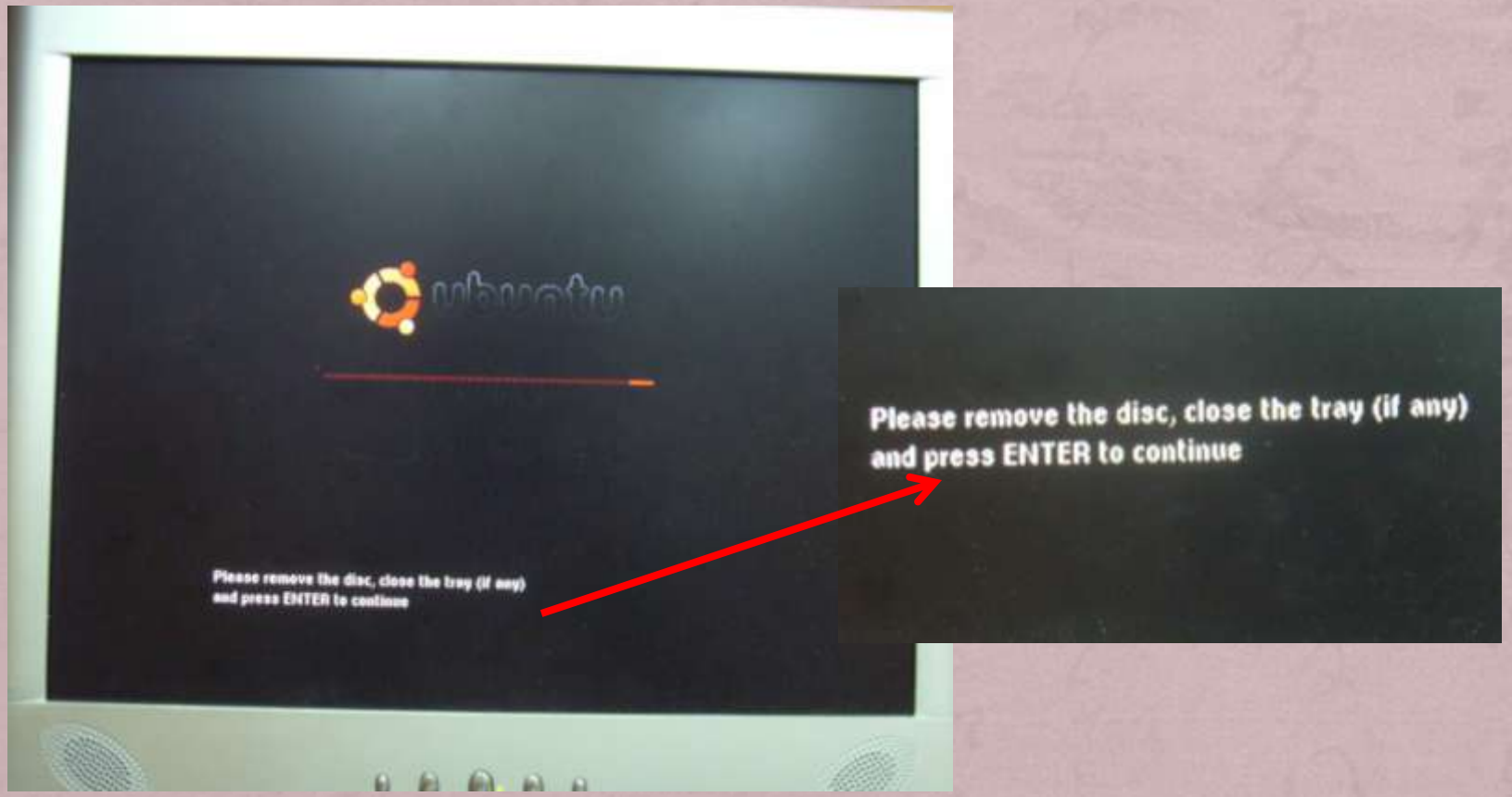
STEP17.

- Click “Restart Now”



STEP18.

- Press ENTER to continue
- Remove the USB CD-ROM & reboot

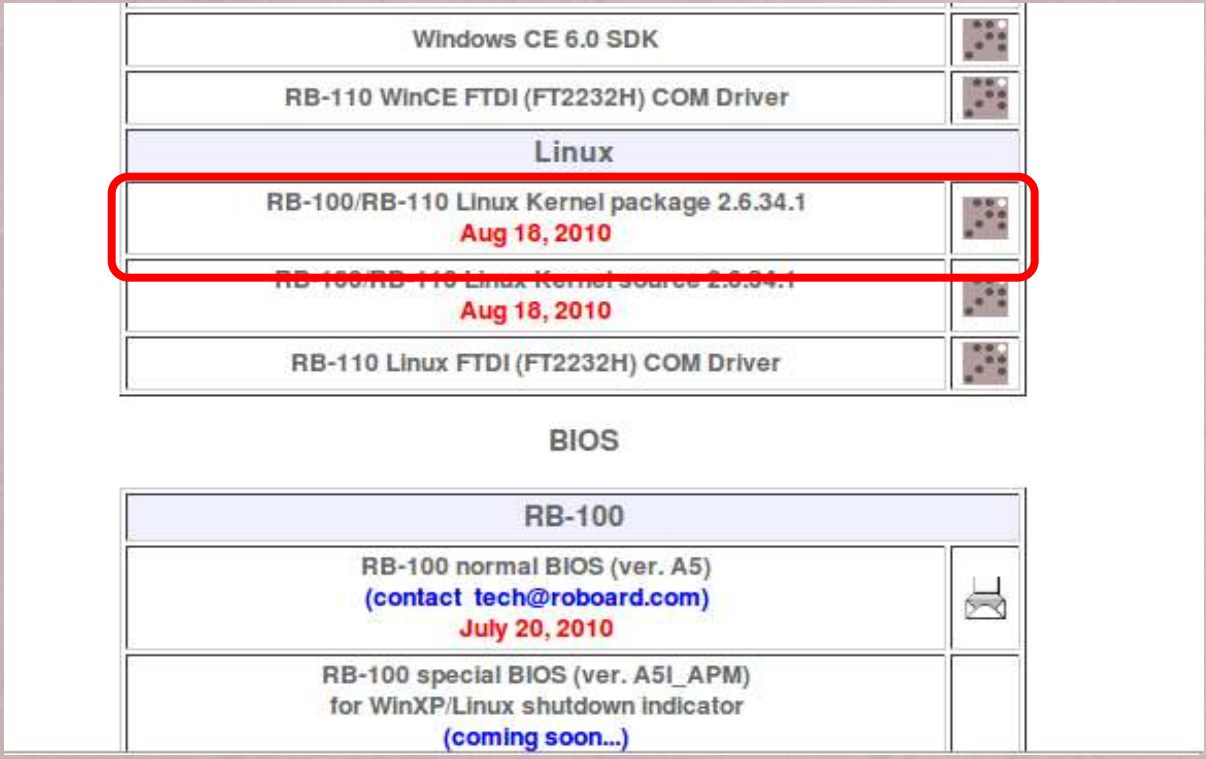


STEP19.

- You will boot into Ubuntu 9.0.4 GUI
- Download & Install the RoBoard Linux kernel package
  - Note that currently the Ubuntu can’t connect to internet, and so you must download RoBoard Linux kernel package with other PC.

STEP20.

- Download RoBoard Linux kernel package into a USB stick download web `http://www.roboard.com/download_ml.htm`



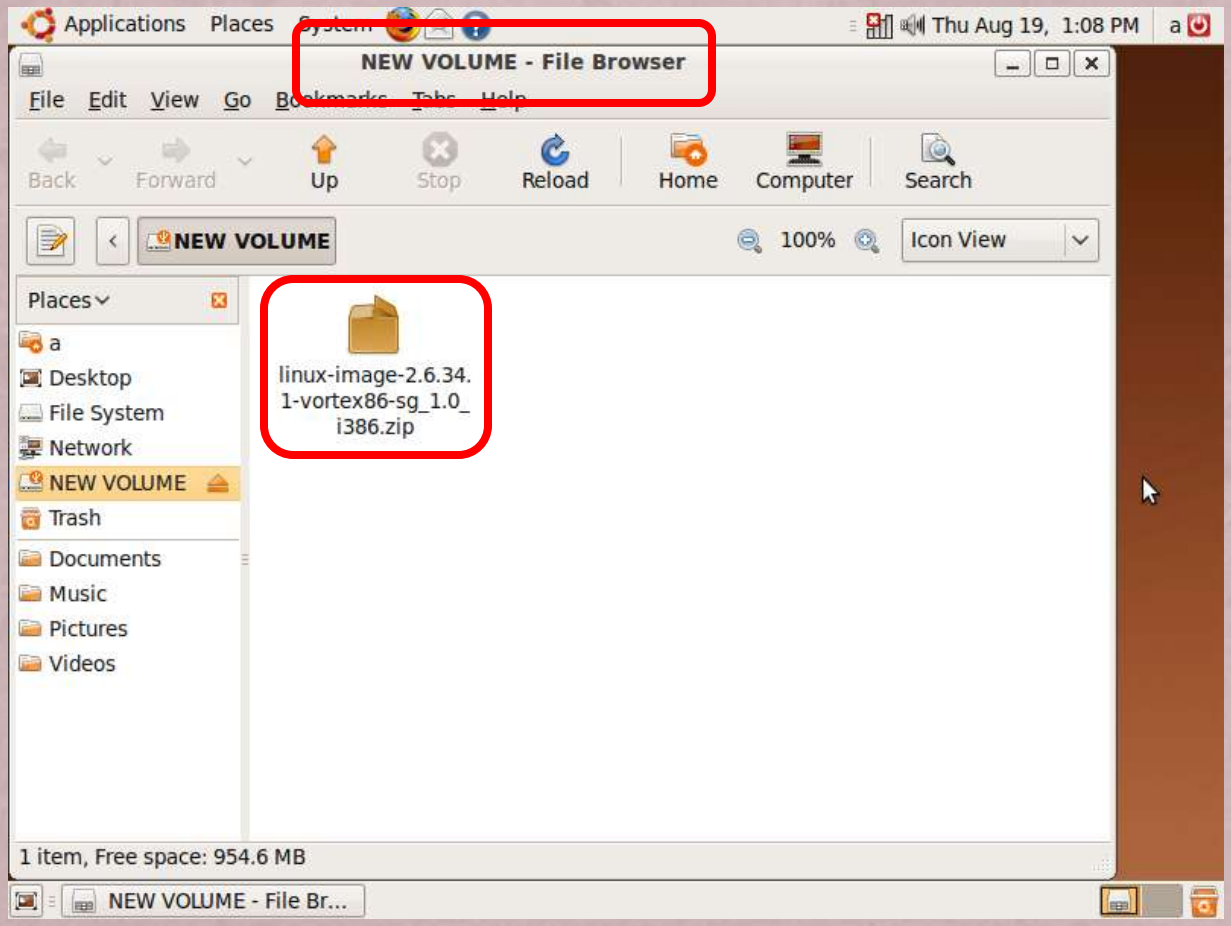
Windows CE 6.0 SDK
RB-110 WinCE FTDI (FT2232H) COM Driver
Linux
RB-100/RB-110 Linux Kernel package 2.6.34.1 Aug 18, 2010
RB-100/RB-110 Linux Kernel source 2.6.34.1 Aug 18, 2010
RB-110 Linux FTDI (FT2232H) COM Driver

BIOS

RB-100
RB-100 normal BIOS (ver. A5) (contact tech@roboard.com) July 20, 2010
RB-100 special BIOS (ver. A5I_APM) for WinXP/Linux shutdown indicator (coming soon...)

STEP21.

+ Plug the USB stick into your RoBoard



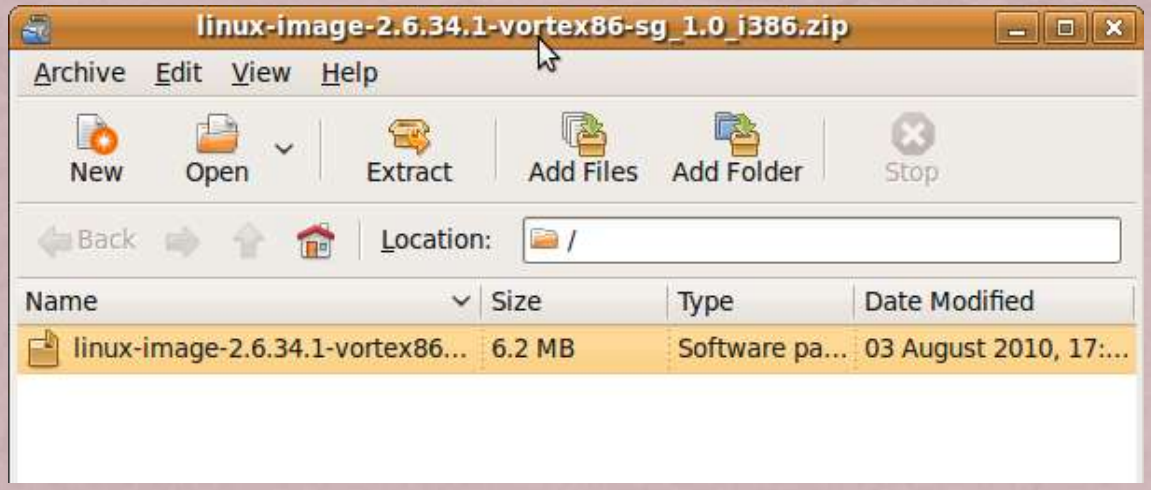
STEP22.

- Extract the downloaded kernel package
  - In this example, the package is

    `linux-image-2.6.34.1-vortex86-sg_1.0_i386.zip`

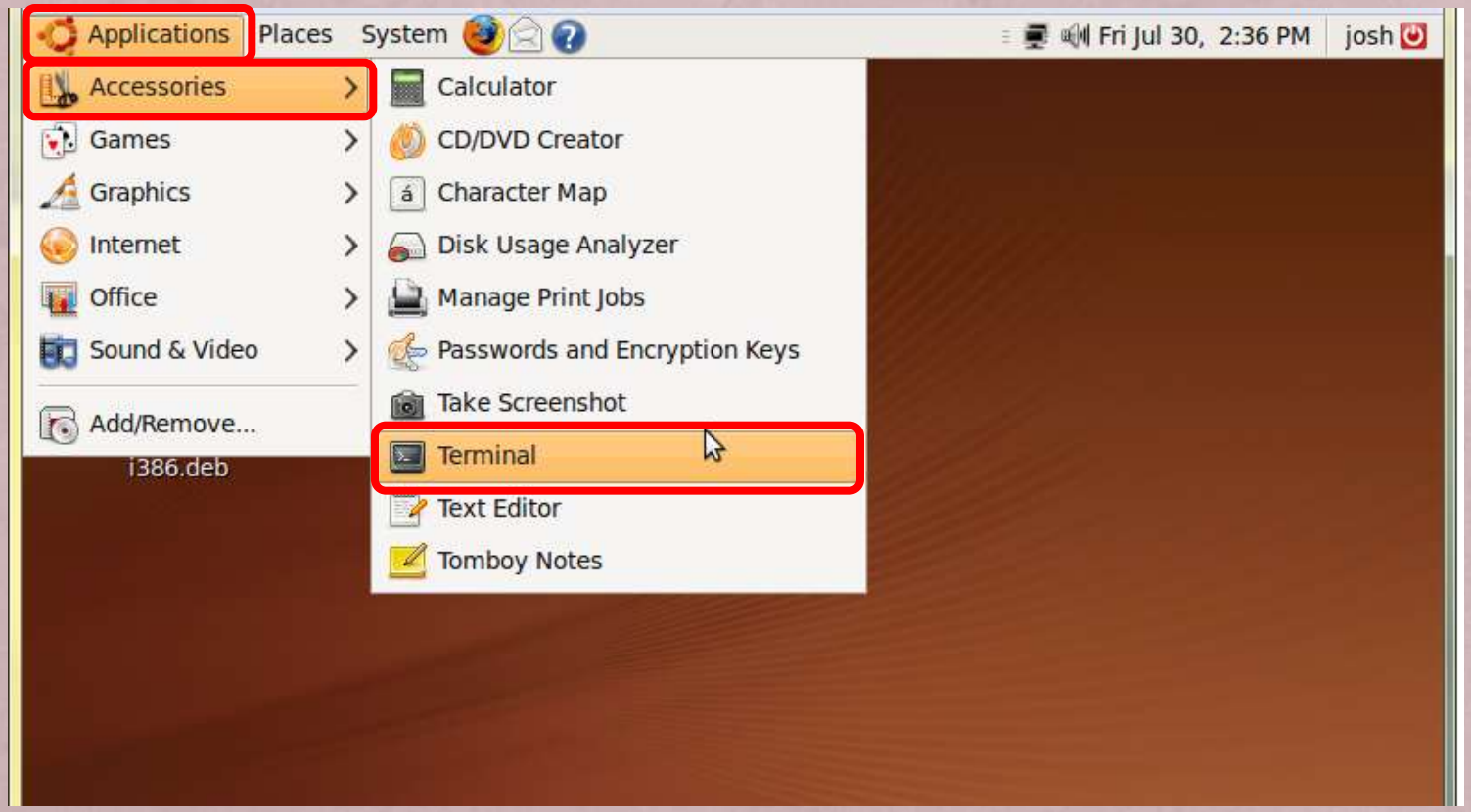
    Extracting it, we get

    `linux-image-2.6.34.1-vortex86-sg_1.0_i386.deb`



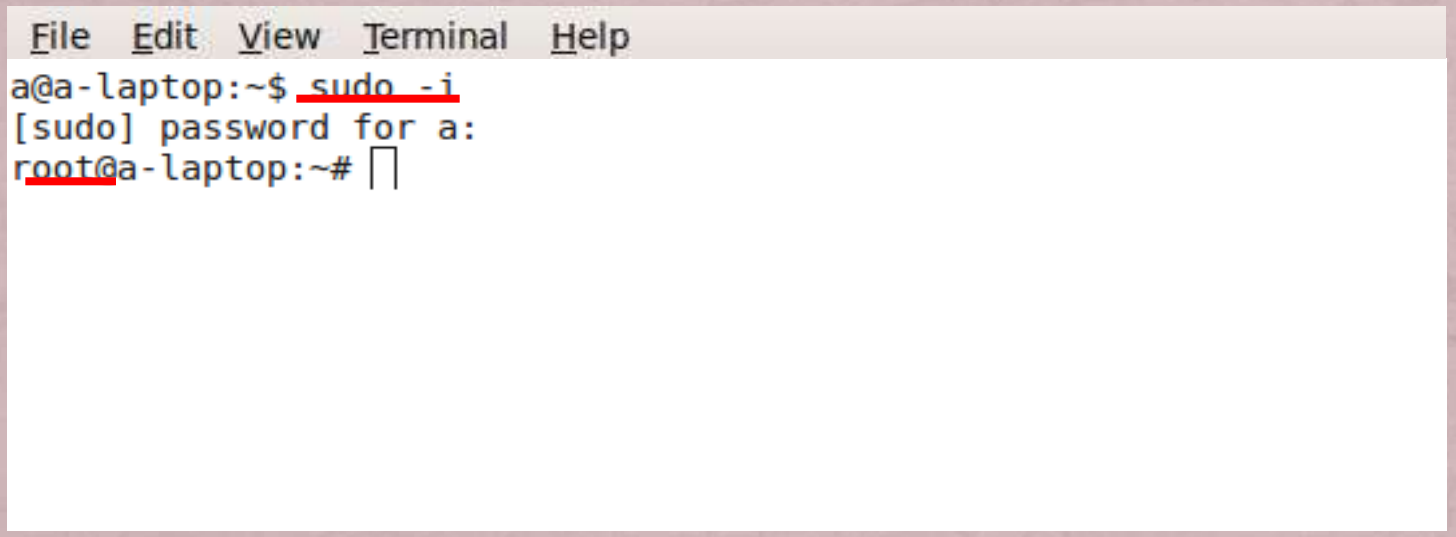
STEP23.

+ Open a Terminal window



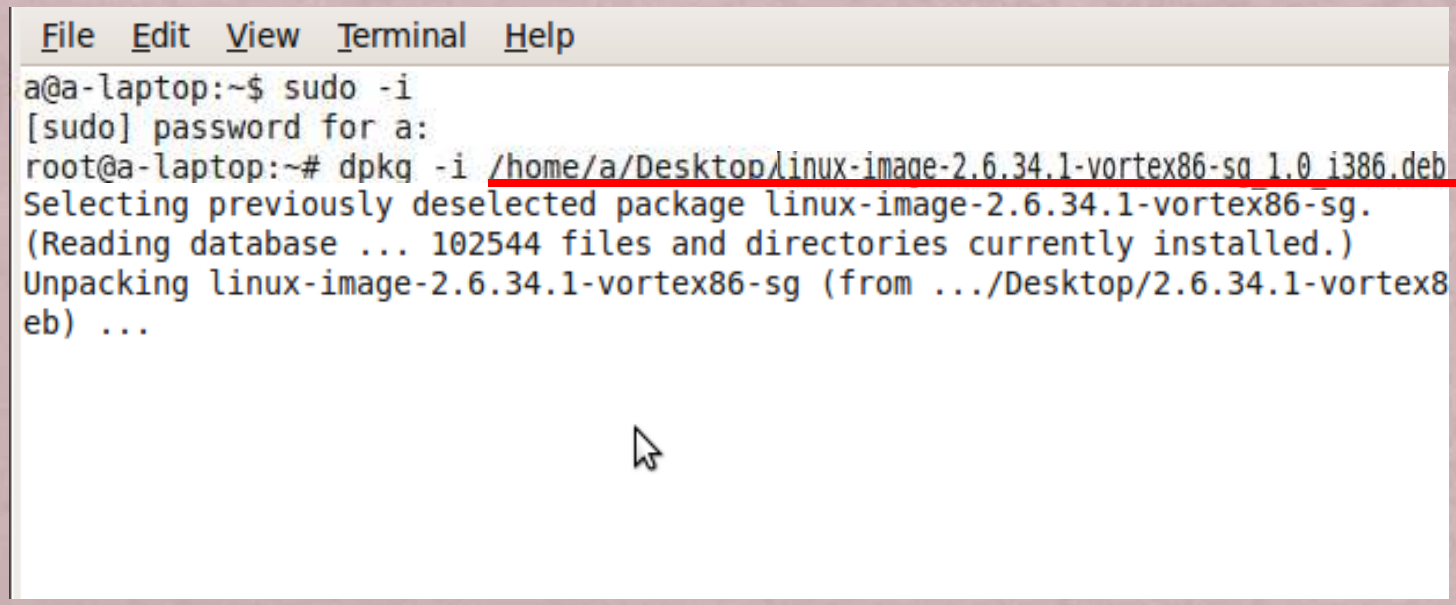
STEP24.

+ Type **`sudo -i`**



STEP25.

- Type **dpkg -i <RoBoard Linux kernal package path>**
  - In this example, the path is **/home/a/Desktop/linux-image-2.6.34.1-vortex86-sg_1.0_i386.deb**



STEP25.

+ Type **update-initramfs -k 2.6.34.1-vortex86-sg -c**

```
Found kernel: /boot/vmlinuz-2.6.28-11-generic
Found kernel: /boot/memtest86+.bin
Replacing config file /var/run/grub/menu.lst with new version
Updating /boot/grub/menu.lst ... done

root@a-laptop:~# update-initramfs -k 2.6.34.1-vortex86-sg -c
```

STEP27.

- Type **update-grub**

```
root@a-laptop:~# update-initramfs -k 2.6.34.1-vortex86-sg -c
update-initramfs: Generating /boot/initrd.img-2.6.34.1-vortex86-sg

root@a-laptop:~#
root@a-laptop:~# update-grub
Searching for GRUB installation directory ... found: /boot/grub
Searching for default file ... found: /boot/grub/default
Testing for an existing GRUB menu.lst file ... found: /boot/grub/menu.lst
Searching for splash image ... none found, skipping ...
Found kernel: /boot/vmlinuz-2.6.34.1-vortex86-sg
Found kernel: /boot/vmlinuz-2.6.28-11-generic
Found kernel: /boot/memtest86+.bin
Replacing config file /var/run/grub/menu.lst with new version
Updating /boot/grub/menu.lst ... done
```

STEP28.

- Type **`reboot`**
- Now It is complete to install Ubuntu on RoBoard RB-100/RB-110.

```
Found kernel: /boot/vmlinuz-2.6.28-11-generic
Found kernel: /boot/memtest86+.bin
Replacing config file /var/run/grub/menu.lst with new version
Updating /boot/grub/menu.lst ... done
root@a-laptop:~# reboot
```

THANK YOU

tech@roboard.com
http://www.roboard.com