

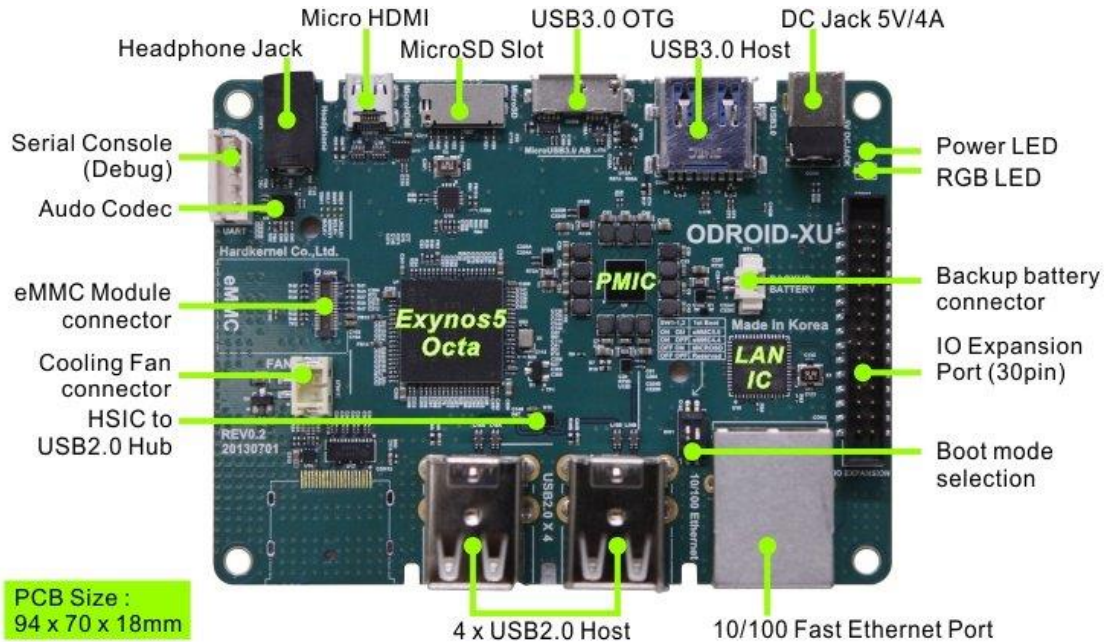
Ubuntu 12.04 with Odroid-XU

Application Note

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24/3/2014

Odroid-XU



Key features

- Exynos5 Octa Cortex™-A15 1.6Ghz quad core and Cortex™-A7 quad core CPUs
- PowerVR SGX544MP3 GPU (OpenGL ES 2.0, OpenGL ES 1.1 and OpenCL 1.1 EP)
- 2Gbyte LPDDR3 RAM PoP
- USB 3.0 Host x 1, USB 3.0 OTG x 1, USB 2.0 Host x 4
- HDMI 1.4a output Type-D connector
- eMMC 4.5 Flash Storage

Odroid-XU is a very powerful computer with quad core CPUs which perform much better than most of the minicomputer in the market. The Odroid-XU

Ubuntu boot up time around 25 seconds.

Ubuntu 12.04 set up for windows user

Prerequisites & Tools

- SD-Card & SD-Card reader/writer
- [7-Zip](#) to extract the SD-Card image from downloaded .xz file
- [Win32 Disk Imager](#) to write the .img file to your SD-Card.

Step-by-Step

1. Download a compressed SD image (odroidu2_xxxxxyyzz-linaro-ubuntu-desktop-uSDeMMC.img.xz) from:<http://odroid.us/odroid/odroidu2/ubuntu/>
2. **(optional)** Check md5sum of the downloaded .xz archive

1. Note the MD5 sum of the image on server in the **.md5sum** file:

```
odroidu2_xxxxxyyzz-linaro-ubuntu-desktop-uSDeMMC.img.xz.md5sum
```

2. Calculate your md5sum for downloaded file

```
md5sums  
odroidu2_xxxxxyyzz-linaro-ubuntu-desktop-uSDeMMC.img.xz
```

3. Verify if the MD5 checksums match - if not, your downloaded file is corrupted, download again!

3. Extract the .img file from .xz archive using 7-Zip

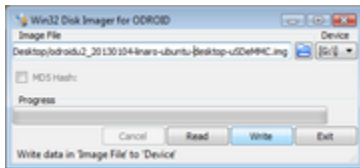
```
7z -z odroidu2_xxxxxyyzz-linaro-ubuntu-desktop-uSDeMMC.img.xz
```

4. Plug your SD-Card to your SD reader/writer.
5. Format the SD-Card using default Windows format utility or [SDFormatter](#)

Warning: Make double sure you know which device represents the SD-Card. Formatting an incorrect drive will erase all data!

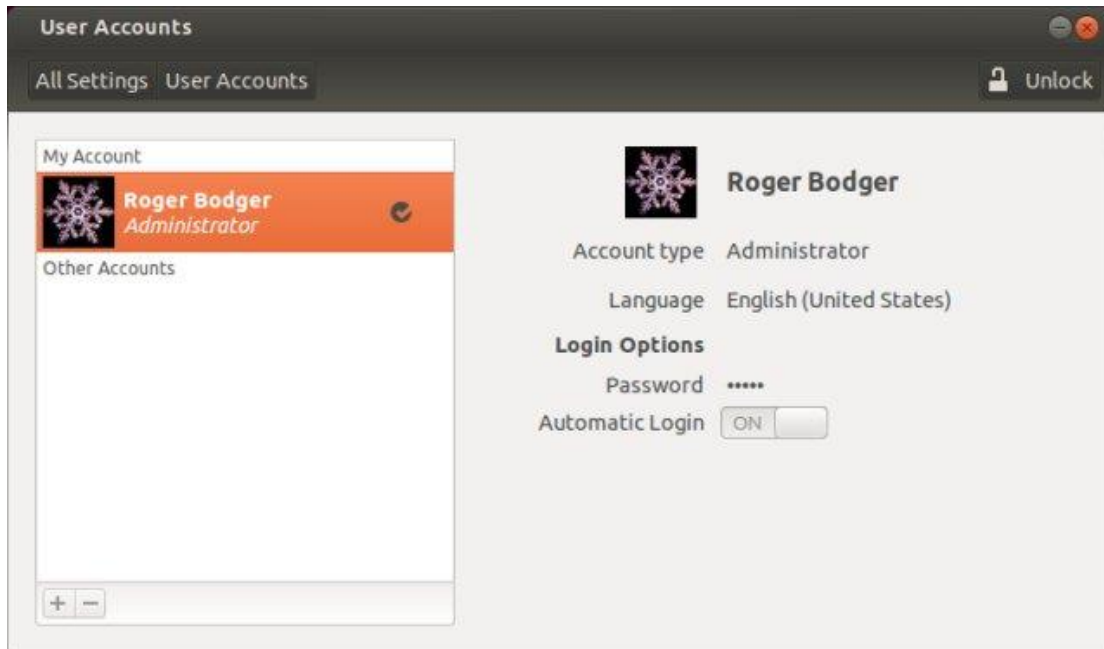


6. Use the Win32 Disk Imager GUI to select the SD-Card image file (.img) and write it.



7. All done - Plug the SD-Card into Odroid and boot!

Ubuntu auto login set



User management

1. Open the System Settings application
2. Go to User Accounts.
3. Click the Unlock button and type in your password.
4. Click on the user you want to use auto-login.
5. Toggle the auto-login slider to the On setting.
6. Click Lock to save your changes.

Edit Configuration Files

in Ubuntu 11.04 and lower, the configuration is stored

in `/etc/gdm/gdm.conf`.

In Ubuntu 11.10 and higher, the file is `/etc/lightdm/lightdm.conf`.

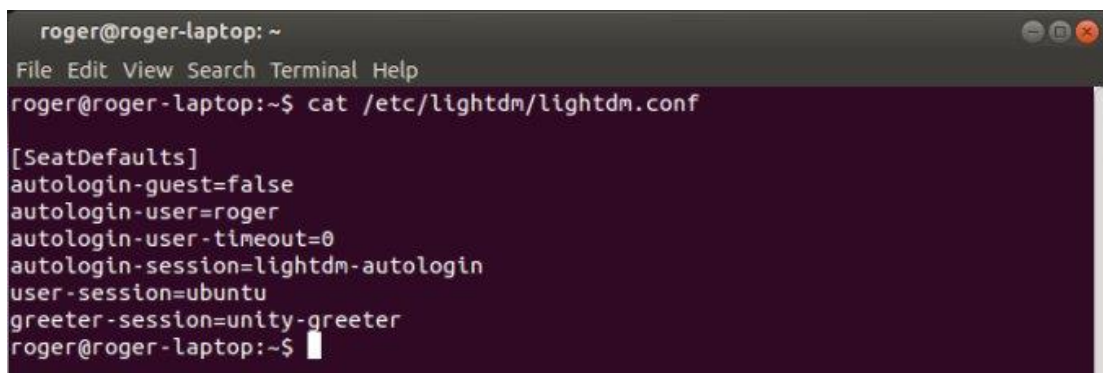
In Mint, the relevant file is `/etc/mdm/mdm.conf`.

Now that we know what we need, editing becomes simple. As sudo, with necessary backup beforehand, of course. But you knew that already.

What you want to look is the following set of directives. In Ubuntu:

`autologin-user=<name>` - Name of the user

`autologin-user-timeout=<value>` - Timeout before session is loaded

A terminal window titled 'roger@roger-laptop: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The command 'cat /etc/lightdm/lightdm.conf' has been executed, displaying the following configuration:

```
[SeatDefaults]
autologin-guest=false
autologin-user=roger
autologin-user-timeout=0
autologin-session=lightdm-autologin
user-session=ubuntu
greeter-session=unity-greeter
roger@roger-laptop:~$
```

In Mint, the following directives:

`AutomaticLoginEnable` - Do you want the autologin on or off

`AutomaticLogin=<user>` - The name of the lucky user

`TimedLoginEnable` - Do you want to enable auto-login on session restart

`TimedLogin=<user>` - Name of the user for timed logins

`TimedLoginDelay` - Delay before entering the session again

```
gamer@lameria: ~
File Edit View Search Terminal Help
gamer@lameria:~$ cat /etc/mdm/mdm.conf | grep -v \#

[daemon]
AutomaticLoginEnable=true
AutomaticLogin=gamer
TimedLoginEnable=true
TimedLogin=gamer
TimedLoginDelay=10
```

Delete the shutdown password

Edit the file `/usr/share/polkit-1/actions/org.freedesktop.consolekit.policy` using your favorite text editor. You will need root permissions.

Change the section relating to shutdown when others are logged in from

```
<action id="org.freedesktop.consolekit.system.stop-multiple-users">
  <description>Stop the system when multiple users are logged in</description>
  <message>System policy prevents stopping the system when other users are logged
in</message>
  <defaults>
    <allow_inactive>no</allow_inactive>
    <allow_active>auth_admin_keep</allow_active>
  </defaults>
</action>
```

To

```
<action id="org.freedesktop.consolekit.system.stop-multiple-users">
  <description>Stop the system when multiple users are logged in</description>
  <message>System policy prevents stopping the system when other users are logged
in</message>
  <defaults>
    <allow_inactive>no</allow_inactive>
    <allow_active>yes</allow_active>
  </defaults>
</action>
```

and the section relating to rebooting when others are logged in from

```
<action id="org.freedesktop.consolekit.system.restart-multiple-users">
  <description>Restart the system when multiple users are logged in</description>
  <message>System policy prevents restarting the system when other users are logged
in</message>
  <defaults>
    <allow_inactive>no</allow_inactive>
```

```
<allow_active>auth_admin_keep</allow_active>
</defaults>
</action>
```

To

```
<action id="org.freedesktop.consolekit.system.restart-multiple-users">
  <description>Restart the system when multiple users are logged in</description>
  <message>System policy prevents restarting the system when other users are logged
in</message>
  <defaults>
    <allow_inactive>no</allow_inactive>
    <allow_active>yes</allow_active>
  </defaults>
</action>
```

And that will allow you shutdown and reboot the PC when multiple users are logged in. Whether you want to do that is a different question.

Root Permission

Open terminal

Command window input

Sudo /usr/share/polkit-1/actions/org.freedesktop.consolekit.policy

Conclusion

In this project, we choose to use 12.04 Ubuntu which is an older version of Ubuntu and functions are enough for our four cameras setting. The size of this Ubuntu is a light weigh which can reduce the boot up speed form 130 seconds in to 25 seconds approximately. The auto login and the shutdown without password can be made by recode the system file which also need to use the root permission and the key code is sudo.

Work Cited

Web source

<http://www.dedoimedo.com/computers/ubuntu-mint-autologin.html>

http://odroid.us/mediawiki/index.php?title=Step-by-step_Ubuntu_SD_Card_Setup_for_Windows_Users

<http://askubuntu.com/questions/1190/how-can-i-make-shutdown-not-require-admin-password>