Debian / Ubuntu Linux Installation Guide

for VortexDX platfrom

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In the DX platform, there with the newer IDE and Ethernet controller, the main both of controllers just start supported from kernel 2.6.28.3. For now before the Linux distributor release the kernel (above 2.6.28.3) that supported IDE and Ethernet of DX platform. Please refer to this guide to help you complete the Linux installation.

How to install Linux on VortexDX platfrom?

Preparation:

1. The Linux installation DISC (Ubuntu7.10, 8.04, 9.04, Debian4.0, 5.0)
2. A completely formatted storage (CF)
3. Intel/AMD platform Personal Computer
4. Confirm the BIOS setting,

　　Advanced\

　　　　IDE Configuration\ IDE mode >> **Native mode**

　　　　USB Configuration\ USB 2.0 Controller Mode >> **Fullspeed**

5. The 2.6.30 kernel package DMP provided for Vortex platform.

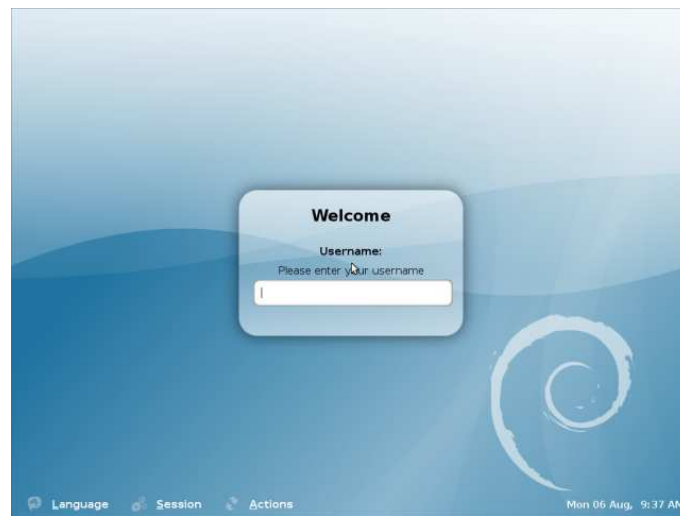PS: The completely formatted storage is helpful to avoid some unexpected error in the procedure.

After you plug all the devices and ready to install, please follow the steps as below:

Step1:

Please follow the standard procedure to install the Linux OS base on the *Intel or AMD* platform first, and make sure your Linux can boot up normally, after install completed.
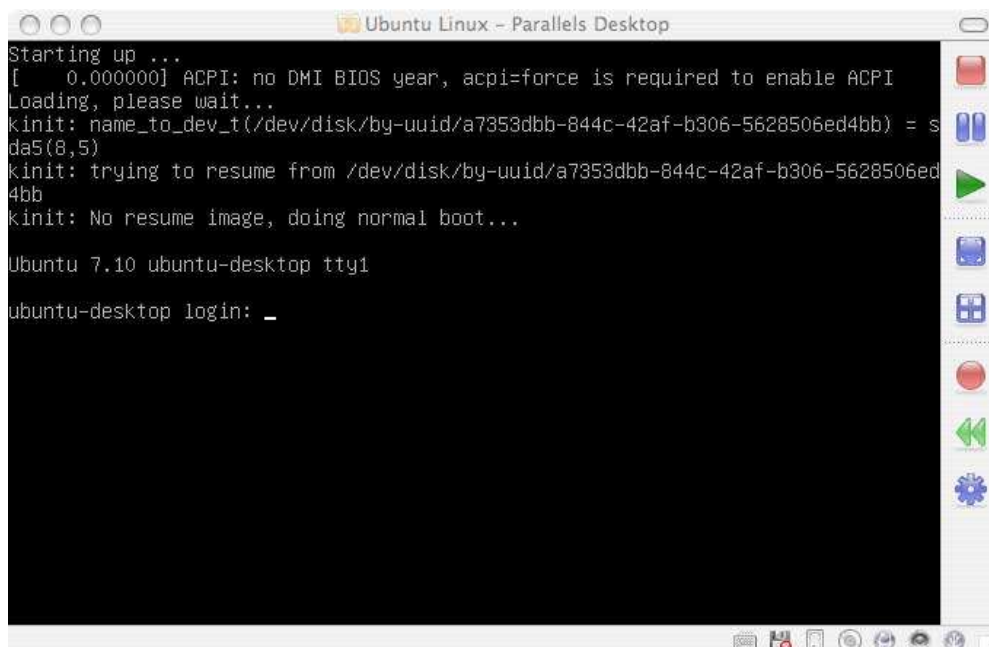

The Ubuntu login

The Debian login

Step2:

1. Please copy the .deb file (kernel package) that DMP provided into your USB pen driver or other removable storage.

File Location: ftp://vxdx:gc301@ftp.dmp.com.tw/Linux_DEMO/linux-image-2.6.30-vortex86mx_1.0_i386.deb

2. Press Ctrl+Alt+F1 keys to enter text mode.

The system would ask you to enter your user name and password.

3. Plug on the USB pen driver and try to mount it as mnt.

```
#sudo su
#mount /dev/sda1 /mnt
```

```
#cd /mnt
```
Confirm the actual codename to mount.

4. To unpack the kernel package and update.
```
# dpkg -i xxx.deb
# update-initramfs –k 2.6.30-vortex86mx -c
# update-grub
```


5. When these three procedures completed, type *reboot* to reboot system.
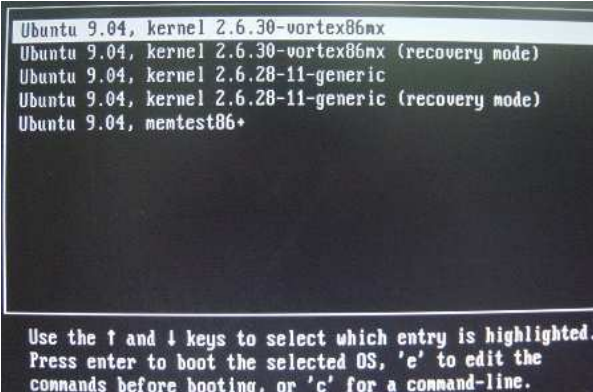```
reboot
```


## Step3:
Moving the storage installed Linux, back to VortexDX platform.


## Step4:
Turn on the power to boot.


**For Ubuntu**

When it start booting, press the Esc key when it boot. Confirm the Grub list first. There should has an option **2.6.30-vortex86mx**, and then to boot.



**For Debian**

Please press the Esc key to confirm Grub list and press E key to confirm and modify the storage's codename.



PS: The Grub list parameters you can modify in the file /boot/grub/menu.lst.

# How to install VGA driver on VortexDX platfrom?

## Preparation:

1.  The VGA driver DMP provided for eBox 33xx/PDX057-T platform

    Driver Files: ftp://vxdx:gc301@ftp.dmp.com.tw/Linux_DEMO/XGI_Z9S_R2_Xorg.zip

## Step1:

1.  Copy the whole XGI folder to USB pen driver first.
2.  Confirm what Xorg version your system using?

    | Ubuntu8.04 | X Server 1.**4** |
    | --- | --- |
    | Ubuntu9.04 | X Server 1.**6** |
    | Debian4.0 | X Server 1.**3** |
    | Debian5.0 | X Server 1.**4**.**2** |

    PS: If you don't know which version of X server it is, you can check from */var/log/xorg.0.log*

3.  Plug on the USB pen driver and try to mount the storage, and enter the folder that version your system using.

## Step2:

Copy the fit version of driver to driver folder:

```
#sudo su
```
Execute as root

```
#mount /dev/sda1 /mnt
```
Mount the USB storage to used

```
#cd /mnt/…../1.X/2.xx.xx/IA32/xgipkg_Xorg8_i386/
```
Enter the correct folder of X Server that your system operating

```
#sh install.sh
```
Install the driver file

```
#/etc/init.d/gdm restart
```
Restart the GDM

# How to install the Touch Panel driver?

## Preparation:

1.  The touch driver DMP provided for VDX platform

    Driver Files: http://home.eeti.com.tw/web20/eGalaxTouchDriver/linuxDriver.htm

## Steps:

1.  Download the Touch driver and copy it to USB driver first.
2.  Mount the storage and enter the folder of touch driver.
3.  Execute the *setup.sh*

    ```
    #sh setup.sh
    ```
4.  Follow the steps to choose the touch interface:

    ```
    (*) Linux driver installer for eGalax Touch controller

    (I) Check user permission: root, you are the supervisor.
    (I) Begin to setup the eGalax Touch driver.
    (I) Extract eGalax Touch driver archive to /usr/local/eGalaxTouch32.
    (I) Create eGalaxTouch utility shortcut in /usr/bin.
    (I) Create TKCal tool shortcut in /usr/bin.
    (I) Check X window version: 1.6.x
    (I) Copy X module: x16/egalax_drv.so to /usr/lib/xorg/modules/input.

    (Q) Which interface controller do you use?
    (I) [1] RS232 [2] PS/2 [3] USB : 3   << enter 3
    ```
5.  When complete, remember back to desktop and enter the touch driver folder of USB, clicks the eGalaxTouch to correct the position.

# Technical Support

For more technical support, please visit http://www.dmp.com.tw/tech or mail to tech@dmp.com.tw.