

Debian on Asus X205TA

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- 2) Open the downloaded Image with disk-writer in case of Linux and with Rufus in case of Windows.
 - 3) Now select the pen drive which you want to make bootable and click on restore.
 - 4) It will take sometime. Once the process is finished the pen drive will be bootable.
- 1.2 Steps to Disable secure boot*
- 1) Go to bios setup. In order to go bios setup in X205TA EeeBook just press Esc button and boot setup will open.
 - 2) Now Go to security Tag and select secure boot control and make it Disable.
 - 3) Press F10 button to save and exit.
 - 4) Secure boot is now disabled.

Abstract—This manual lists the steps required to run Debian on an Asus X205TA EeeBook through a bootable pen drive.

1 RESOURCES

- 1) Asus X205TA EeeBook
- 2) A bootable pen drive with an image file of Debian
- 3) A blank pen drive with unallocated space(free space), min 8 GB size.

1.1 Making a bootable pen drive

We can make a pen bootable both by Linux as well as windows. For Linux we will be using disk-writer while for windows we will be using Rufus software.

- 1) First of all you have to download a image file of Debian from the following link

<https://cdimage.debian.org/debian-cd/current/i386/iso-cd/>

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2 STEPS FOR INSTALLATION

2.1 Installation

Refer to given link:

<http://www.elinuxbook.com/installation-of-linux-debian-9-stretch-with-snapshots/>

- 1) Plug both the pen drive in the laptop.
- 2) Start the laptop and keep on pressing the esc button.
- 3) Select the pen drive that contain the image file of debian.
- 4) Click on Graphic Install.
- 5) Select the language. English
- 6) Next it will ask for location, just select India.
- 7) Now it will ask whether you want to install Hardware network for connected device. Just click on No and continue.
- 8) Select no Ethernet card from the next window and continue.

- 9) After this configuration System will start to detect the CD-ROM for required files for further Installation of Linux Debian 9 Stretch.
- 10) Just Assign a Hostname for Debian 9 Operating System Then click on Continue.
- 11) It will ask you set the password for the root . just enter the password and click on continue.
- 12) Create an username. This name will used to login the Linux debian 9 system. Then Click on Continue.
- 13) Then set password for the User.
- 14) Now we have to create Partitions for Linux Debian 9 Stretch Operating System. Here you will get multiple options to Create Partitions. Here we will create Partitions manually so select Manual. Click on Continue.
- 15) We have to make 2 partition. one for the boot and another for swap area.
- 16) Select the empty pen drive. it will ask that you have selected the whole disk do you want to make the partition. Just click on yes
- 17) Now select the free space, create new partition and give the space that you want for the boot section.
- 18) Now in partition setting select ext4 journalling file system as Use as and select / as mount point and select Done setting up the partition option.
- 19) Now it will be showing free unallocated space.
- 20) Now similarly we will make a swap partition. In this in place of use as ext4 you have to click on swap area.
- 21) Now select Finish partitioning and write changes to disk and press enter.
- 22) Then complete the remaining installation.
- 23) It will ask for update package from mirror image. Just click on No and hit enter.
- 24) Now select required softwares for Linux Debian 9. Here we will be selecting all available Softwares and then click on Continue.
- 25) Now Linux debian 9 installation is Finishing
- 26) Now Restart your computer and remove only the bootable pen drive and boot the system from another pen drive by BIOS option.

3 ENABLING WIFI

After the Installation their will be no wifi-driver. So in order to make wifi working just type the

following commands in terminal. These instructions are available at

<https://wiki.debian.org/InstallingDebianOn/Asus/X205TA>

- 1) Connect your laptop to internet either by Lan or by USB tethering.
- 2) Now open Terminal and type following command.

Downloading the Driver

```
Command:- wget https://android.googlesource.com/platform/hardware/broadcom/wlan/archive/master/bcmdhd/firmware/bcm43341.tar.gz
```

Then we simply need to copy in in the right place (the directory /lib/firmware/brcm/ might not exist so it may need to be created), with the right name

```
command: tar xf bcm43341.tar.gz
command: mkdir -p /lib/firmware/brcm/
command: cp fw_bcm43341.bin /lib/firmware/brcm/brcmfmac43340-sdio.bin
```

```
command: mount -t efivarfs efivarfs /sys/firmware/efi/efivars
```

Then the nvram-File needs to be copied and renamed:

```
command: cp /sys/firmware/efi/efivars/nvram-74b00bd9-805a-4d61-b51f-43268123d113 /lib/firmware/brcm/brcmfmac43340-sdio.txt
```

- 3) Reboot the system. Your wifi will be working.

4 ENABLING TOUCHPAD

After the installation configure the Touchpad. Follow the instructions below.

- 1)

```
su
cd /etc/X11
mkdir xorg.conf.d
```
- 2) Download

```
http://tlc.iith.ac.in/resources
/sources.txt
```
- 3) Move the downloaded file to the appropriate directory with a new name.

```
mv sources.txt /etc/X11/xorg.
conf.d/40-libinput.conf
```
- 4) Now Reboot your System

5 INSTALLING SUDO

In Debian, sudo command does not come by default. You have to install it.

- 1) First goto root.
- 2) Download the file

```
http://tlc.iith.ac.in/resources
/Touchpad.txt
```
- 3) Move the downloaded file to the appropriate directory.

```
mv Touchpad.txt /etc/apt/
sources.list
```
- 4) Install sudo

```
apt-get update
apt-get install sudo
```
- 5) Now you have to give Privileges to the user from the **sudoers** file.

```
nano /etc/sudoers
```
- 6) In that file Under **user privilege specification** add one more line

```
username ALL=(ALL:ALL) ALL
```
- 7) Save and reboot.
- 8) sudo will work now.