

ThinLinX TLXOS NUC / Compute Stick / RePC Installation Guide

ThinLinX has created optimized versions of ThinLinX OS (TLXOS) for either the Intel NUC, Intel Compute Stick or RePC making full use of the SSE and MMX instruction sets; we also use the H.264 hardware decoder built into the NUC and Compute Stick to deliver outstanding Performance for single, dual or triple Displays.

TLXOS is very memory efficient, the minimum RAM Memory Module available for the NUC is 2GB of RAM. Using more than 2GB will not enhance performance. The low cost single core Intel Atom DE3815 is the only NUC with a built in 4GB eMMC Flash Memory Drive which makes this model exceptional value. TLXOS only requires 37% of the capacity of this Drive, leaving approximately 2.5GB free for other files. We also recommend the Dual Core NUC5CPYH as a low cost solution that can boot from a SD Card instead of requiring an internal Hard Drive. The Windows and Linux Intel Compute Sticks have either 2GB or 1GB of built in Ram respectively. If you are re-purposing a PC or Laptop 512MB is the minimum recommended Ram.

Installation is very easy using the newly released TLXOS Installer available from one of our Mirror sites reached by clicking on the link below.

http://thinlinx.com/download.html

During installation the installer will automatically Register your Device with the ThinLinX License Server for a 30 day free trial, therefore it is essential that there is a DHCP server and Internet connectivity on the attached Network during the installation

Creating the Installer (Step 1)

1. Download the ThinLinX 320MB Installer image to a Windows PC or Windows Laptop from this link

http://thinlinx.com/download.html

Do NOT Download the image direct to the installation USB stick, please ensure you save the image to the Windows PC or Laptop's Hard Drive. The saved image will be be written to the USB stick using the procedure below.

To download the ThinLinX installer, select the closest ThinLinX Download Mirror, click on the appropriate link for your Device, then save the NUC, Compute Stick, or RePC installer image file to the PC or Laptop's Directory of your choice.

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|--|--|---|------------------------------------|---------|
| ← → C L thinlinx.com/download1.html | | | | ☆ : |
| | T H I N L I N X | Products TMS Buy Support D | ownloads Contact | |
| | ThinLinX D | ownload Mirror United States 1 | | |
| | ThinLinX Management Software ThinLinX Management Software 7.8.5 for Windows | md5 sum f956710ae03c05a4dcf5455115c2c251 | Release date Mar 30, 2015 | |
| | TLXOS Installer for Intel NUC TLXOS 64-bit NUC Installer | md5 sum 8a22ce499bbc3c222506d016b3bf11ca | Release date March 29, 2015 | |
| | TLXOS Installer for Intel Compute Stick TLXOS Compute Stick Installer | md5 sum 488d40b471bef78ac999ab88c310552b | Release date July 1, 2015 | |
| | TLXOS Installer for RePC TLXOS RePC Installer | md5 sum 3027454bc53b074fc8522f3a98f59c32 | Release date June 3, 2015 | |
| | TLXOS Installer for Raspberry Pi | md5 sum 5a132f57d64e6a74436c6407e6396962 | Release date September 25, 2015 | |
| | Installation Guides | Description | Release date | |
| | TLXOS NUC TLXOS RePC | How to Install TLXOS on the NUC How to install TLXOS on a PC or Laptop | Feb 19, 2015 Feb 19, 2015 | |
| | TLXOS CS TLXOS RPi | How to install TLXOS on Compute Stick How to install TLXOS on a RPi | Aug 6, 2015 Aug 6, 2015 | |
| | TLXOS Digital Signage | TLXOS Digital Signage Setup | Feb 19, 2015 | |
| | Click here to see the Thinlinx Management Software (TMS) Sceer | icast on Youtube | | |
| | Detailed information on how to effectively use TMS is available in review these before using TMS | the form of Screencasts reached by clicking on the TMS help bu | tton. Please take the time to | |
| | Buy license(s) and create your account at ThinLinX's store. Downloading and install TMS | | | |

Figure 1

2. Insert a USB stick into the PC or Laptop. Windows may pop up a box saying, "You need to format the disk in drive D: before you can use it", if so click on Cancel as there is no need to format it. Navigate to the location where you downloaded the installation file to, right click on the file and select "Run as administrator", click on Yes when asked the question below

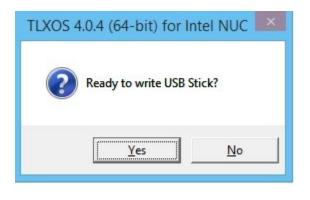


Figure 2

3. This will unpack the ThinLinX Installer image and launch Win32Disk Imager which will prompt you to write the Installer to the USB stick. Win32 Disk Imager will only write to removable storage, the USB stick is selected automatically in the Device menu, click on the "Write" button to create the ThinLinX installer. The 320MB ThinLinX installer image will only take a few minutes to be written to the USB Stick.

| 4 | Win32 | Disk Imag | er – | × |
|--------------------|-----------------|----------------|----------------|---------|
| Image File | | | | Device |
| C:/Users/john/AppD | ata/Local/Temp/ | 7zS57CF.tmp/nu | uc64-4.0.4.img | [D:\] 🔻 |
| Copy MD5 Ha | sh: | | | |
| Version: 0.9 | Cancel | Read | Write | Exit |
| | | | | |



Ignore the Warning message below, just click on Yes and the ThinLinX installer will be written to the USB Stick



Figure 4

| 4 | Win32 | Disk Imag | er – | |
|--------------------|------------------|----------------|----------------|-----------|
| Image File | | | | Device |
| C:/Users/john/AppD | ata/Local/Temp/: | 7zS57CF.tmp/nu | uc64-4.0.4.img | 🔁 [D:\] 🔻 |
| Copy MD5 Has | sh: | | | |
| | | | | 4% |
| Version: 0.9 | Cancel | Read | Write | Exit |
| 3.08914MB/s | | | | |



After writing the image as shown above in figure 5 you will normally see a Write successful message shown below in Figure 6.

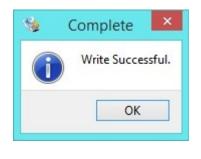


Figure 6

In some circumstances the Windows Program Compatibility Assistant warning box may appear stating, "This program may not have installed correctly", if so you can safely ignore it, click on the Close Button, click on Exit as shown in Figure 7 below

| 1 | Win32 | Disk Imag | er – | |
|------------------------------------|-----------------|---------------|----------------|---------|
| Image File | | | | Device |
| C <mark>:/</mark> Users/john/AppDa | ta/Local/Temp/7 | zS87A0.tmp/nu | uc64-4.0.4.img | [D:\] 🔻 |
| Copy MD5 Has Progress | sh: | | | |
| Version: 0.9 | Cancel | Read | Write | Exit |
| Exit Win32 Disk Im | ager | | | .1 |



Configure WiFi now if you are using a Compute Stick

The built in Network connectivity on the Compute Stick is via WiFi, leave the newly created USB stick plugged into the PC that you created it on as you will need to configure the WiFi now. This is easy to do, just open the USB Stick Drive in Windows using Explorer and double click wireless txt to edit it. NETNAME is the base station SSID, NETPASS is the clear-text WPA/WPA2 Pre Shared Key, see default wireless.txt below

For initial install via wireless, please put your wireless network

details here.

#

- # * DO NOT use any kind of quotes or shell metacharacter escaping.
- # * DO NOT insert spaces at the start of the line, or either side of the
- # equals sign.
- # * Clear text password only (no hashes).
- # * WPA/WPA2 Pre Shared Key is the only supported authentication scheme at # present.

* This file may be in either UNIX or DOS format (carriage returns ignored). NETNAME=

NETPASS=

| 🕞 🕕 = | Drive Tools | tlxupgr (D:) | | |
|----------------------------|--------------------|--------------------|-------------------|---------------|
| File Home Share | View Manage | | | ~ |
| 🕘 👻 🛧 👝 > This PC | C → tlxupgr (D:) → | ¥ C | Search tlxupgr (D | :) , c |
| 🔆 Favorites | ^ Name ^ | Date modified | Туре | Size |
| 📃 Desktop | J syslinux | 10/05/2015 6:01 AM | File folder | |
| 鷆 Downloads | initrd | 19/10/2015 2:08 PM | Disc Image File | 7,620 KB |
| 📳 Recent places | memtest.bin | 17/10/2014 6:34 AM | BIN File | 147 KB |
| | mode | 27/03/2015 7:01 AM | TXT File | 1 KB |
| 🖳 This PC | version | 2/10/2015 11:30 AM | TXT File | 1 KB |
| Apple iPhone | vmlinuz | 2/10/2015 11:02 AM | File | 3,318 KB |
| 📔 Desktop | i wireless | 14/02/2015 10:48 | TXT File | 1 KB |
| Documents | | | | |
| 〕 Downloads | | | | |
| 👝 Local Disk (S: on nGEMY5 | 2300N | | | |
| 🚺 Music | | | | |
| 📔 Pictures | | | | |
| 📔 Videos | | | | |
| 🚢 Local Disk (C:) | | | | |
| 🕳 tlxupgr (D:) | | | | |
| 鷆 syslinux | | | | |
| items | | | | |

Figure 8

If you have WiFi connection problems, you should double check that the base station SSID is correct by using a PC / Tablet / Laptop or a mobile (Cell Phone) with WiFi switched on to check that the base station SSID is the same as you have entered in the wireless.txt file on the line beginning with NETNAME=

Also double check that the Password is correct on the line starting with NETPASS=

- 3. Unplug the USB stick from the PC or Laptop and insert into the NUC / CS, then power on the NUC / CS while pressing F2 to enter the BIOS. In order for the Atom DE3815 NUC to detect the eMMC it needs to be activated in the BIOS. Click Advanced in the "Boot Order" box, then click the "Boot Configuration" tab, and choose Linux in the "OS Selection" pull down menu. Ensure that Legacy as well as UEFI boot are both selected. Tap the F10 key, on the keyboard, (or the "X" button on the top right of the screen) which will ask you if you'd like to save your changes, click on "Yes".
- 4. Boot the NUC / CS and tap the F10 key until a boot menu appears. Once in that menu, select the USB stick as the Boot device, and hit enter. Go to step 5 below

Installing the RePC image on a PC or Laptop

Either boot the RePC USB Stick installer created above or Download the CD-ROM ISO version of RePC and burn to a CD or DVD. Insert into the PC or Laptop and select boot from CD

5. The ThinLinX installer will run and display the ThinLinX Firmware Maintenance screen for 10 seconds.

You MUST press a Key while this screen is displayed to interrupt the Boot up, this will allow you to select any of the four options. YOU MUST select the second option, "Wipe Everything and (Re) Install TLXOS". If you have not selected "Wipe Everything and (Re) Install TLXOS", unplug the power and start the installation again, ensure you select "Wipe Everything and (Re) Install TLXOS"

| ThinLinX Firmware | Maintenan |
|--|-----------|
| Upgrade/Recover TLXOS Wipe Everything and (Re)Install | TLXOS |
| Hardware Detection Tool Test Memory | TENOO |
| Show TFM Version | |
| | |

Figure 9

The default Protocol is RDP, you can change this anytime after installation using the local configuration menu or the ThinLinX Management Software (TMS). During installation after selecting the "Wipe Everything and (Re)Install TLXOS" option, the menu below is used to change the default Protocol.

| ^₩3 | ipe Everything and (Re)Install TLXOS | |
|----------------------------|--|---|
| (Re)Install (Re)Install | TLXOS - Authentic8 mode TLXOS - Digital Signage mode TLXOS - [Citrix] HDX mode | |
| (Re)Install (Re)Install | TLXOS - [NoMachine] NX mode TLXOS - RDP mode TLXOS - RemoteFX mode TLXOS - Spice mode | X |
| (Re)Install (Re)Install | TLXOS - TCM (NetOp) mode TLXOS - Telnet mode TLXOS - TMS mode | |
| (Re)Install | TLXOS - TN3270 mode TLXOS - VMware [Horizon] View mode | |

Figure 10 (Above)

The NUC will boot to the installation screen shown in Figure 11 below.

The ThinLinX installer is now running completely in RAM Memory but still needs access to some information on the installer USB stick, ensure you leave the USB stick plugged in for the next step

Even though you may have selected "Wipe Everything and (Re) Install TLXOS" nothing is erased yet, you have a 10 second window to press <Ctrl>c to cancel the installation. See Figure 11 below. Normally you do nothing and allow the installation to proceed, the Disk Drive is automatically detected and then partitioned into 3 Partitions, TLXOS is written to the Partitions. See Figure 12 below.

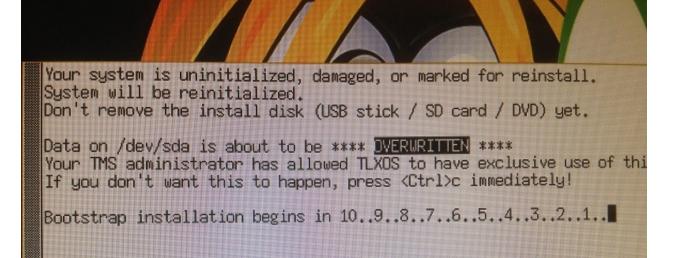


Figure 11 (Above)

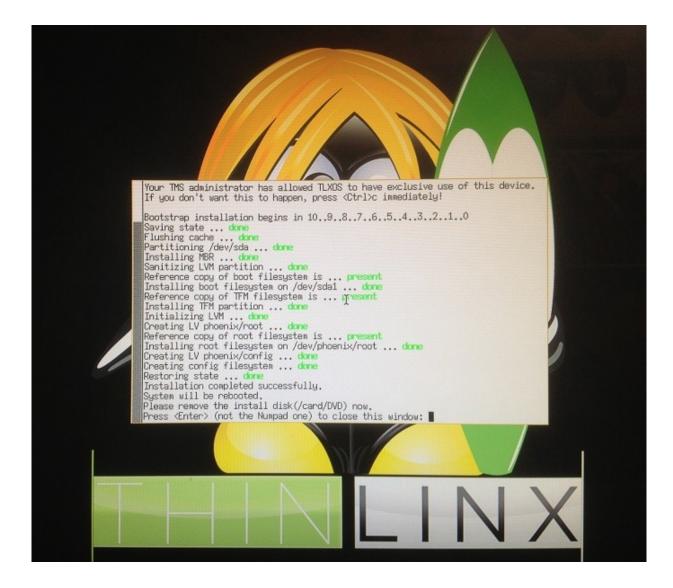


Figure 12 (Above) TLXOS is now installed and self Registered for a 30 Day Free Trial

In the Figure 12 shown above, the TLXOS installation has been completed, note the messages in the xterm window above, "Please remove the install disk (/card/DVD) now". After doing this press Enter to reboot the NUC which will reboot running TLXOS with the default Protocol selected during installation running. You can evaluate TLXOS for 30 Days after which time if you would like to keep using TLXOS on that device you will need to buy a License from this link http://thinlinx.com/order.html and then Register your device using the TMS / Tools / Product Registration.

Read the TLXOS PXE Boot Server installation guide to learn how you can convert one or Hundreds of NUCs / CS / PC or Laptops simultaneously into Thin Clients using TMS and the TLXOS PXE Boot Server Mode. TMS for Windows is available as a free download from http://thinlinx.com/download.html

TMS for Linux is integrated into every version of TLXOS and can be selected from the Protocol list.