

# **USB Driver**

# Installation Guide for Telit LTE Devices



#### **USB Driver Installation Guide for Telit LTE Devices**

For the following devices: MTSMC-L1G2D-U, MTSMC-LAT3-U, MTSMC-LVW3-U, MTSMC-MNG6-U, MTSMC-MNA1-U, MTSMC-L4N1-U, MTSMC-L4E1-U, MTQ-L1G2D-B02, MTQ-LAT3-B01, MTQ-LAT3-B02, MTQ-LVW3-B01, MTQ-LVW3-B02, MTQ-MNA6-B02, MTQ-MNA1-B01, MTQ-MNA1-B02, MTC-L4G2D-B03, MTC-LNA4-B03, MTC-LEU4-B03, MTC-MNG6-B03, MTC-MNA1-B03, MTC-MNA6-B03, MTC-MNA1-B03, MTC-MNA1-B03,

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# **Chapter 1 – LTE Cat 4 and Cat 1 Intel Based Devices**

### **Installing on Linux**

This chapter applies to certain LTE Cat 4 and Cat 1 devices, including the following models:

-LAT3, -LVW3, -LNA3, -LNA4, and -LEU4.

The Linux OS includes a generic USB driver for modems supporting CDC/ACM.

To install the device on Linux Kernel 2.6.x and newer with CDC/ACM support, connect USB cable from the device to a USB port on your computer. For most recent Linux distributions, there are no drivers to install.

If the operating system recognizes the modem, up to seven devices are created (assuming no other ACM values have been assigned):

- /dev/ttyACM0
- /dev/ttyACM1
- /dev/ttyACM2
- /dev/ttyACM3
- /dev/ttyACM4
- /dev/ttyACM5
- /dev/ttyACM6

Only the following devices can be used for AT commands:

- /dev/ttyACM0 (data port for PPP connections and AT commands)
- /dev/ttyACM3 (generic port for AT commands)

### **Troubleshooting Linux**

If Linux does not create devices, check for the kernel module:

# lsmod | grep cdc\_acm

If entries aren't found, load the kernel module with root privileges:

# modprobe cdc-acm

If this returns an error response, such as

# FATAL: Module cdc-acm

not found, the kernel module is not on your system. You will need to build the driver.

## Chapter 2 – LTE Cat 4, Cat 1 and Cat M1 Qualcomm Based Devices

### **Installing on Linux**

This section applies to certain LTE Cat 4, Cat 1 and Cat M1 devices. This includes the following models:

-L4G2D, -L4N1, -L4E1, -L1G2D, -MNA1, -MNG2 and -MNG6.

Beginning with Linux Kernel 3.18, an LTE driver named option was included in Linux. If using an older version of Linux, build an updated option driver.

### **Manually Adding Option Driver**

Load the option driver manually by issuing the following command or including it in the Linux startup scripts: modprobe option echo 1bc7 1101 > /sys/bus/usb-serial/drivers/option1/new id

For the LE910C1-WWXD and LE910C4-WWXD (L4G2D and L1G2D) use this command: echo 1bc7 1031 > /sys/bus/usb-serial/drivers/option1/new\_id

For the LE910C4-NF and LE910C4-EU (L4N1 and L4E1) use this command: echo 1bc7 1201 > /sys/bus/usb-serial/drivers/option1/new id

For the ME910G1-WW (MNG6) use this command: echo lbc7 l10A > /sys/bus/usb-serial/drivers/option1/new\_id

For the ME910C1-NA and ME910C1-WW (MNA1 and MNG2) use this command: echo 1bc7 1101 > /sys/bus/usb-serial/drivers/option1/new id

If the operating system recognizes the modem, devices named /dev/ttyUSBx are created, for example:

- /dev/ttyUSB0
- /dev/ttyUSB1
- /dev/ttyUSB2
- /dev/ttyUSB3
- /dev/ttyUSB4

Note: -MNG6 devices installed /dev/ttyUSB0-3 only

Only the following devices can be used for AT commands:

- /dev/ttyUSB2 (data port for PPP connections and AT commands)
- /dev/ttyUSB3 (generic port for AT commands)

Note: Tested with Linux kernel 4.4.0-176-generic

### **Troubleshooting Linux**

If Linux does not create devices, check for the kernel module:

# lsmod | grep option

If entries aren't found, load the kernel module with root privileges:

# modprobe option

Check dmesg output to see that the radio was detected:

# dmesg | grep option

```
usbcore: registered new interface driver option
option 1-2.3:1.0: GSM modem (1-port) converter detected
option 1-2.3:1.2: GSM modem (1-port) converter detected
option 1-2.3:1.3: GSM modem (1-port) converter detected
option 1-2.3:1.4: GSM modem (1-port) converter detected
option 1-2.3:1.5: GSM modem (1-port) converter detected
option 1-2.3:1.6: GSM modem (1-port) converter detected
```

If this returns an error response, the kernel module is not on your system. You will need to build the driver.

## **Chapter 3 – Windows Drivers**

### **WHQL Windows Driver**

For some devices, download options include a WHQL driver for Windows 10 and Windows 11. WHQL drivers have been tested and signed by a Windows Hardware Quality Lab. Windows uses digital signatures to verify the driver package integrity.

You may use the Windows Desktop driver, the WHQL Windows 10 driver, or the WHQL Windows 11 driver for 32and 64-bit systems. If using the Windows Desktop driver, Windows displays a security warning dialog box during the installation process. You can click to install the driver software anyway. You do not get the prompt with the WHQL drivers.

### **Downloading the Windows USB Driver**

If you haven't downloaded the driver:

- **1.** Go to multitech.com and search to find your device's model page. Your device's model number is on the product label.
- 2. Under Downloads, click on:
  - WindowsDesktopDriversInstaller
  - Windows10WHQLDriversInstaller for the Windows 10 signed driver
  - Windows11WHQLDriversInstaller for the Windows 11 signed driver
- 3. A popup window appears. Click to **Download** the driver zip file to your computer.
- 4. Extract the files to your computer.

### Installing on Windows 11 and 10

This process installs multiple drivers and ports. You need administrator rights to install drivers.

**Note:** If you previously installed USB drivers for this device, uninstall them before installing or re-installing this driver. Uninstall all existing drivers for this device. Refer to Uninstall Windows Drivers for details.

Before you connect the device (disconnect the device if you connected it):

**CAUTION:** If you connected the device before installing the drivers, Windows may install drivers automatically. Your device may not operate correctly with these drivers. Uninstall the drivers before proceeding. See Remove Microsoft Installed Drivers for details.

**1.** Go to the location where you extracted the driver and double-click on file for your system:

For the Windows desktop drivers:

- For 32-bit use TelitModulesDrivers\_x86.msi
- For 64-bit use TelitModulesDrivers\_x64.msi

For the WHQL Drivers:

- For 32-bit use Telit WHQL Drivers x86.msi
- For 64-bit use Telit WHQL Drivers x64.msi
- 2. Click **Next** in the Welcome pane.

- 3. Leave the default Complete (suggested) Setup Type and click Next.
- 4. Click **Install** each time you are prompted. You may be prompted to allow the installer to install the program on your computer, click **Yes**.
- 5. Click Finish.
- 6. Connect USB cable from the device to a USB port on your computer. Windows indicates when the device is ready to use.

### **Uninstalling Windows Drivers**

### Windows 11 and 10

To uninstall drivers from Windows 10 and Windows 11:

- 1. Open the Start Menu and click **Settings**.
- 2. Click System.
- 3. Click Apps & Features.
- 4. In the Apps & Features pane, scroll down to **TelitModulesDrivers\_x##** or **Telit WHQL Drivers x##**, where ## is 64 or 86, and click **Uninstall**. Confirm that you want to uninstall the driver.
- 5. Click **Next** in the Welcome pane.
- 6. From the options, select **Remove** and click **Next**.
- 7. Finalize by clicking **Remove**.

Uninstalling the TelitModulesDrivers, uninstalls all related Telit modems, ports, and drivers, so you don't need to uninstall these individually.

### **Remove Microsoft Installed Drivers**

If using Windows 7 and connect the device before installing drivers, Windows Update automatically installs drivers. Your device may not operate correctly with these drivers. To remove these drivers:

1. With the device plugged in, open the **Device Manager**.



- 2. Right-click on the Telit Mobile Modem and select Uninstall.
- 3. Select Delete the driver software for this device and click OK.
- 4. Repeat the removal steps to uninstall each Telit port and the Telit Universal Serial Bus Control.