

How to Disable the DM-Verity option in your Android device.

To disable the Android dm-verity in the new devices you should have the below.

- A Window/Linux computer
- The Android SDK platform-packages tools.

Download the Android Packages tool.

To use the Android kernel or give root access to your Android device, is needed to have some tools from the Android SDK like ADB or fastboot. To download those tools just go to below web-page:

<https://developer.android.com/studio#downloads>

Go to the “command line tools only” part and download the sdk-tools-windows-4333796.zip package.

Command line tools only

If you do not need Android Studio, you can download the basic Android command line tools below. You can use the included [sdkmanager](#) to download other SDK packages.

These tools are included in Android Studio.

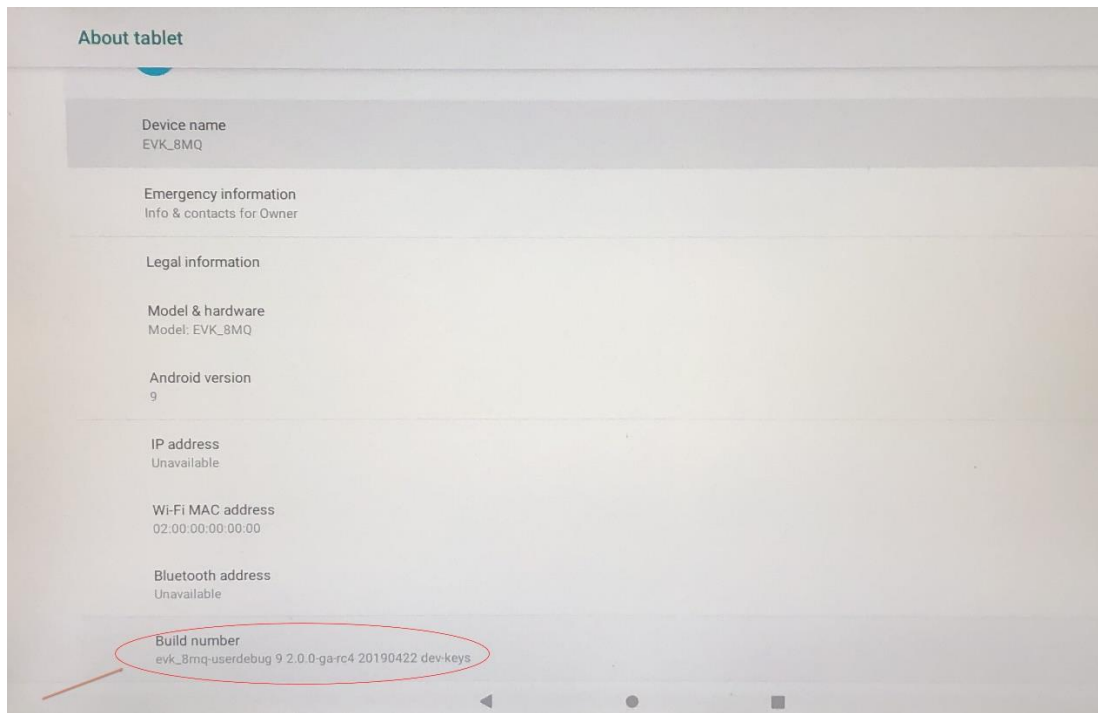
Platform	SDK tools package	Size	SHA-256 checksum
Windows	sdk-tools-windows-4333796.zip	148 MB	7e81d69c303e47a4f0e748a6352d85cd0c8fd90a5a95ae4e076b5e5f9e0d3c7a
Mac	sdk-tools-darwin-4333796.zip	98 MB	ecb29358bc0f13d7c2fa0f9290135a5b608e38434aad9bf7067d0252c160853e
Linux	sdk-tools-linux-4333796.zip	147 MB	92ffe5a1d98d856634e8b71132e8a95d96c83a63fde1099be3d86df3106def9

See the [SDK tools release notes](#).

Note: Is recommended to storage the content of the zip file in path that you could find without any problem, since the Android SDK tools can only be run by the terminal console.

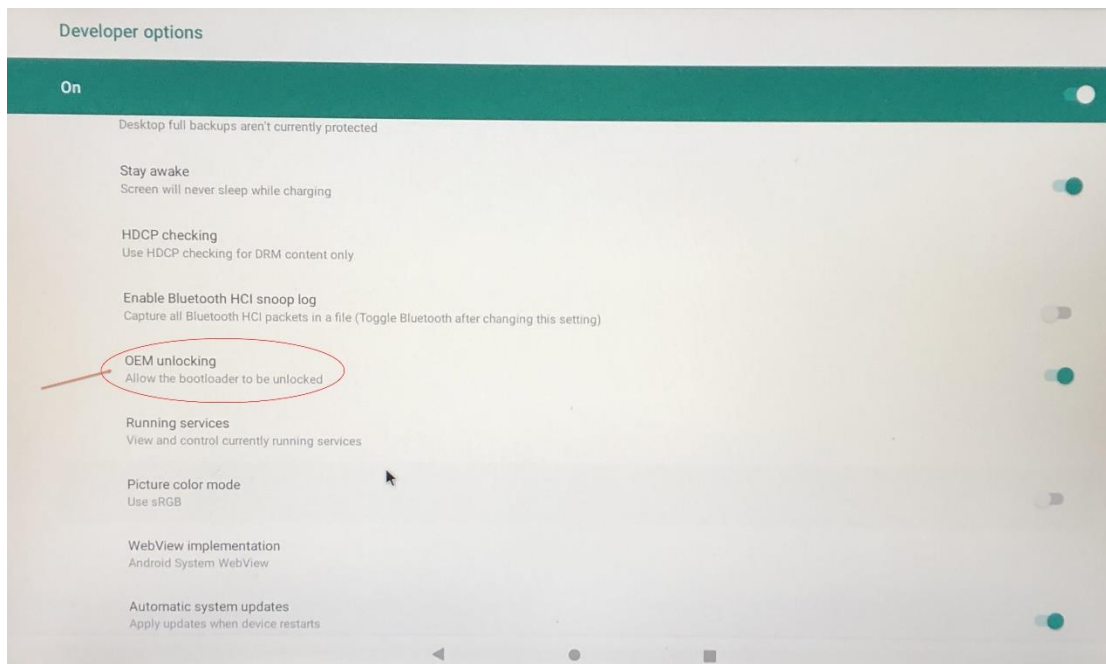
Unlock your Android device.

On the Android GUI go to Settings -> systems -> About Phone



At the bottom you should see the build number of your Android device. Tap it multiple times until appears on the screen that you are a developer now.

Go to the developer options and search for the OEM unlock option. You need to activate that option.



Open the power-shell terminal and go to the path where you stored the zip file.

Example for Windows:

```
cd C:\users\diego\Documents\platform-tools
```

You will use the ADB tool (Android Debug Bridge). To use it you need to run adb.exe in your powershell terminal. To run an executable in the Windows terminal is just with `.\`.

Connect the serial download cable to the host computer (the Type C for the i.MX8M and i.MX8MM. The OTG for the i.M6 SabreSD boards).

Open the adb server.

```
.\adb.exe start-server
```

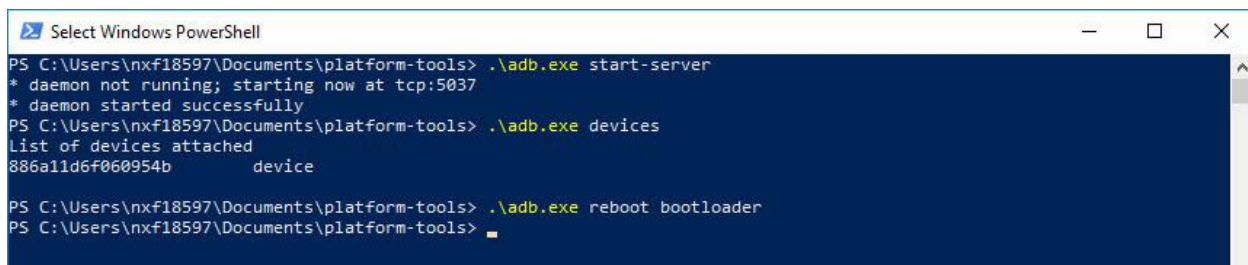
See your connected devices.

```
.\adb.exe devices
```

You should see your device and the serial number that is assigned to the device.

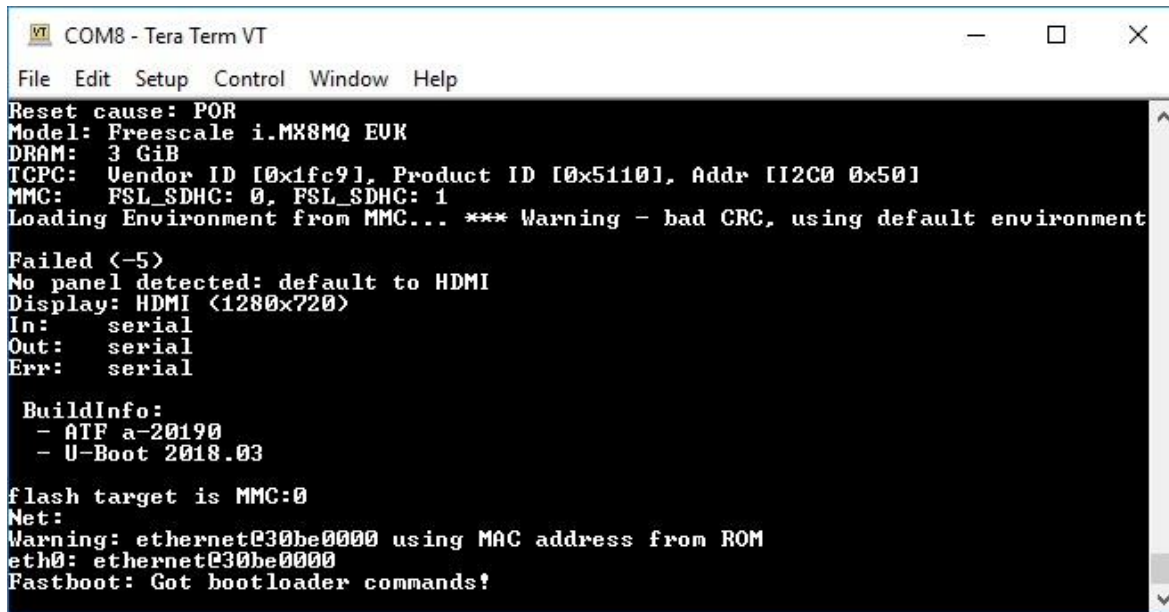
Then, enter Bootloader mode.

```
.\adb.exe reboot bootloader
```



```
Select Windows PowerShell
PS C:\Users\nxf18597\Documents\platform-tools> .\adb.exe start-server
* daemon not running; starting now at tcp:5037
* daemon started successfully
PS C:\Users\nxf18597\Documents\platform-tools> .\adb.exe devices
List of devices attached
886a11d6f060954b    device
PS C:\Users\nxf18597\Documents\platform-tools> .\adb.exe reboot bootloader
PS C:\Users\nxf18597\Documents\platform-tools> █
```

Note to see if your board successfully entered to Bootloader mode. In your serial terminal, you should see that you are in Bootloader mode.



```
COM8 - Tera Term VT
File Edit Setup Control Window Help
Reset cause: POR
Model: Freescale i.MX8MQ EUK
DRAM: 3 GiB
TCPC: Vendor ID [0x1fc9], Product ID [0x5110], Addr [I2C0 0x50]
MMC: FSL_SDHC: 0, FSL_SDHC: 1
Loading Environment from MMC... *** Warning - bad CRC, using default environment

Failed (-5)
No panel detected: default to HDMI
Display: HDMI (1280x720)
In: serial
Out: serial
Err: serial

BuildInfo:
- ATF a-20190
- U-Boot 2018.03

flash target is MMC:0
Net:
Warning: ethernet@30be0000 using MAC address from ROM
eth0: ethernet@30be0000
Fastboot: Got bootloader commands!
```

Once inside the Bootloader mode, using fastboot you can unlock your phone.

First see if your computer recognizes your board once inside the Bootloader mode.

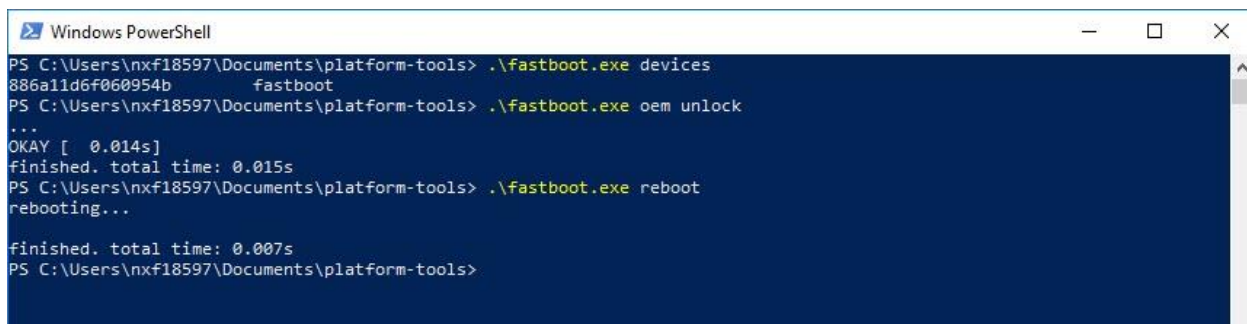
```
.\fastboot.exe devices
```

If you do not see any device, go to the final section of the document.

Finally, Unlock and reboot the board.

```
.\fastboot.exe oem-unlock
```

```
.\fastboot.exe reboot
```



```
Windows PowerShell
PS C:\Users\nxf18597\Documents\platform-tools> .\fastboot.exe devices
886a11d6f060954b fastboot
PS C:\Users\nxf18597\Documents\platform-tools> .\fastboot.exe oem unlock
...
OKAY [ 0.014s]
finished. total time: 0.015s
PS C:\Users\nxf18597\Documents\platform-tools> .\fastboot.exe reboot
rebooting...

finished. total time: 0.007s
PS C:\Users\nxf18597\Documents\platform-tools>
```

Unlock the dm-verity option.

After the board rebooted. Start again the adb server

```
.\adb.exe start-server
```

```
.\adb.exe devices
```

Then root the board

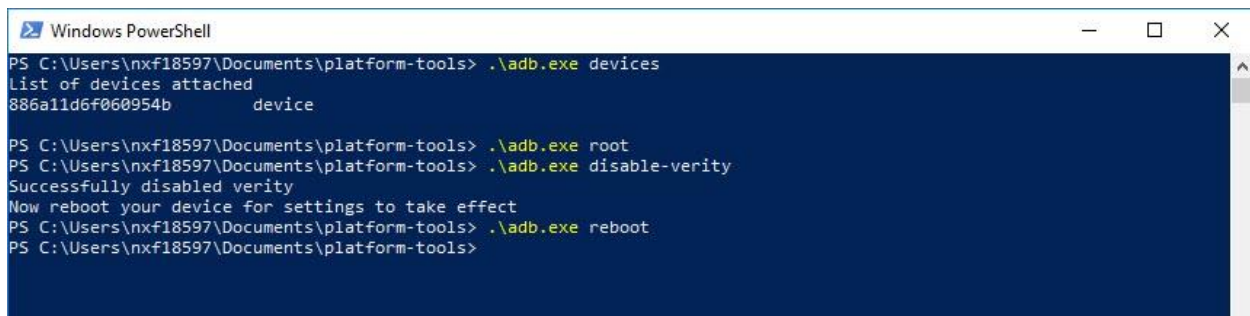
```
.\adb.exe root
```

After rooting the board, disable the dm-verity option

```
.\adb.exe disable-verity
```

After disabling the verity option, it will request you to reboot your board. Just reboot your board.

```
.\adb.exe reboot
```

A screenshot of a Windows PowerShell terminal window. The window title is "Windows PowerShell" and it has standard window controls (minimize, maximize, close). The terminal shows the following commands and output:

```
PS C:\Users\nxf18597\Documents\platform-tools> .\adb.exe devices
List of devices attached
886a11d6f060954b    device

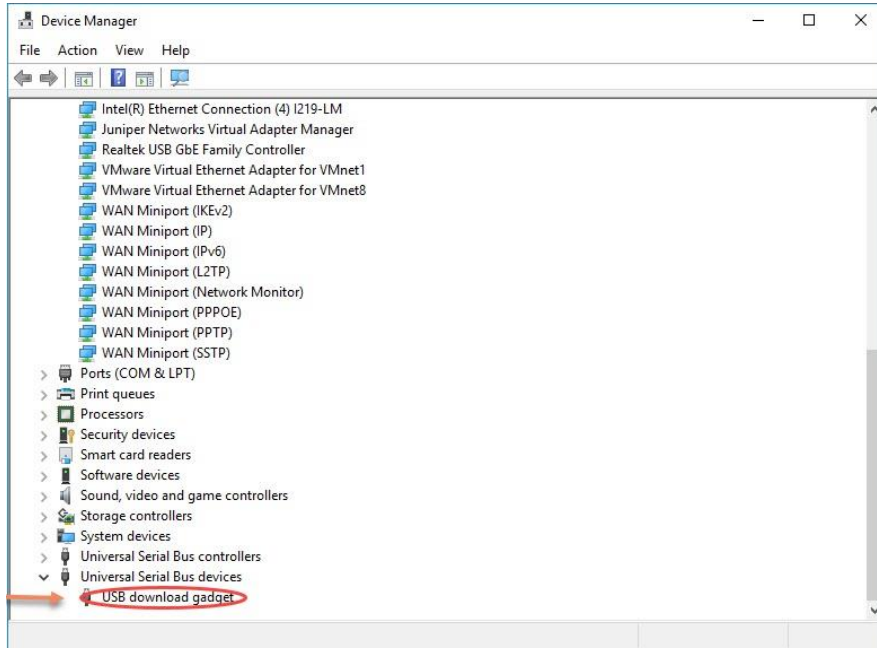
PS C:\Users\nxf18597\Documents\platform-tools> .\adb.exe root
PS C:\Users\nxf18597\Documents\platform-tools> .\adb.exe disable-verity
Successfully disabled verity
Now reboot your device for settings to take effect
PS C:\Users\nxf18597\Documents\platform-tools> .\adb.exe reboot
PS C:\Users\nxf18597\Documents\platform-tools>
```

With that, you should have successfully disabled the verity option in your board.

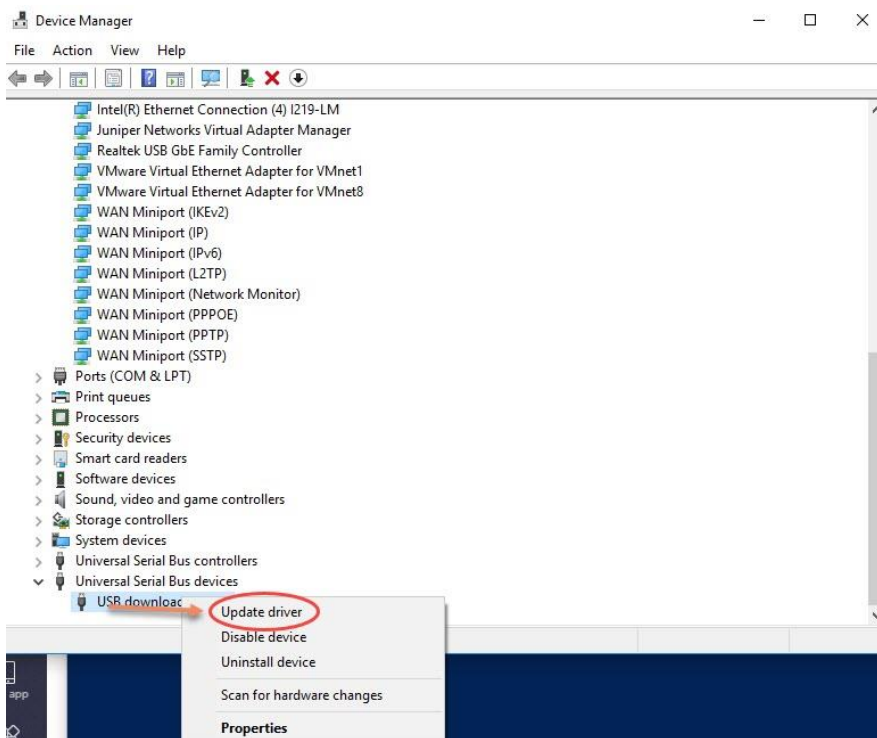
Appendix A Update the USB driver (For Windows only)

If your computer does not recognize once you are inside the bootloader mode. What you need to do is update the USB driver. To update the driver, follow the below steps.

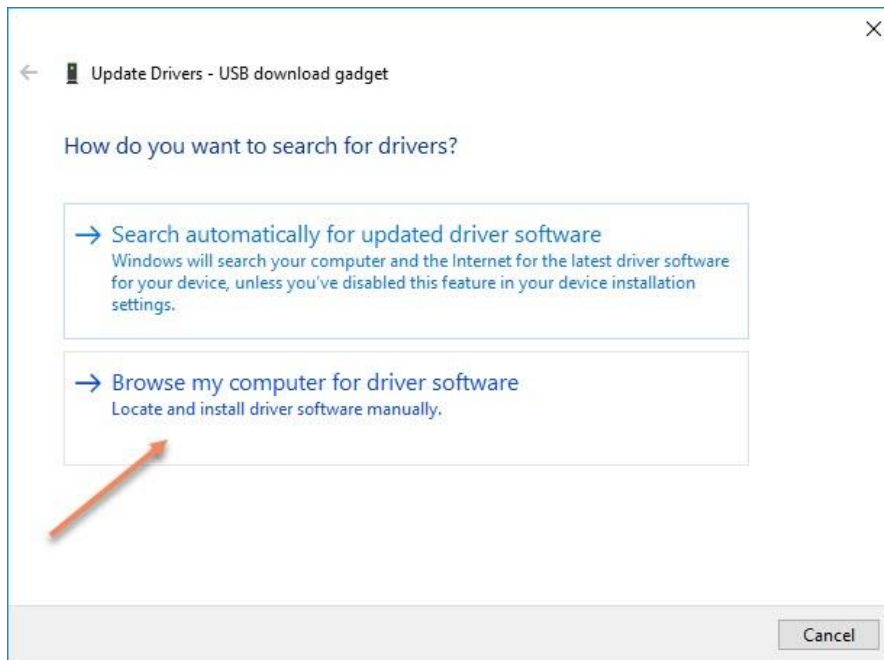
First open your device manger and locate the Universal Serial Bus devices -> USB download gadget.



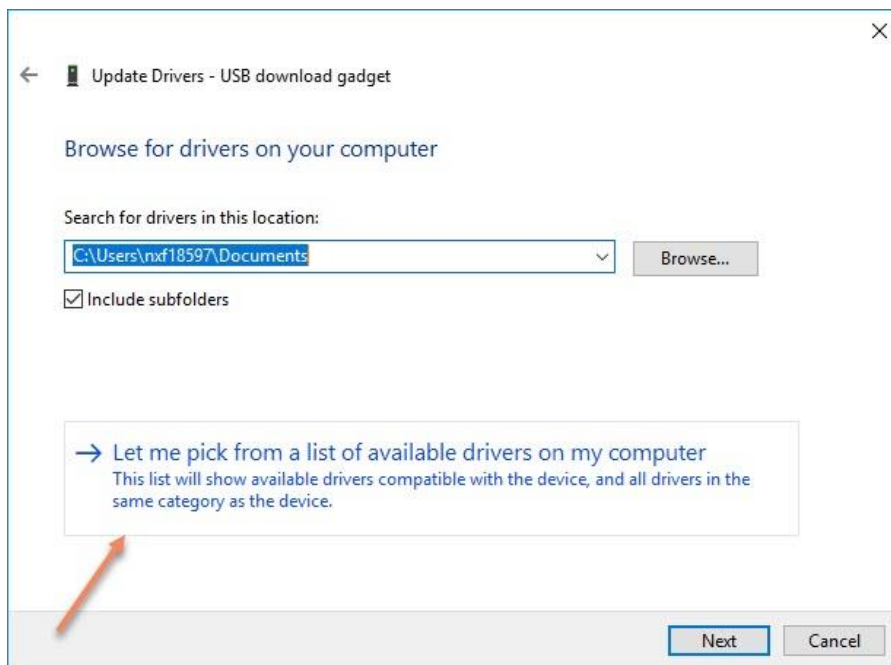
Then press the right click and select the update driver option.



Select the “Browse my computer for driver software” option.



Select the “Let me pick from a list of available drivers on my computer” option.



Select the ADB Device Model.



And accept to install the driver. After that your computer should recognize the board being into Bootloader mode.