

Hirschmann Koxha

Trionic 8 Cloning



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PREPARATION

Before using your OBDLink SX/EX for the first time, it is necessary that you install and setup the drivers correctly. Otherwise, reads and writes (flashing) can take significantly longer or even fail.

DRIVERS

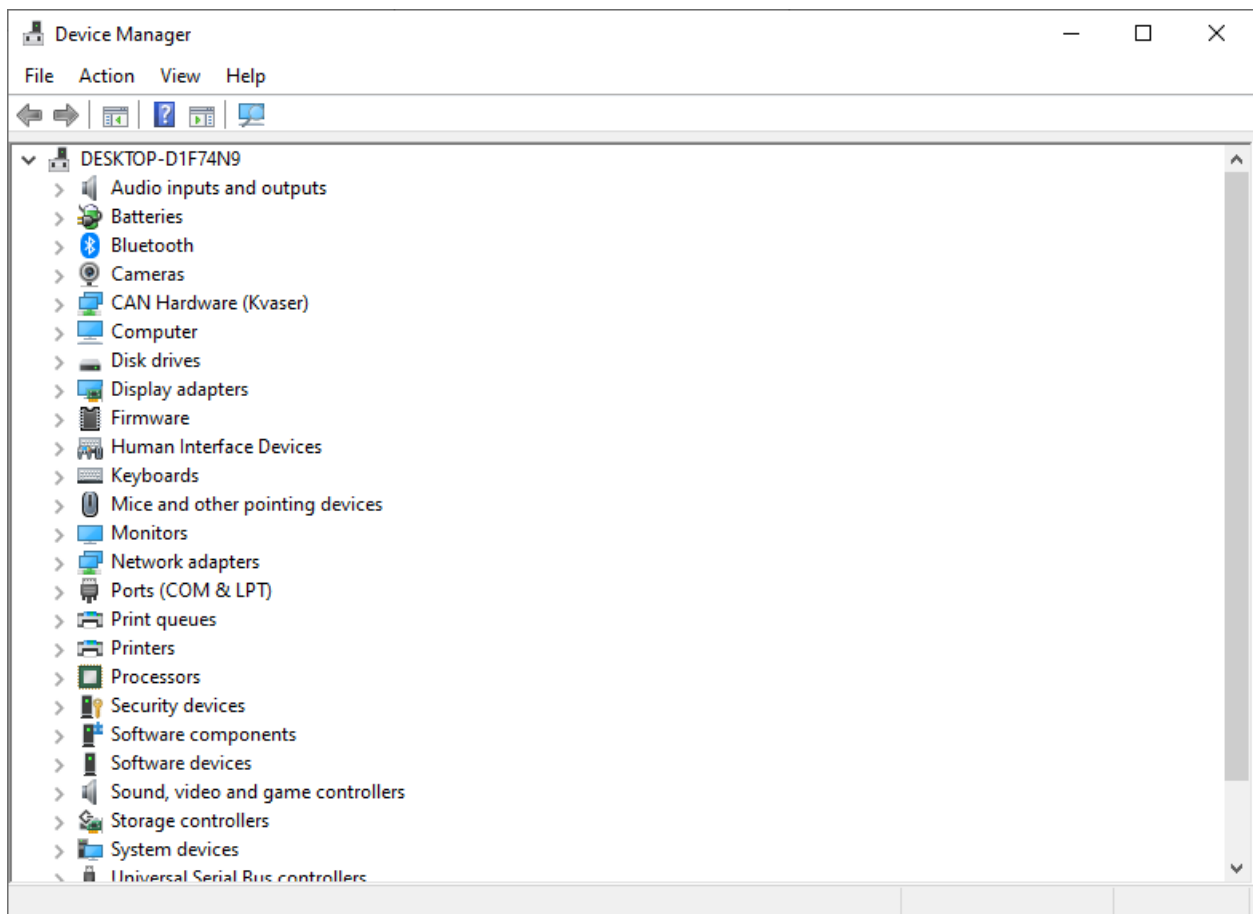
First, download the following file:

https://ftdichip.com/wp-content/uploads/2020/07/CDM21228_Setup.zip

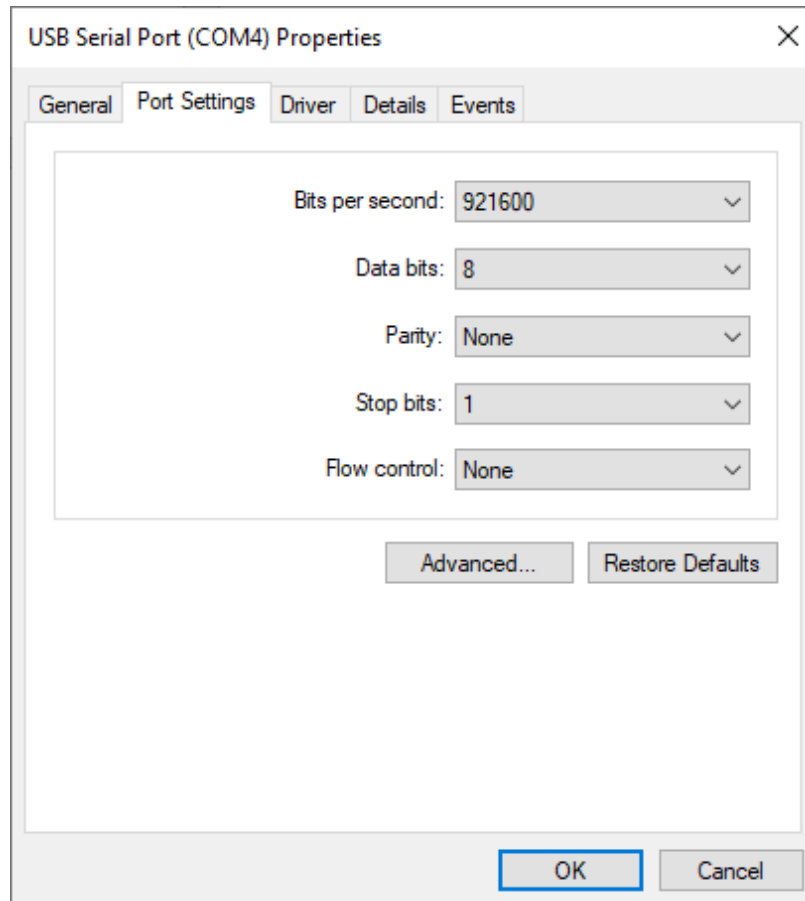
Unzip it to any location and run "*CDM21228_Setup.exe*". Just follow the installer.

Once the installation is complete, plug in your OBDLink SX/EX. If the driver has been installed correctly, the LED on the cable should light up green. Before we can start reading and writing, however, additional driver settings have to be made.

To do this, open the *"Control Panel"*. Select *"Hardware and Sound"*. Then open the *"Device Manager"*, which should be visible right under *"Devices and Printers"*. Select it. A new window should open, which looks like this:



Under the menu item *"Ports (COM & LPT)"*, a device named *"USB Serial Port (COM)"* should appear. Right click on it and choose *"Properties"*.
A new window opens again. There, switch to the *"Port Settings"* tab and configure them as shown below:



Click on *"OK"* and call up the properties again, switch back to the *"Port Settings"* tab and this time click on *"Advanced..."*.

This window should appear:

Advanced Settings for COM4

COM Port Number: COM4

OK

Cancel

Defaults

USB Transfer Sizes

Select lower settings to correct performance problems at low baud rates.

Select higher settings for faster performance.

Receive (Bytes): 4096

Transmit (Bytes): 4096

BM Options

Select lower settings to correct response problems.

Latency Timer (msec): 2

Timeouts

Minimum Read Timeout (msec): 0

Minimum Write Timeout (msec): 0

Miscellaneous Options

Serial Enumerator ☒

Serial Printer ☐

Cancel If Power Off ☐

Event On Surprise Removal ☐

Set RTS On Close ☐

Disable Modem Ctrl At Startup ☐

Enable Selective Suspend ☐

Selective Suspend Idle Timeout (secs): 5

Here you only change the "*Latency Timer (ms)*". We recommend to set this to 2. Otherwise data might get lost during the transfer with the TrionicCANFlasher - this will then abort the operation.

Check the settings one last time.

TRIONICCANFLASHER

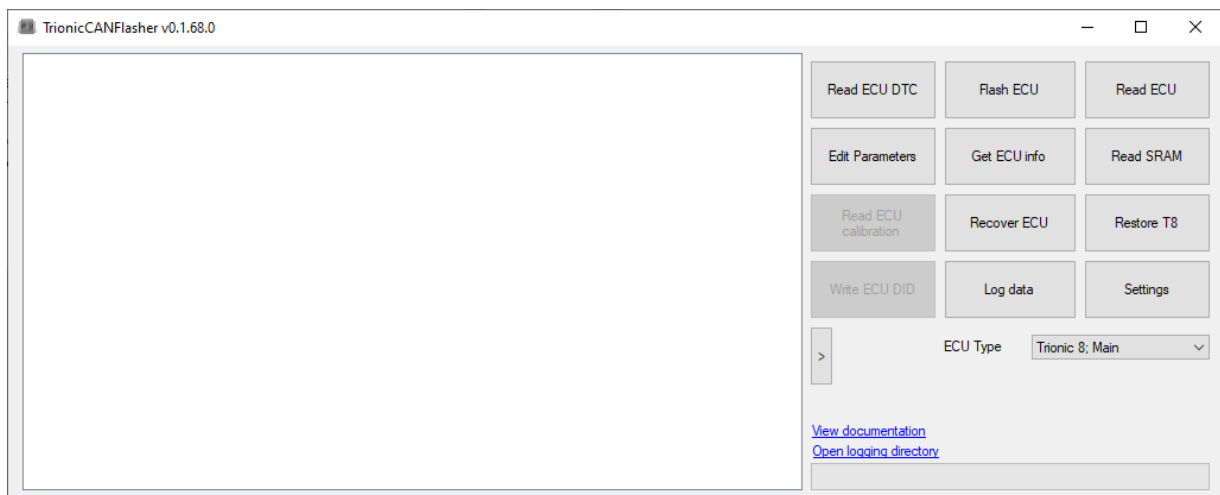
After you have successfully set up the interface, we now turn to the "*TrionicCANFlasher*". You can obtain it via the following link:

<https://txsuite.org/download/trionic-can-flasher/>

or obtain a copy from our site

<https://hirschmann-koxha.de/en/informations/downloads/>

Install the "*TrionicCANFlasher*" and open it. Select your corresponding control unit under "*ECU Type*", then it should look like this:



Now click on "*Settings*", under "*Adapter type*" select the "*OBDLink SX*". Under "*Adapter*" select the corresponding COM port.

You can find this in the device manager. This is often noted behind the device name. You can set the "*Com speed*" to 1Mbit. The configuration should look somewhat like this:

Settings

Adapter type: OBDLink SX

Adapter: COM3

Com speed: 1Mbit

☒ Enable logging

☒ Only P-Bus connection

☒ Use flasher on device

Advanced features

☐ I know what I am doing

☐ Unlock system partitions

☐ Unlock boot partition

☐ Auto update checksum

☒ Verify checksum before flash

☒ Use Legion bootloader

☐ Remember dimensions

Inter-frame delay: 1200 (Default)

☒ Use last address pointer

☐ Skip certain delays

Cancel Save

Then confirm your settings with the "*Save*" button, otherwise the settings will not be saved. The "*TrionicCANFlasher*" is thus also configured.

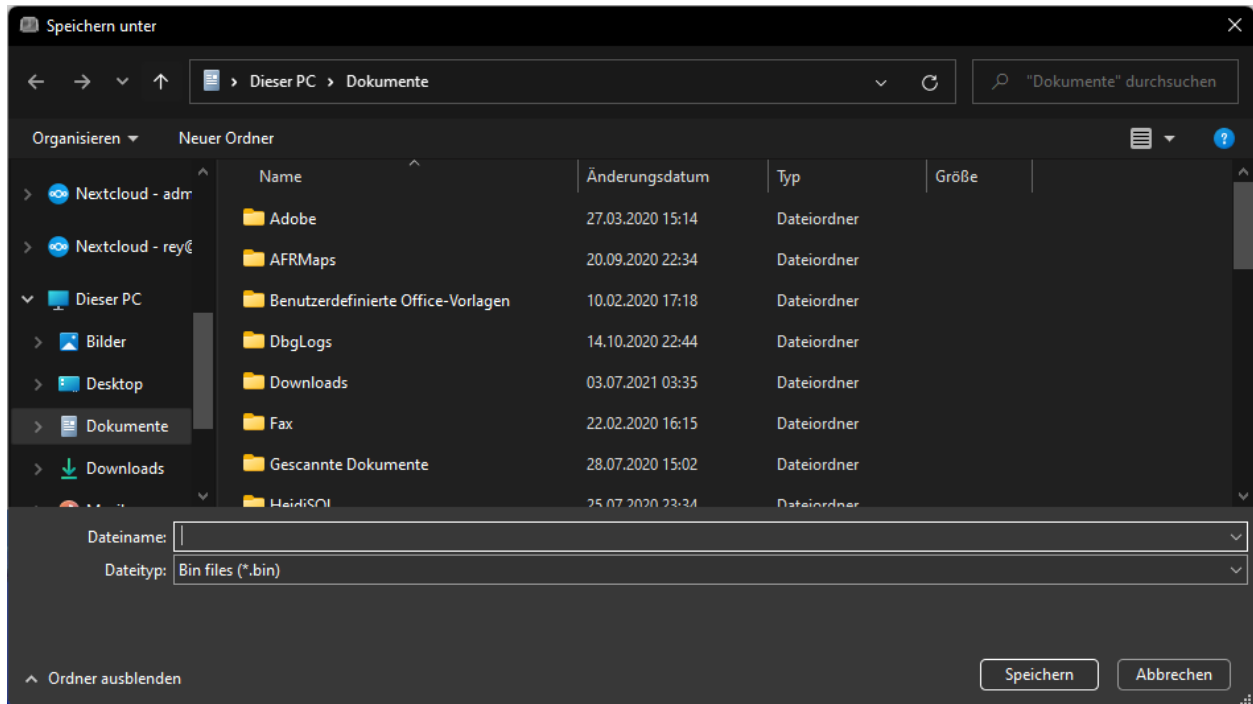
READ

Go into your vehicle and connect the interface to the OBD socket in the driver's footwell.



Now turn the ignition key to the **"ON"** position and switch off all stuff such as the radio, headlights, seat heating, air conditioning, etc.
Now plug the cable into your laptop and open the **"TrionicCANFlasher"**.

The following window should open:



Enter any file name and select a storage location. This is the file we are going to need for all future procedures. This process will take 3-8 minutes. Writing also works in this way (just click **"Flash ECU"** and select the file you want to flash).

REPLACING THE ECU

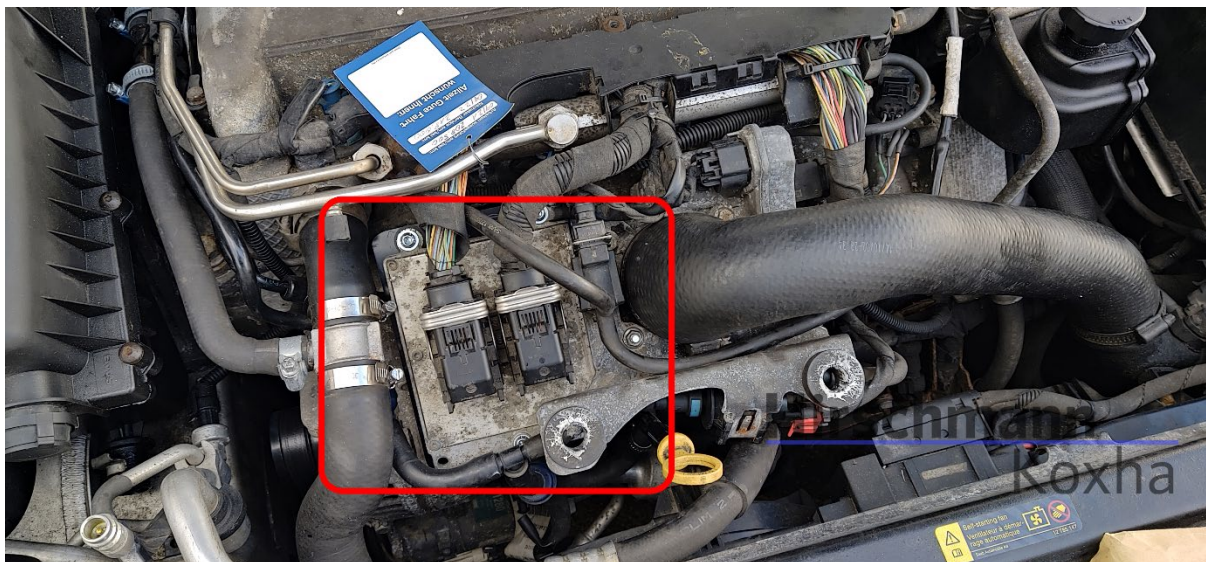
As soon as this process is complete, switch the ignition off again and remove the key. Now open the hood and go to the engine compartment.

Remove the engine cover:

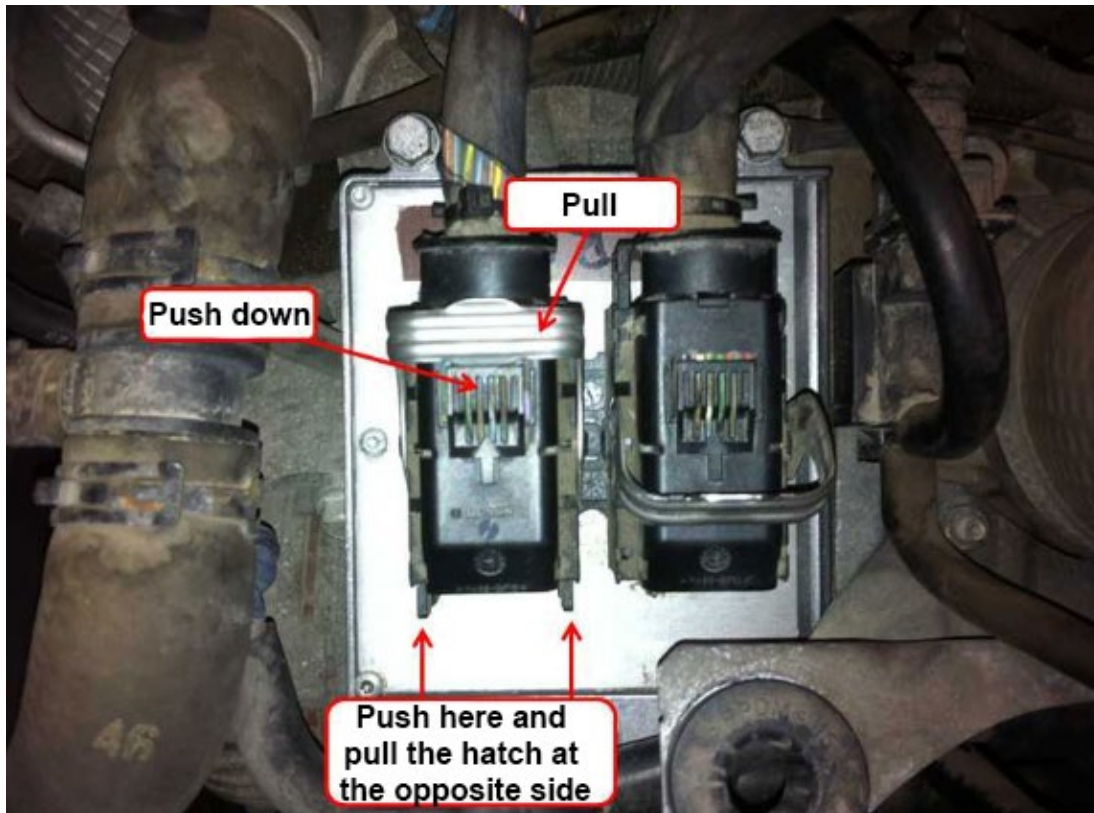


There are three Torx T30 screws.

After the plastic cover is removed, the engine control unit should be in the following location:



Then loosen the two connectors the following way:



Then remove the four 10mm screws:



Now insert the new control unit in reverse order.

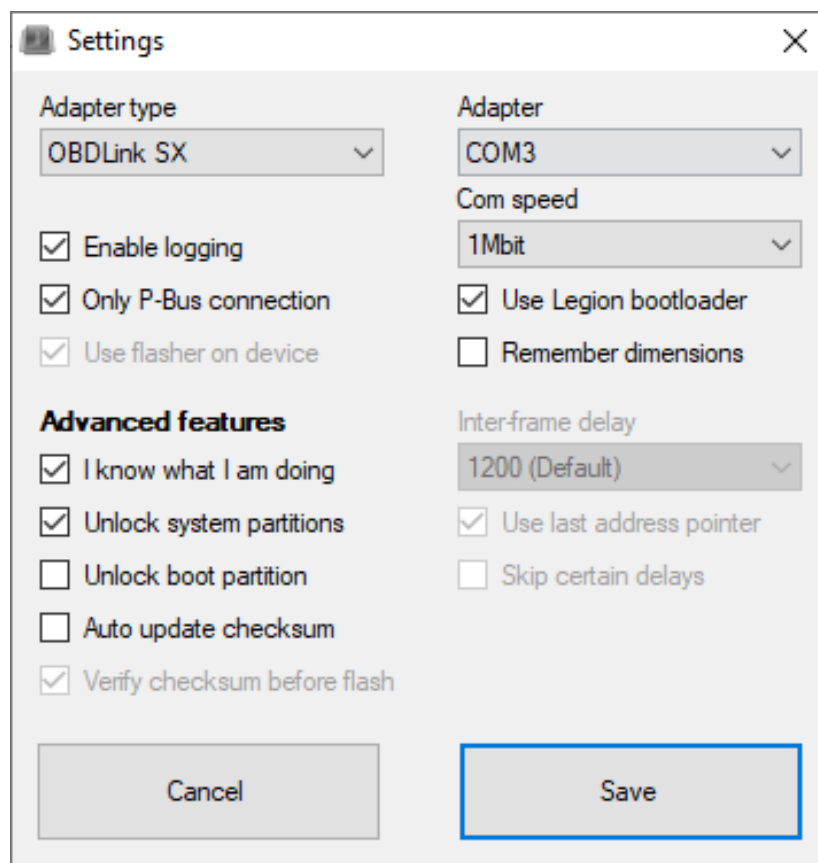
Note:

It is extremely important to connect the ground strap!
Failure due to so will prevent any communication with the ECU.

FLASH

Get back in your vehicle and prepare everything just as you did when you read it out.

Once you opened the *“TrionicCANFlasher”*, go to *“Settings”* and activate the option *“I know what I am doing”* and *“Unlock system partitions”* under *“Advanced features”*.



Confirm the new settings by clicking on *“Save”*.

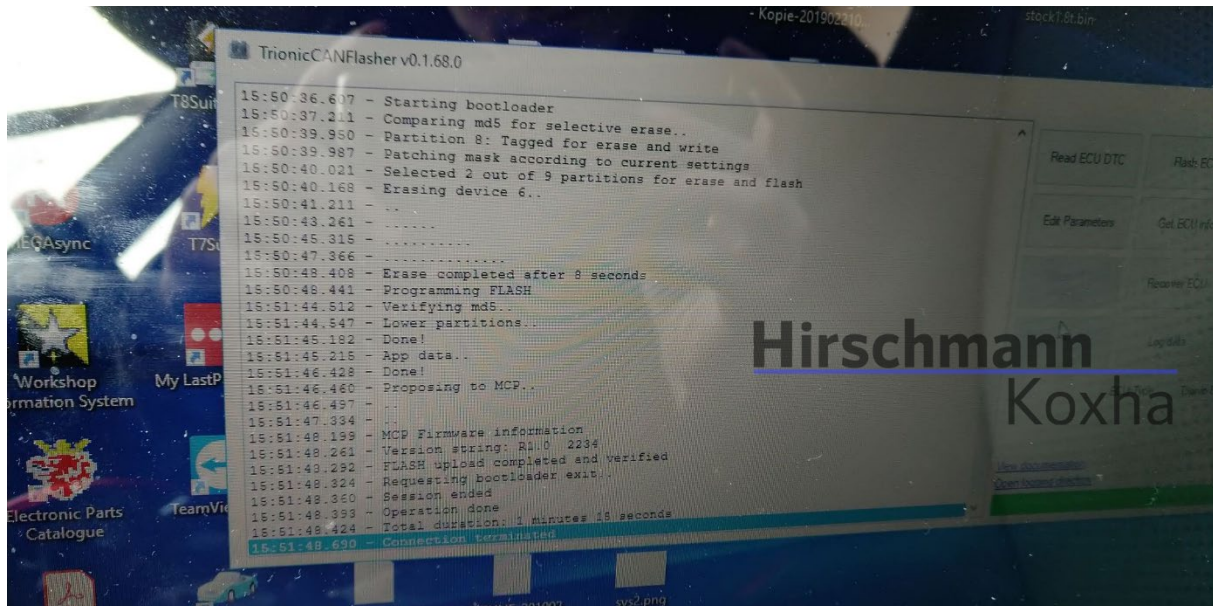
Now click on "*Flash ECU*" and select your previously read out file.

During the procedure it can happen that the following error messages appear in the SID:



This is perfectly normal and nothing to worry about.

As soon as the flash is completed, the following information is usually displayed:



Pay close attention to the *"MCP firmware information"* and the *"Version string"* below. If your vehicle is not a facelift (model years up to 2006), you must have the MCP R1.0 on it. For vehicles of model year 2007 and newer, the MCP R1.1 is required.

This can be flashed afterwards.

You can find the necessary files on our website.

To flash the MCP, change under *"ECU Type"* to *"Trionic 8: MCP (Experimental)"*.

Then click on *"Flash ECU"* and select the correct file for your MCP.

This process should be completed within 30-60 seconds.

Turn the ignition off again and remove the key. Plug it in again and start the vehicle. If everything went well, the vehicle starts.

F.A.Q.

Q.: Is there also a video guide on how to replace the control unit?

A.: <https://www.youtube.com/watch?v=MppFbolPUB0>

Q.: Can you help me with the setup and the procedure in general?

A.: Of course. We can set up the interface with you via remote maintenance. Contact us beforehand and we will schedule an appointment. Please note, however, that an internet connection is required.

Q.: Is there anything I should consider to avoid a bad flash?

A.: We generally recommend charging your car battery beforehand or at least checking for sufficient residual voltage.