Instructions for Setting Up and Using the Program

TLFReader GEN2

http://toyotaflasher.ru/ *http://toyotaflasher.com/*

General Information

Thank you for purchasing our program. We hope it will enhance your chip-tuning capabilities and attract new clients. Please note that we have a private Telegram group for TLFReader users and a technical support bot.

This program is designed for reading the flash memory of processors from the 76F0196/198/199/219 family installed in Toyota/Lexus GEN2 ECUs. It allows you to read both factory files and files that have been edited by others. The reading process relies on accessing the processor using a known password. Typically, we have already collected passwords for most software, so the reading time will be within 10-20 minutes, depending on the size of the flash memory and your computer. However, if your software's password is not in our database, you can extract it yourself using our program. In this case, the reading time may extend up to 3 hours.

To enhance the program's security and receive updates, an internet connection is required during the initial launch. Once the program is successfully started, you can disconnect from the internet. Main operations for reading flash memory are performed via a special USB-CAN adapter (included in the package). The program has been tested on over a hundred different ECUs and on Windows 7, Windows 10, and Windows 11 operating systems.

Package Contents:

1. Guardant Key
2. USB-CAN Adapter
3. USB-microUSB Cable
4. QR Code for Group Invitation

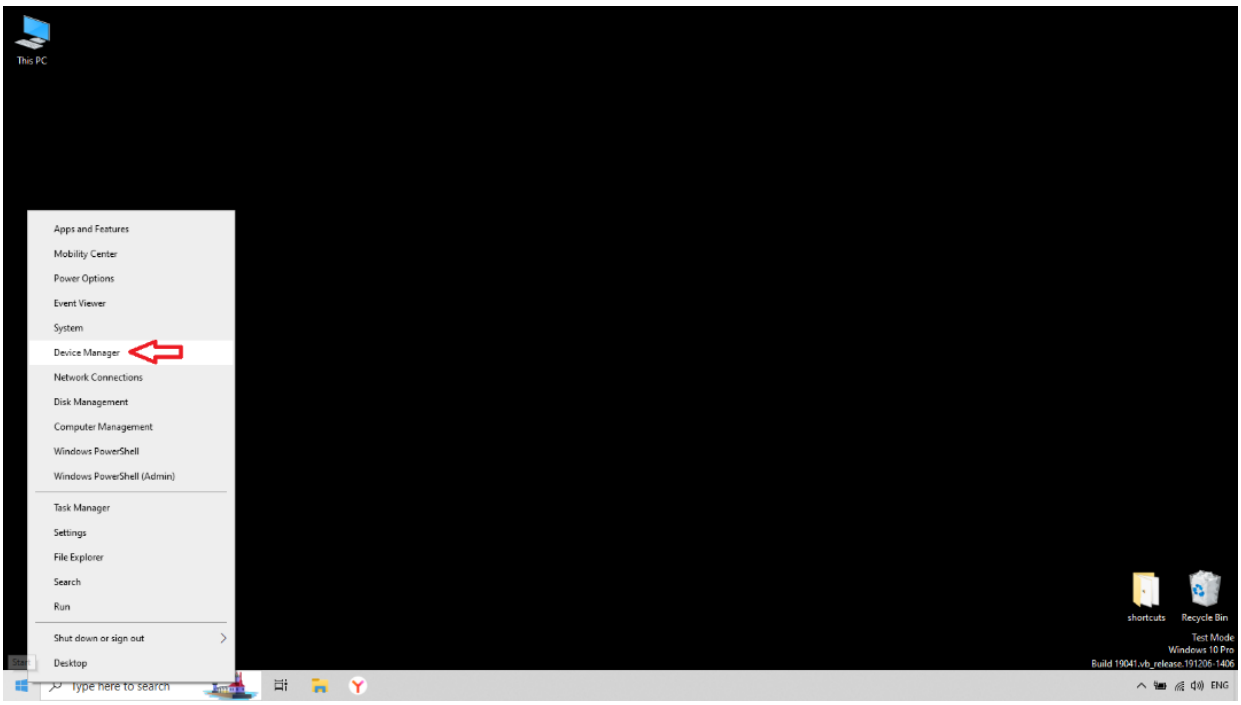
You will also need a J2534 adapter (it is recommended to use the Scanmatik 2).

Preparation for Operation.

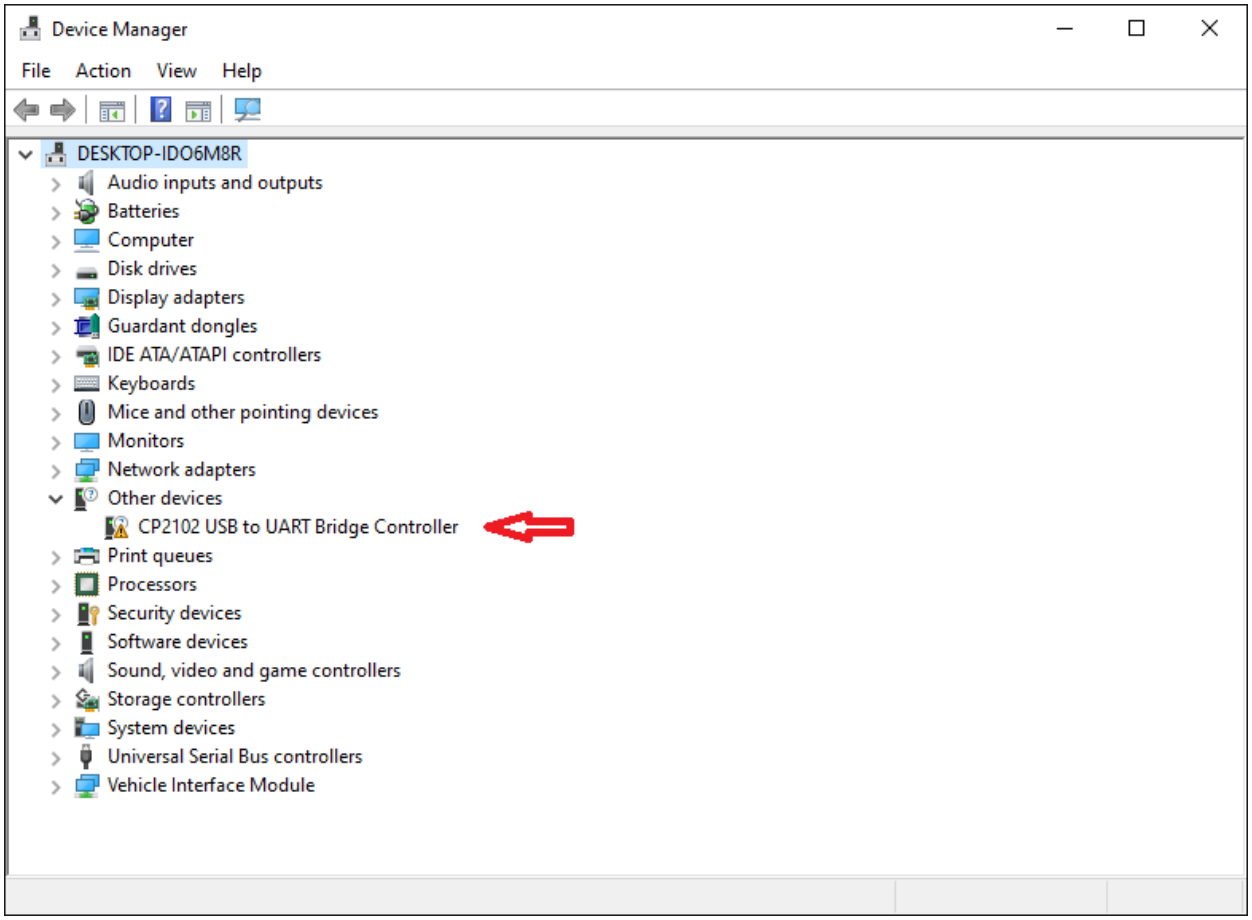
To begin, you need to download the drivers and the program itself from our website:

http://toyotaflasher.ru/downloads

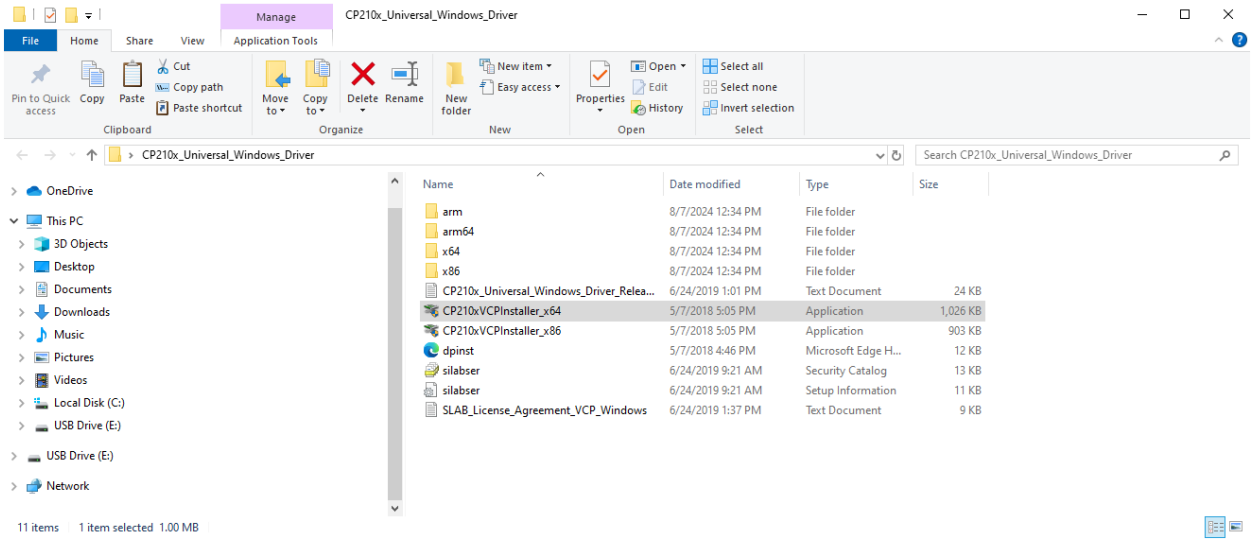
The next step is to ensure that the USB-CAN adapter and Guardant key are recognized correctly. Since the adapter uses the commonly used CP2102 chip, the drivers are likely already installed, as is the driver for the Guardant key. Connect the USB-CAN adapter and access the Device Manager:



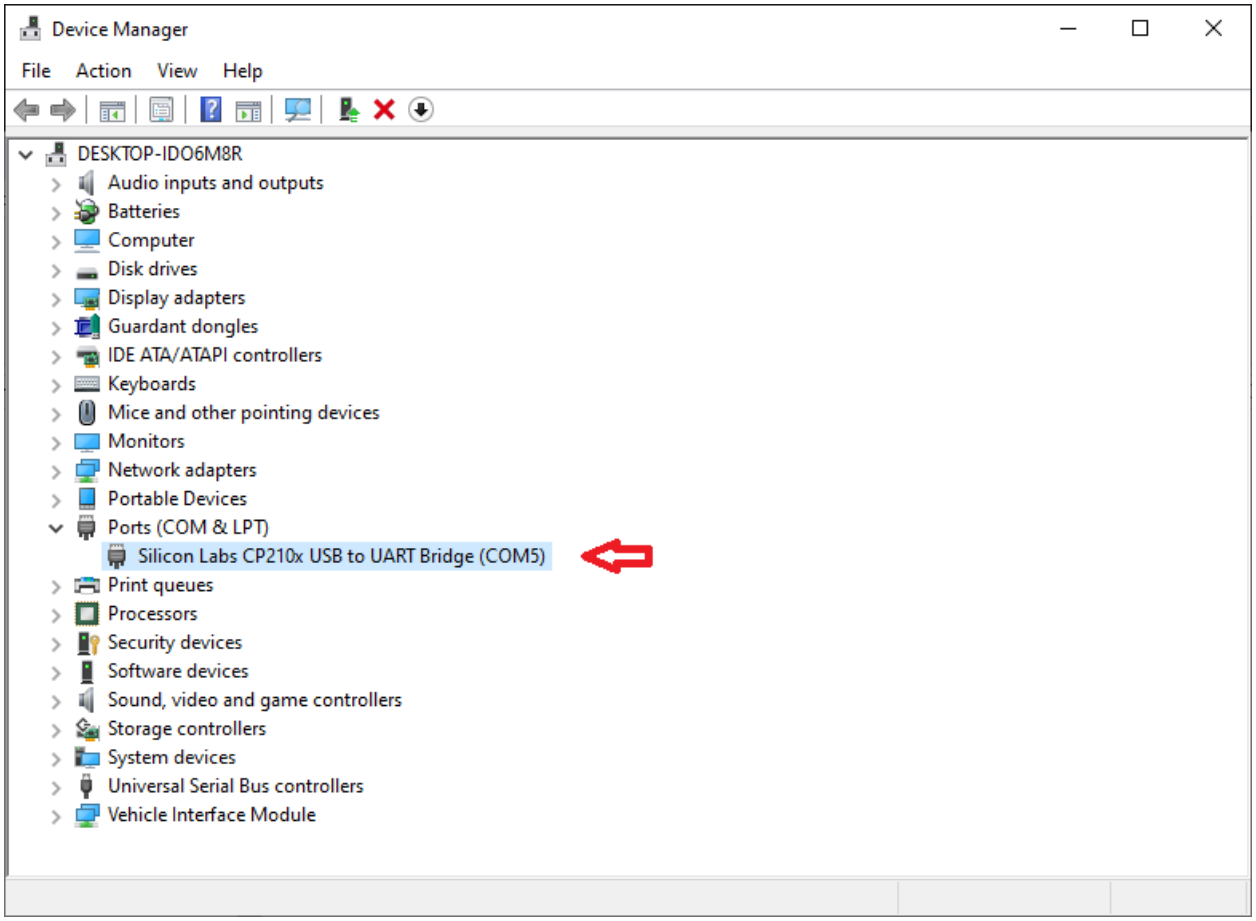
If the device is not recognized, it means that the appropriate driver is not installed on your system:



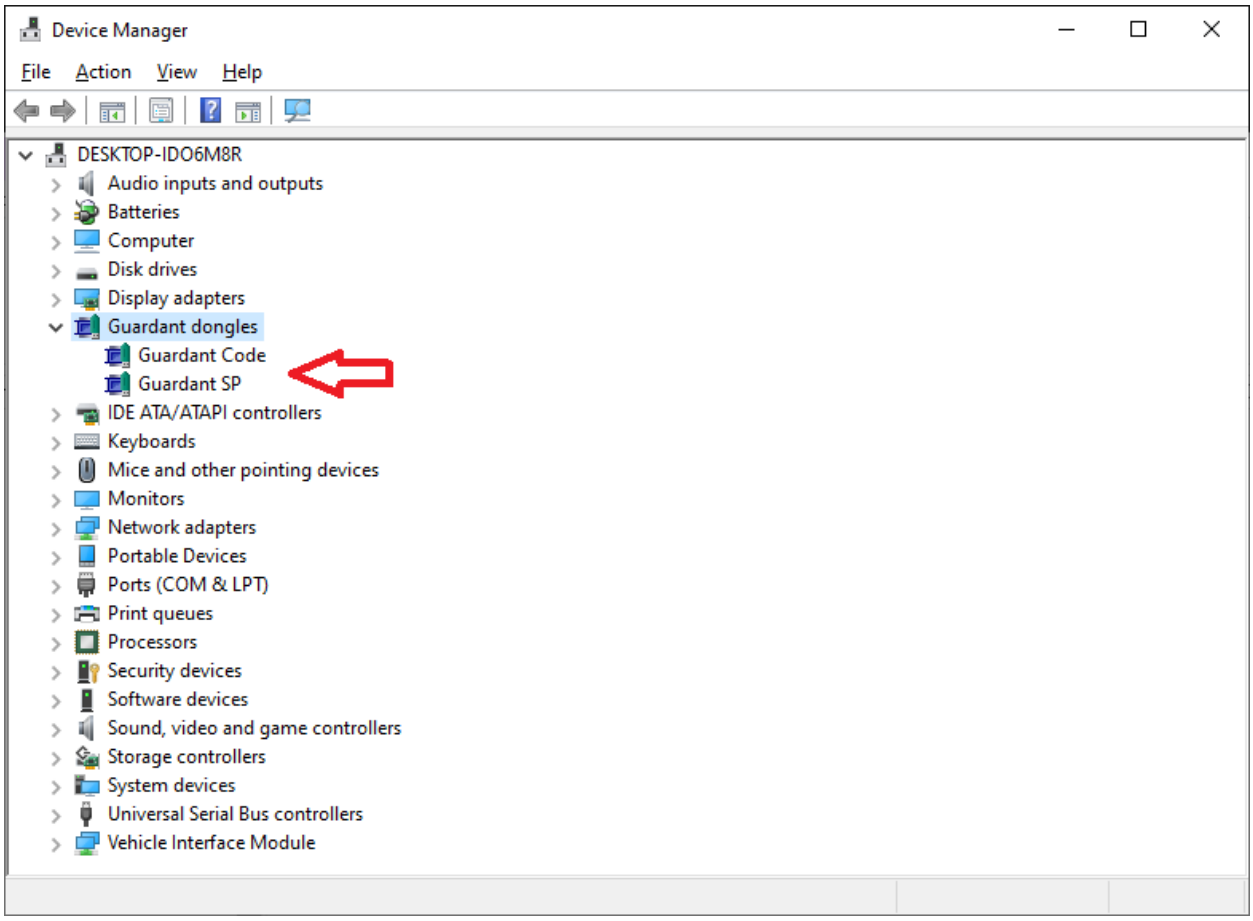
Unpack the CP2102 drivers and run the installer according to your OS architecture:



After installation, the device should appear as follows:

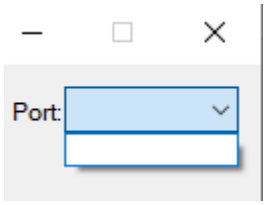


Insert the Guardant USB key and check that it is correctly recognized by the system:

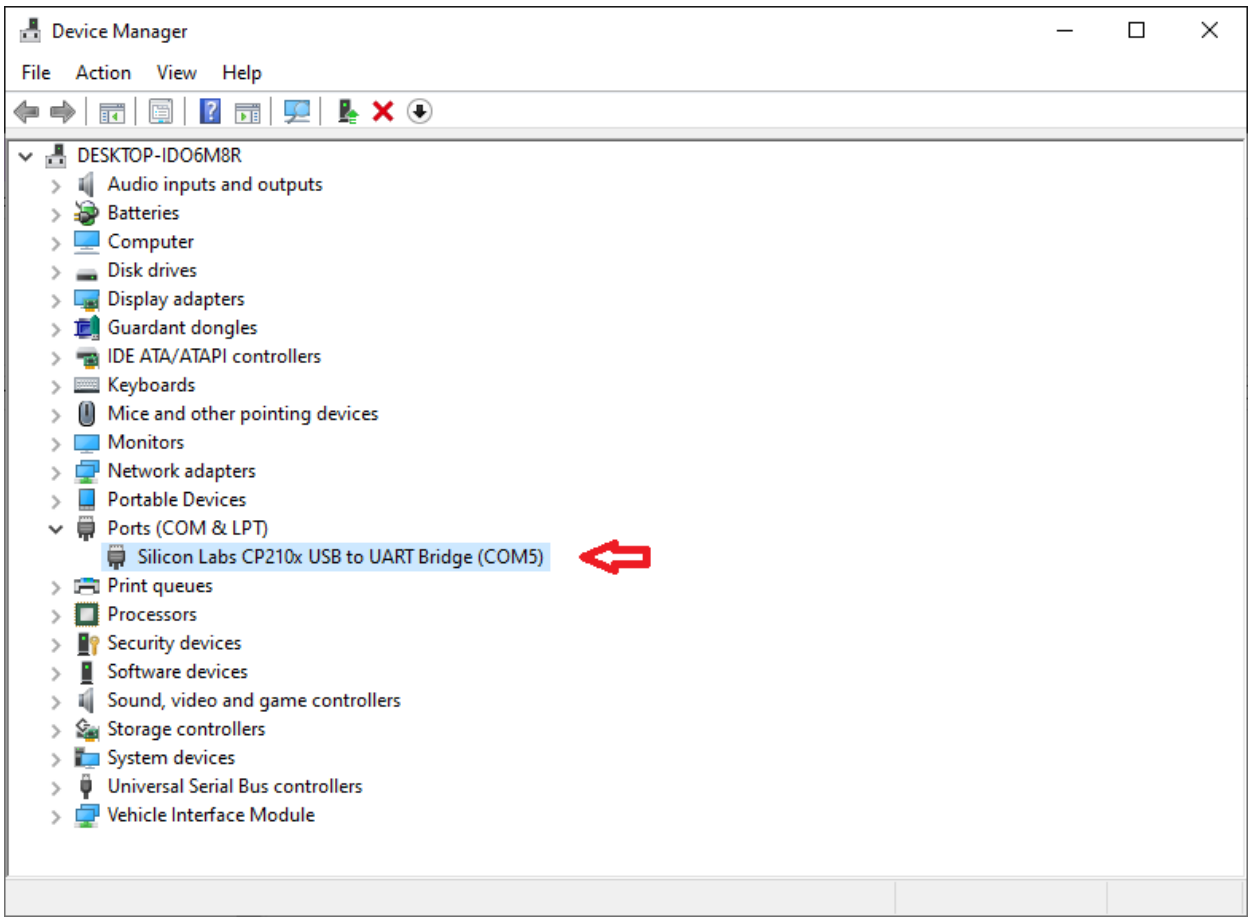


If the USB key is not recognized, install the drivers from the official website, the link to which can be found in the Downloads section.

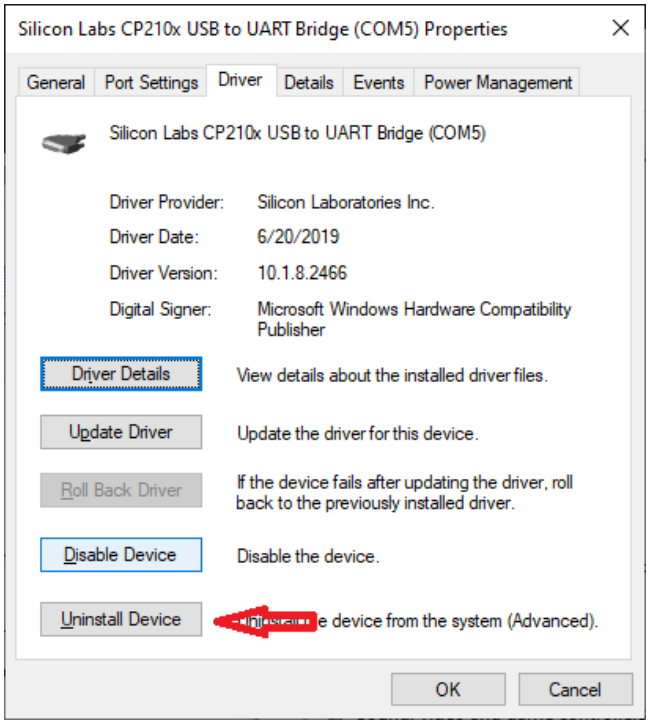
NB! In case that after connecting the USB-CAN adapter, it is correctly recognized in the Device Manager, but the COM port assigned by the system does not appear in the **TLFReader** program:



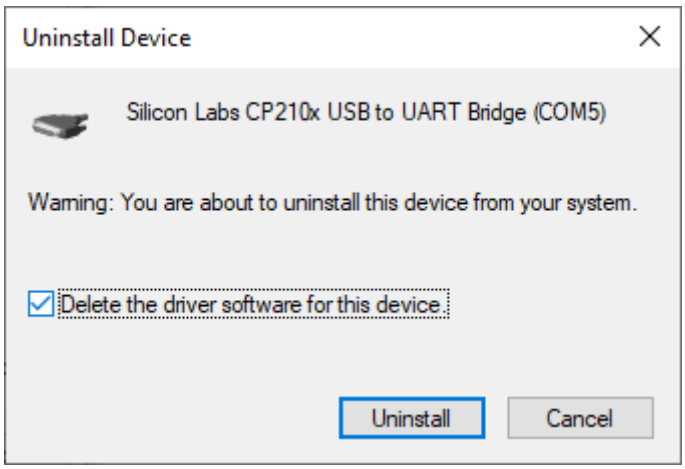
You need to uninstall this device along with its driver and then install the driver downloaded from our website. To do this, double-click on the device:



Then click **Uninstall Device**::



Check the box “Delete the driver software for this device”:



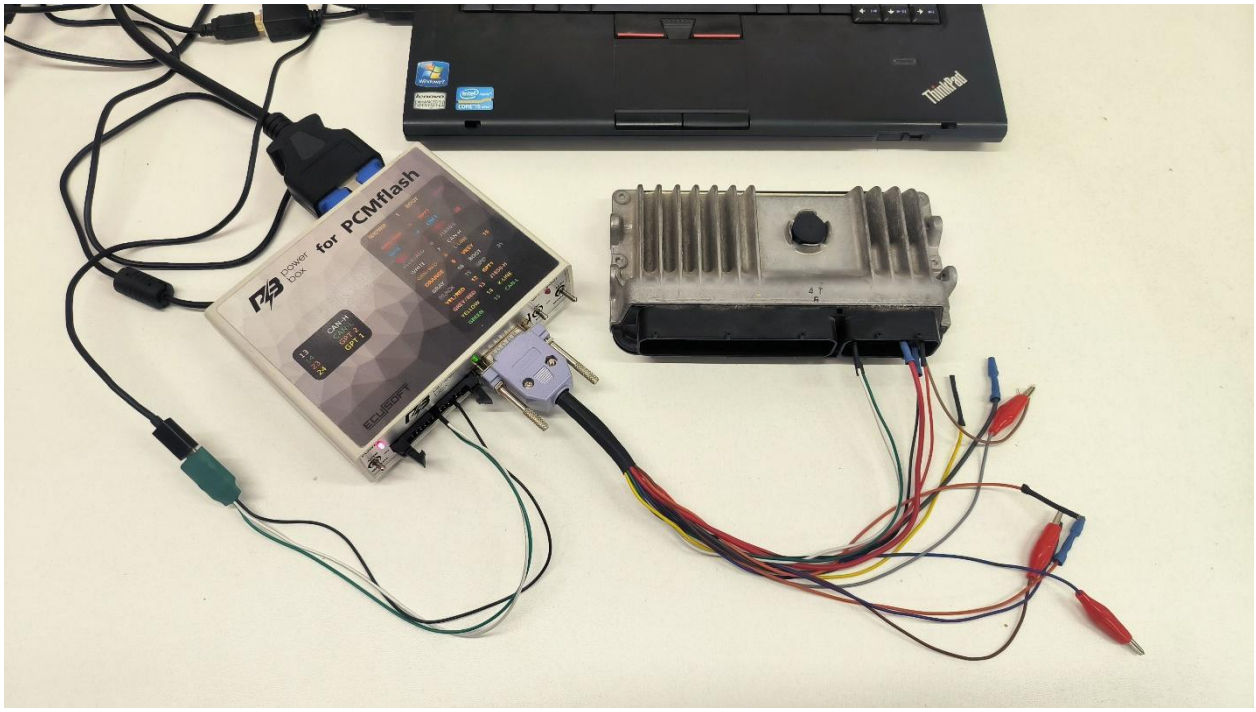
After that, reconnect the USB-CAN adapter and install the driver.

<u>Connecting the ECU on the bench.</u>

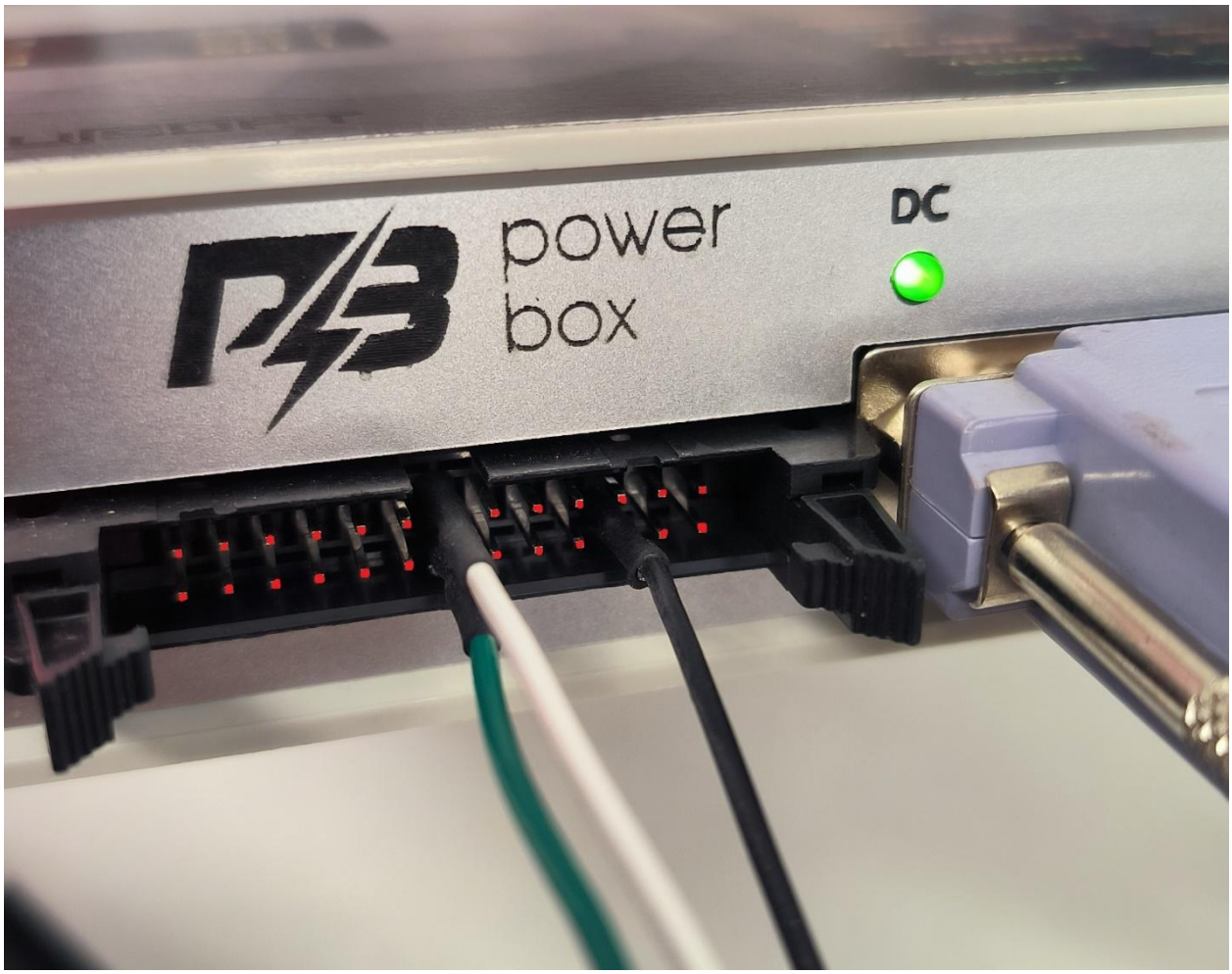
Since the **boot pin** is used for reading, it is only possible to read the ECU outside the vehicle.

The ECU can be connected in various ways: using a **PowerBox**, various adapter boards, or simply directly from the OBD port of the adapter. We recommend the method with automatic power management and **boot pin** (e.g., **PowerBox**). Below are the different connection methods:

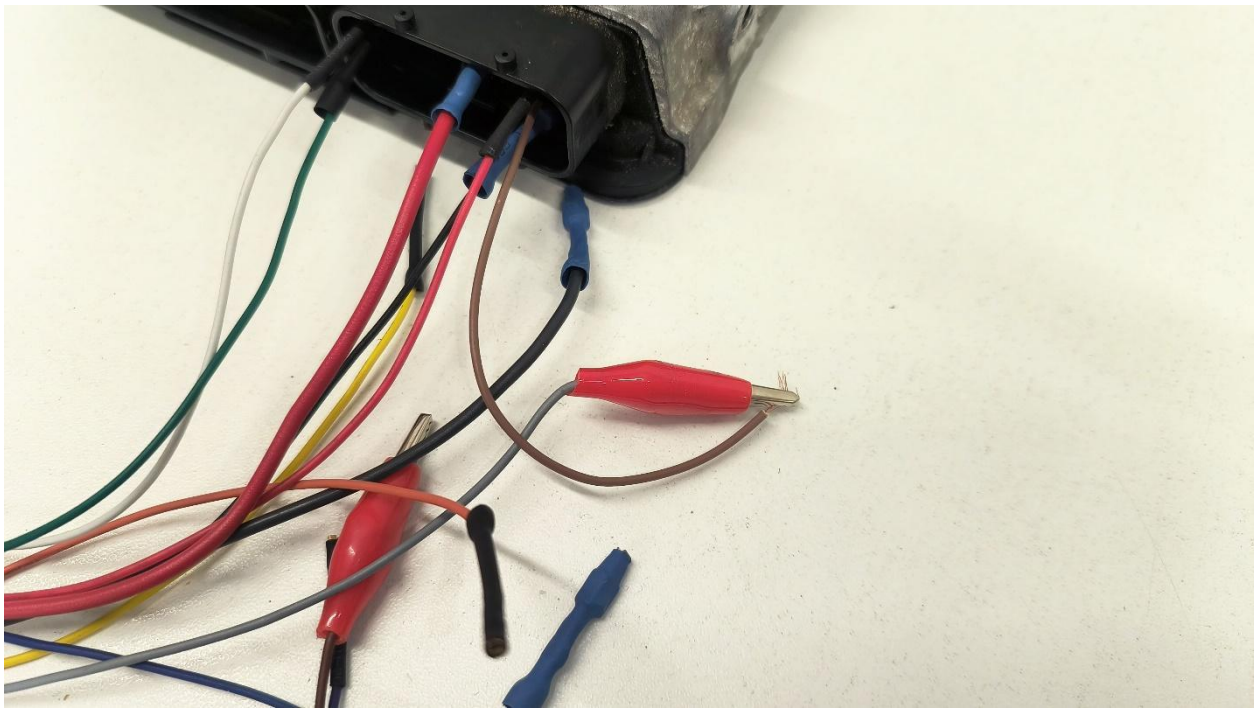
PowerBox



Connect the USB-CAN adapter to the 26-pin connector as shown in the photo:

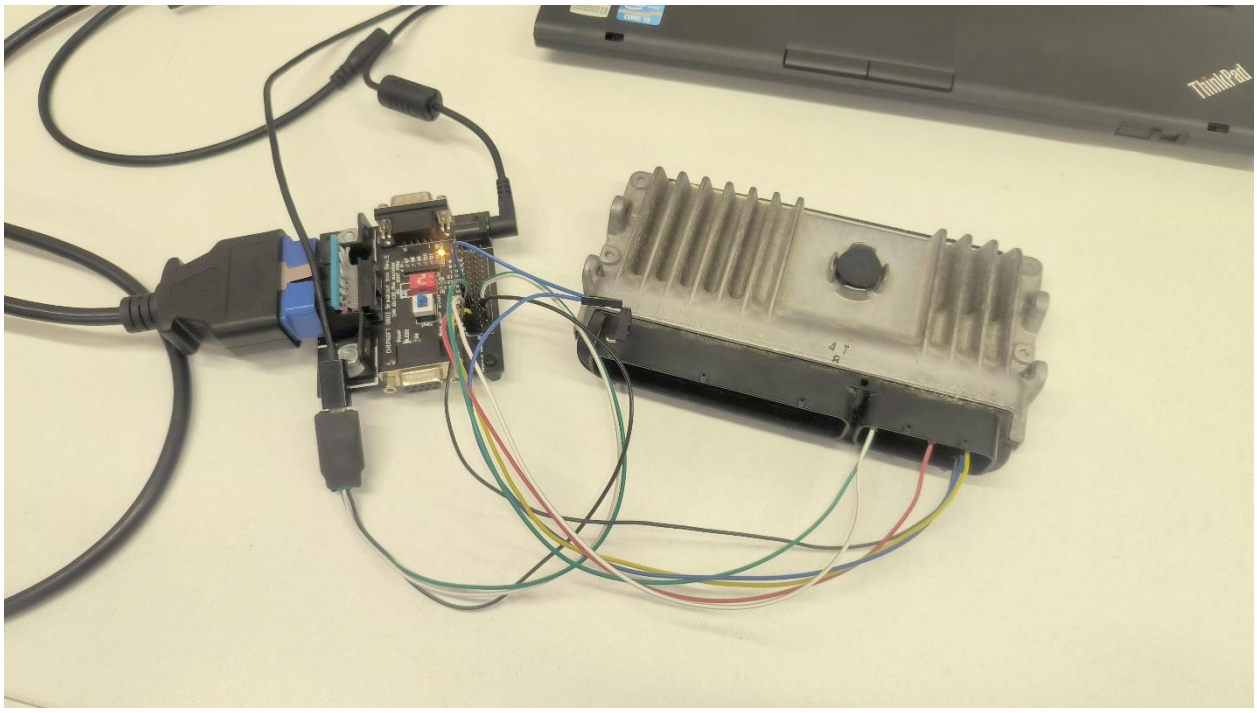


The gray boot wire must be connected to the **boot pin** of the unit. You can use a wire with a "female" connector at the end:



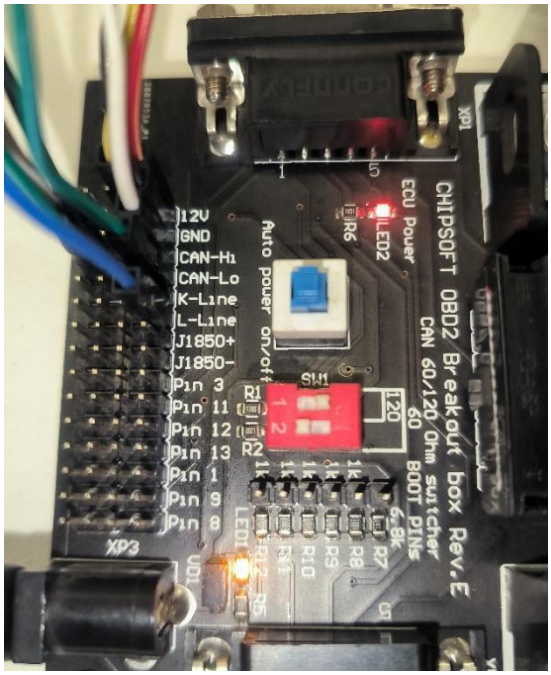
Ensure all switches are set to the upper position.

CHIPSOFT OBD2 Breakout box



You can connect the module using “female-to-female” **Dupont** wires. Connect +12V, GND, CAN-Hi, and CAN-Low to the corresponding labels on the **CHIPSOFT** board. The **boot pin** can be connected either directly to ground or through a button (manual control of the **boot pin** is supported in this configuration).

For the USB-CAN adapter, connect the wires as follows: the white wire to CAN-Hi, the green wire to CAN-Low, and the black wire to GND.



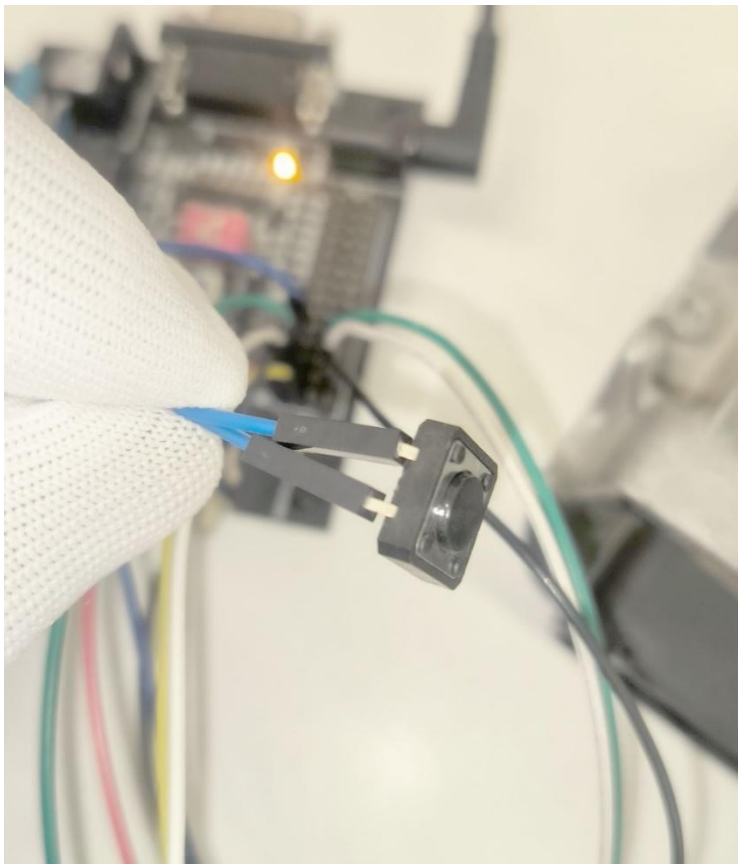
The **Auto power** button must be released.

During **boot pin** identification, the **boot pin** should be in the open state. Before reading, the **boot pin** needs to be shorted either by using a button or by connecting it to the GND contact. After this, press the **"Read Flash"** button. When the message **"Disable boot pin"** appears, be prepared:

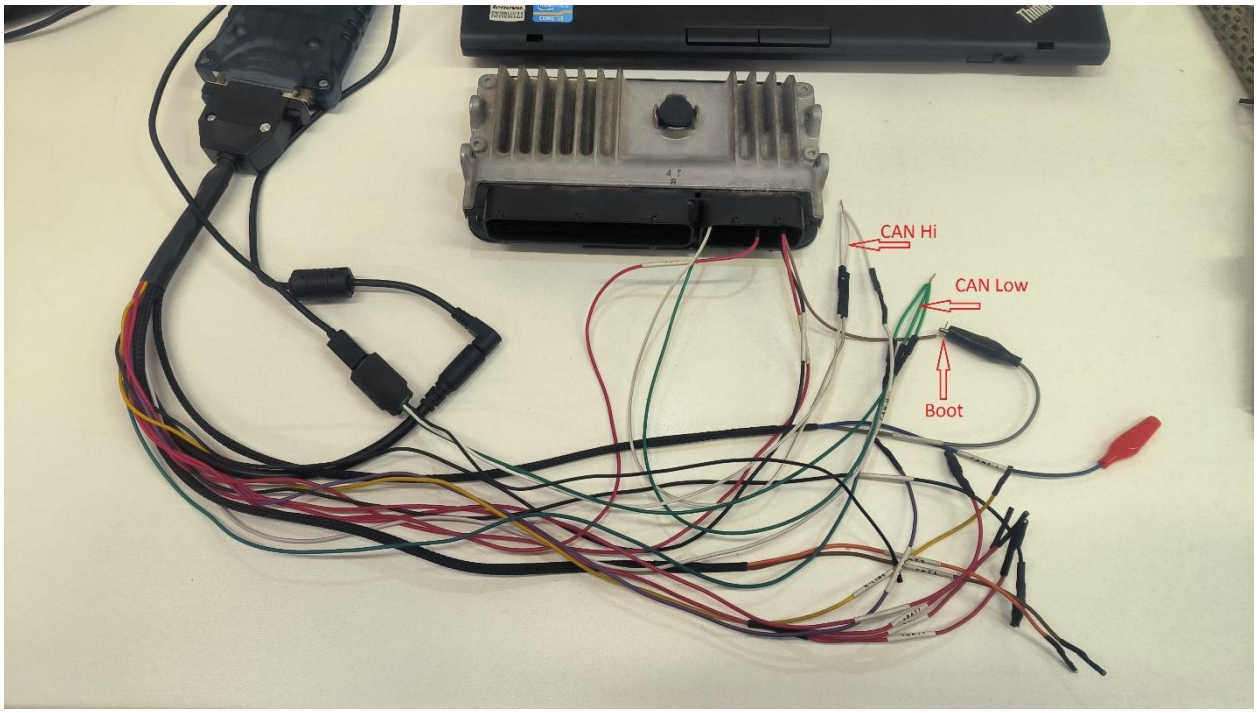
Then, when the next message “**Start reading**” appears, release the **boot pin**:

If reading does not begin, repeat the procedure starting with pressing the "**Read Flash**" button.

Example of Using the Common Button:



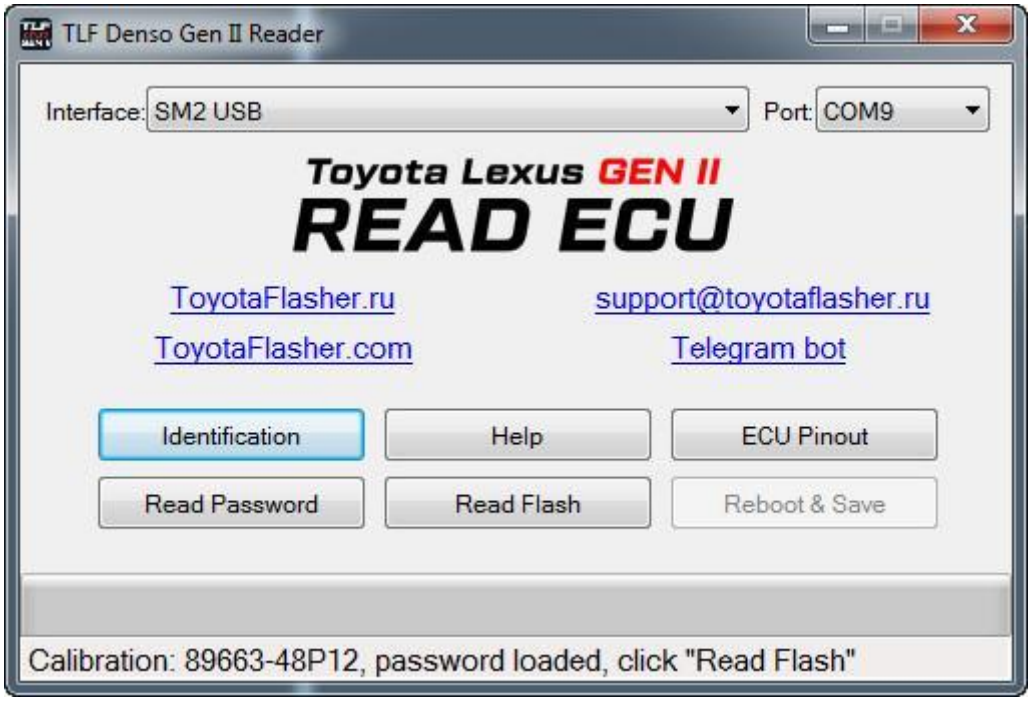
Universal Adapter for Scanmatik 2



You need to connect the CAN-Hi (CAN-Low) from the **Scanmatik**, from the ECU, and from the USB-CAN adapter by any means. In this case, a "male-to-male" twisted wire was used. The ground connection is not required. For connecting the **boot pin**, you can use a wire with a "female" connector.

Using the Program:

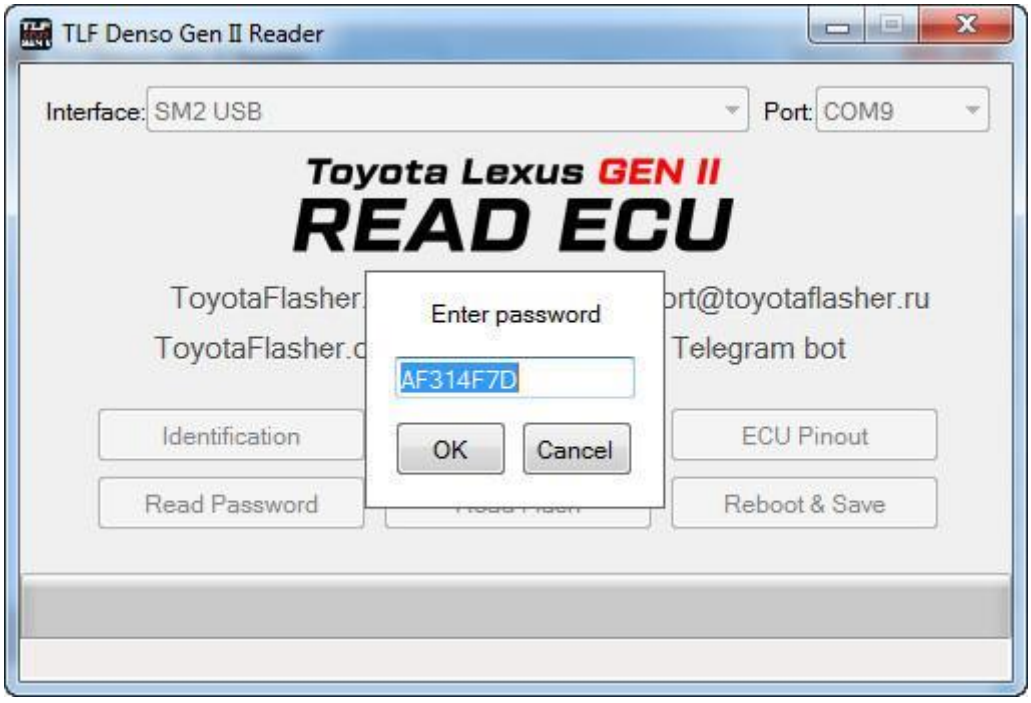
Upon the first launch, you need to select the J2534 adapter (1) and the COM port with the connected USB-CAN adapter (2). Then, press the "**Identification**" button (3). If the module is connected correctly, a calibration number will appear at the bottom along with one of the following messages:



Either:

In the first case, our database contains the password for this software. In the second case, if the password is unknown, you need to use the "**Read Password**" function (see below).

If the password is available, it will be automatically saved to memory and will be automatically loaded for any subsequent operations until it is replaced by another password. In this case, as well as if you know the password and did not press the "**Identification**" button (**3**), you need to press the "**Read Flash**" button. A window will appear showing the current password, which you can change manually.

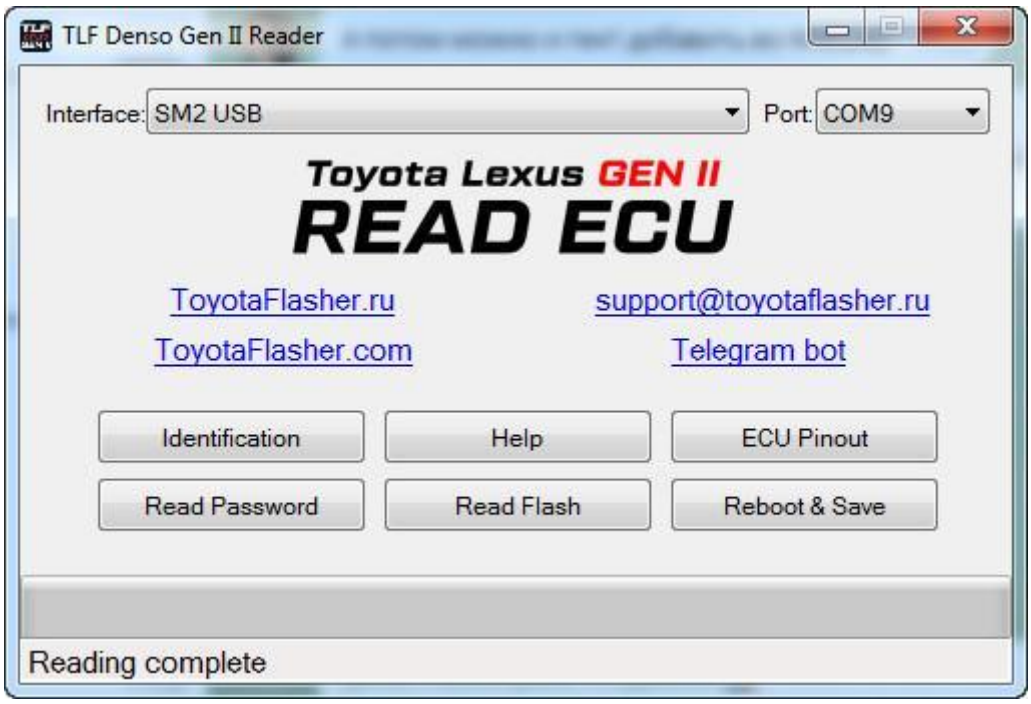


If you are using a **PowerBox** or a similar device with automatic control, the reading process will start 3 seconds after you press the "OK" button.

If you have manual control of the **boot pin**, when you see the "**Start reading**" message, you need to ground the **boot pin**.

If reading has not started, short the **boot pin** and click "**Read Flash**" again.

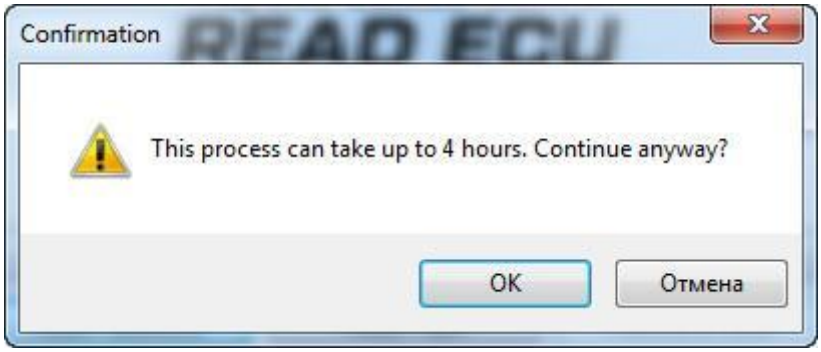
After a successful read, a "**Reading complete**" message will appear:



The "**Reboot & Save**" button will become active. To correctly complete the flash memory reading process, do not disconnect the power from the ECU; instead, click this button. If you are manually controlling the **boot pin**, it should be grounded. After a successful reboot of the ECU, a file explorer window will open for you to save the firmware file.

After saving the file, it is recommended to perform re-identification to check the functionality of the ECU. When manually controlling, the **boot pin** should be disconnected.

If the password for this software is unknown, you will need to use the "**Read Password**" button (**4**). A warning window will appear indicating the duration of this process. If you are manually controlling the **boot pin**, it must be grounded before clicking "OK.":



After successfully reading the password, a message with the current password will appear in the status bar, and the password will also be saved to memory. You only need to press "**Read Flash**" afterwards. However, we recommend saving the password for potential future operations.

Possible Issues When Using the Program:

1. **Error Window Appears Upon Startup or the Program Window Appears Briefly and Disappears:**
   - Add TLFReader.exe to the firewall exceptions.
   - There might be server maintenance; contact technical support for more information.

2. **Nothing Happens When Launching the Program:**
   - Occasionally, Kaspersky Antivirus may block tlfreade.exe and wad.exe, mistakenly identifying them as trojans. Add these files to the antivirus exceptions.

3. **After the "Start Reading" Message, Nothing Happens:**
   - The USB-CAN adapter may be incorrectly connected (CAL-Hi, CAN-Low).
   - The **boot pin** might be incorrectly connected (either always grounded or disconnected).
   - The wrong COM port might be selected in the program.

4. **The ECU Does Not Respond After Reading:**
   - If the "**Reboot & Save**" button is active, connect the **boot pin** to ground and press the button again.
   - Use any flasher (e.g., PCMFlasher) to write the read firmware with the **boot pin** connected.
   - Contact technical support for assistance.