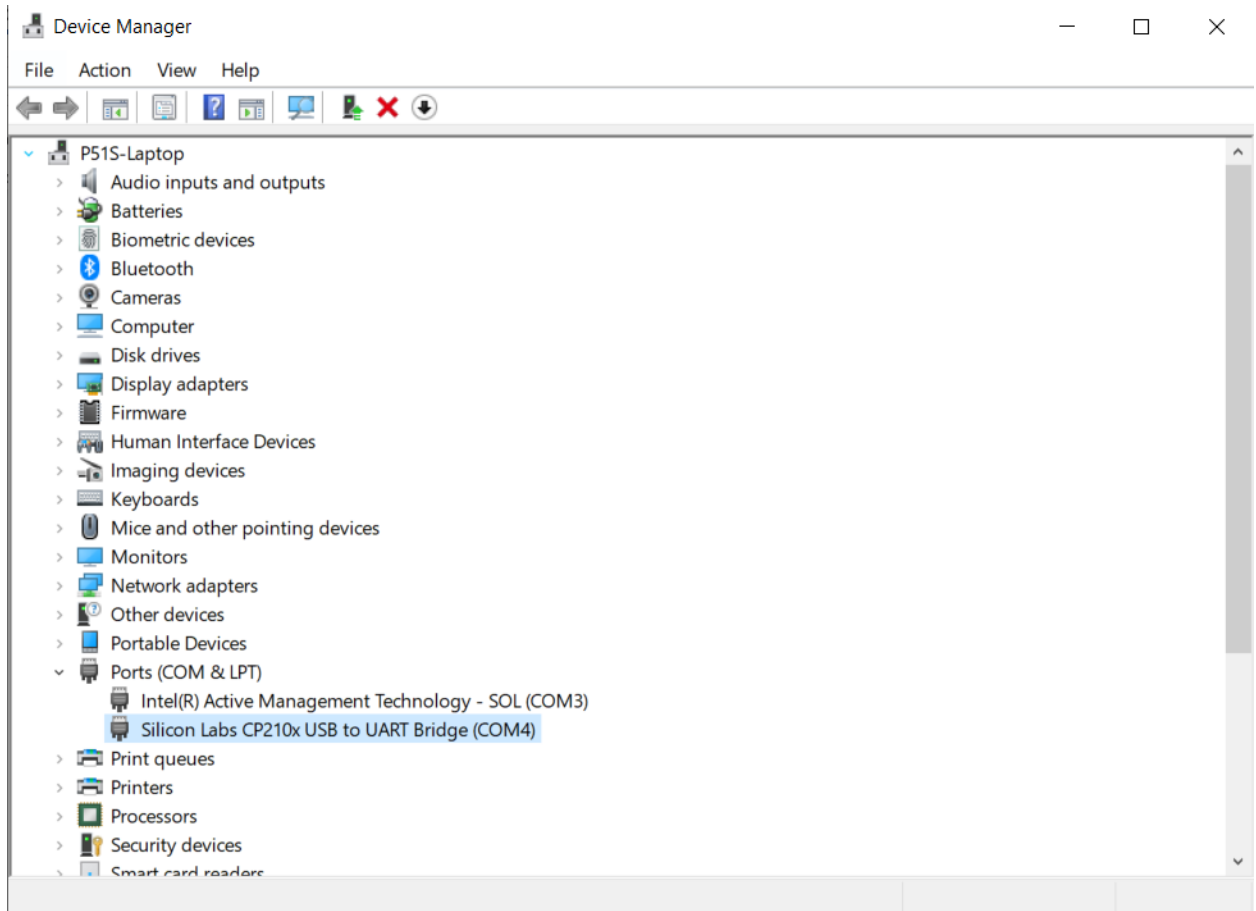


How to update Dongle Firmware by Derhase 🐰 2/19/23

1. Initial Prep: Place dong firmly in hand. Make sure to have a DATA USB to micro-USB cable connected to your PC. You should be able to plug it into your PC and find it in the Device Manager:

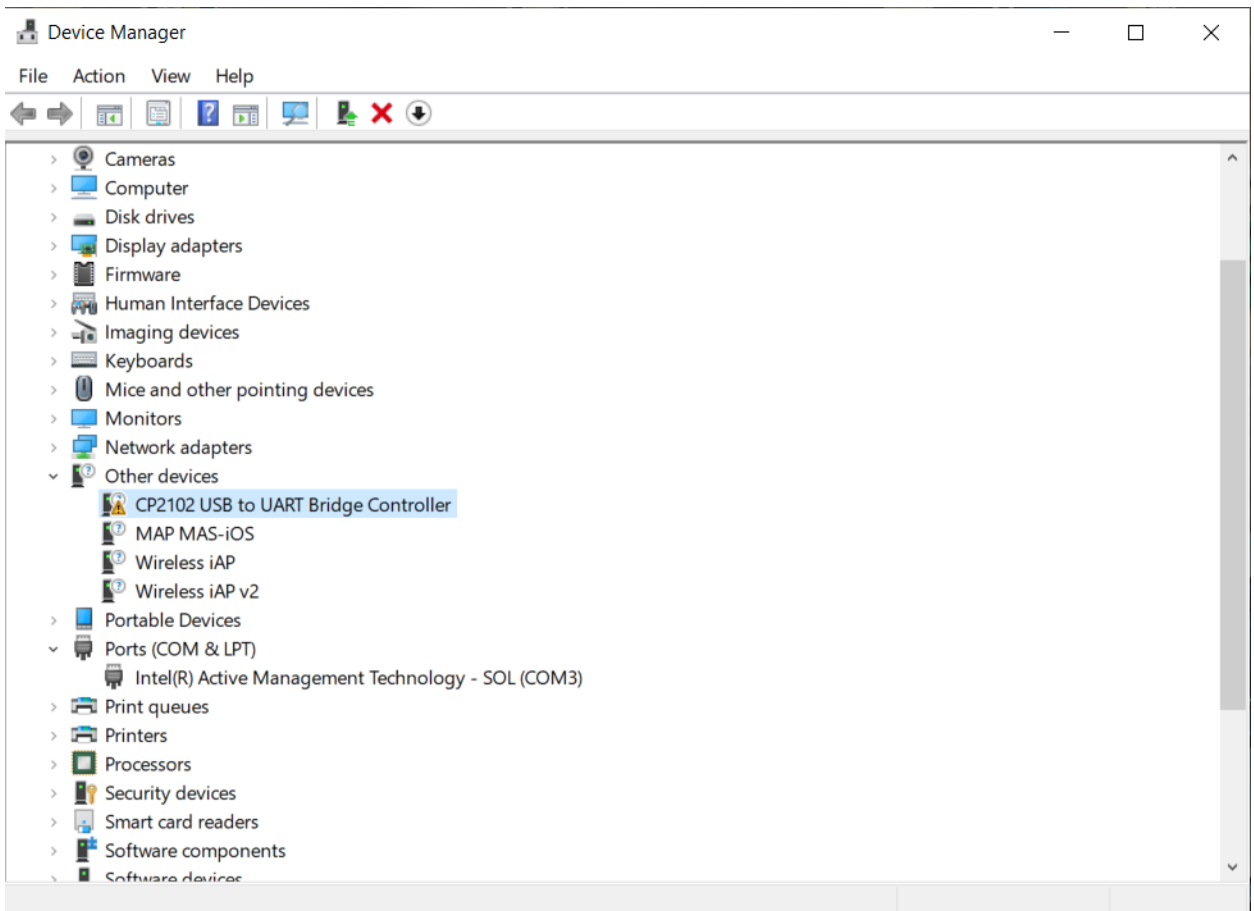


NOTE: When you plug it in for the first time, it may not show up under COM ports and a message similar to this will pop up:



...followed by a “device is set up” etc after a minute or so. If your device does NOT get recognized, chances are good you do not have a DATA cable. If your cable does not work with a phone or tablet etc and allow file transfers, then it won’t be able to be used for making your dong firmer.

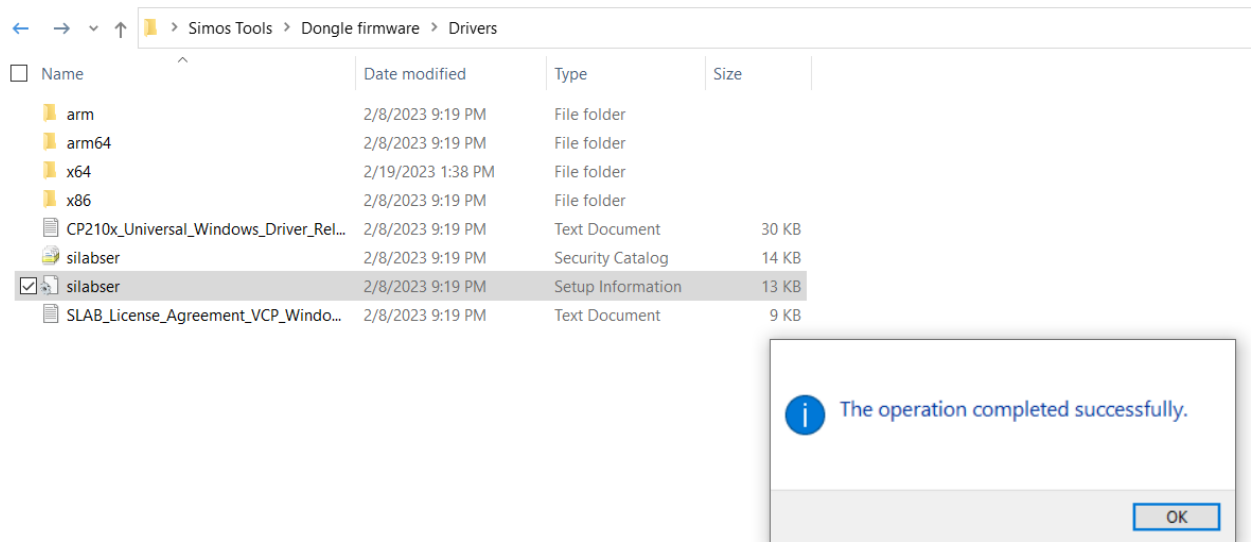
IF you have never installed the Silicone Labs CP210x Windows Driver, it may not show up in your COM ports, and instead as an “other device” or similar:



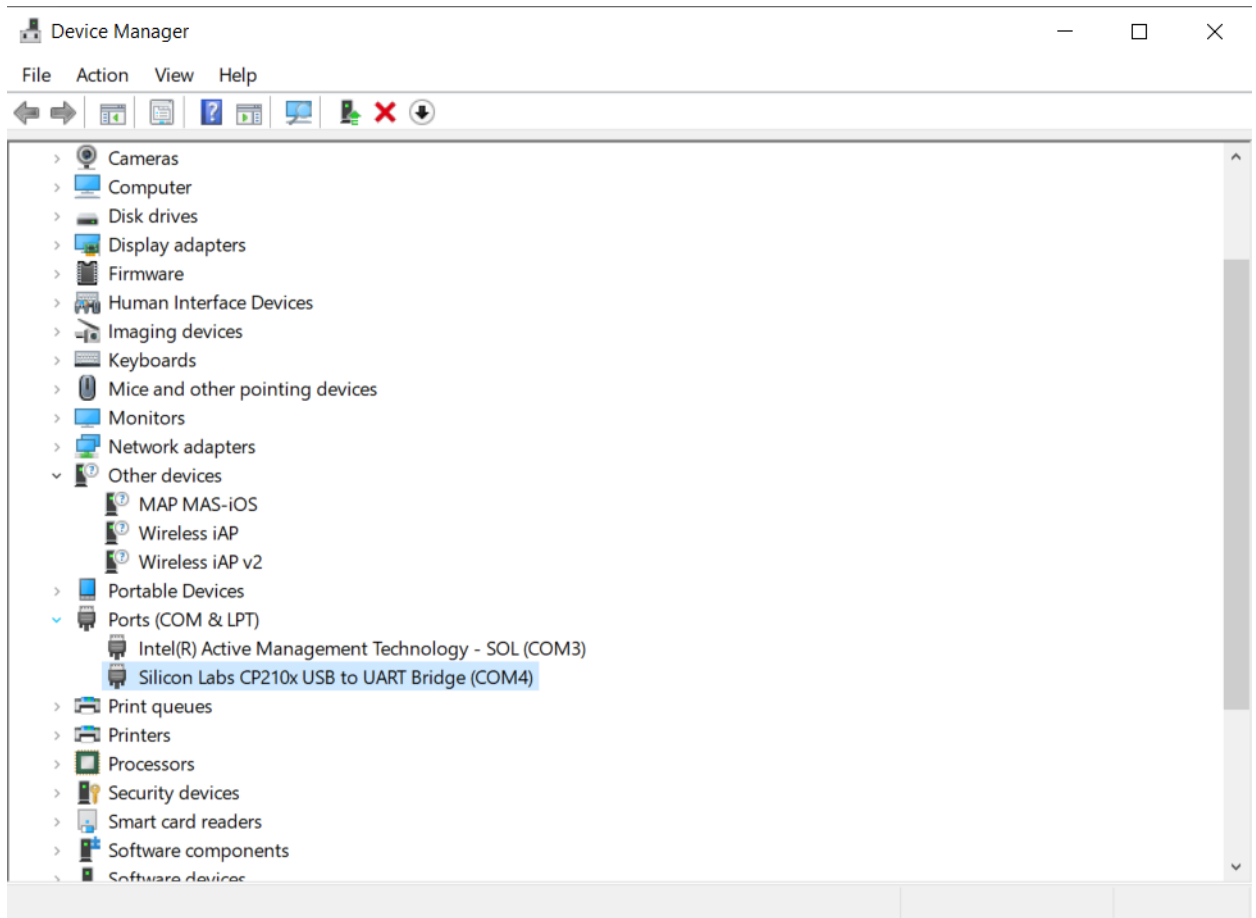
Regardless of where or whether it shows up or not, you will NEED to download the required drivers here (The Universal Windows Driver is what you will most likely want):

<https://www.silabs.com/developers/usb-to-uart-bridge-vcp-drivers?tab=downloads>

When you download the zip folder, you will need to EXTRACT it. When you extract it, you will need to RIGHT CLICK the silabser.inf file, and choose "INSTALL". You should get the following message after doing so:



After this is completed, your computer can now speak fluent dong and it will show up in the COM port list. Take a mental note as to which COM port it is under! In this example it is COM4.



- Now it's time to update the firmware so your dong can flash your VAG product.

(NOTE: Once all of step 1 has been completed once, unless you completely uninstall the CP210x driver, you shouldn't need to perform that again, and subsequent updates can start here at step 2. If any problems are encountered that are not data cable related, then a complete uninstall and reinstall is a decent place to start).

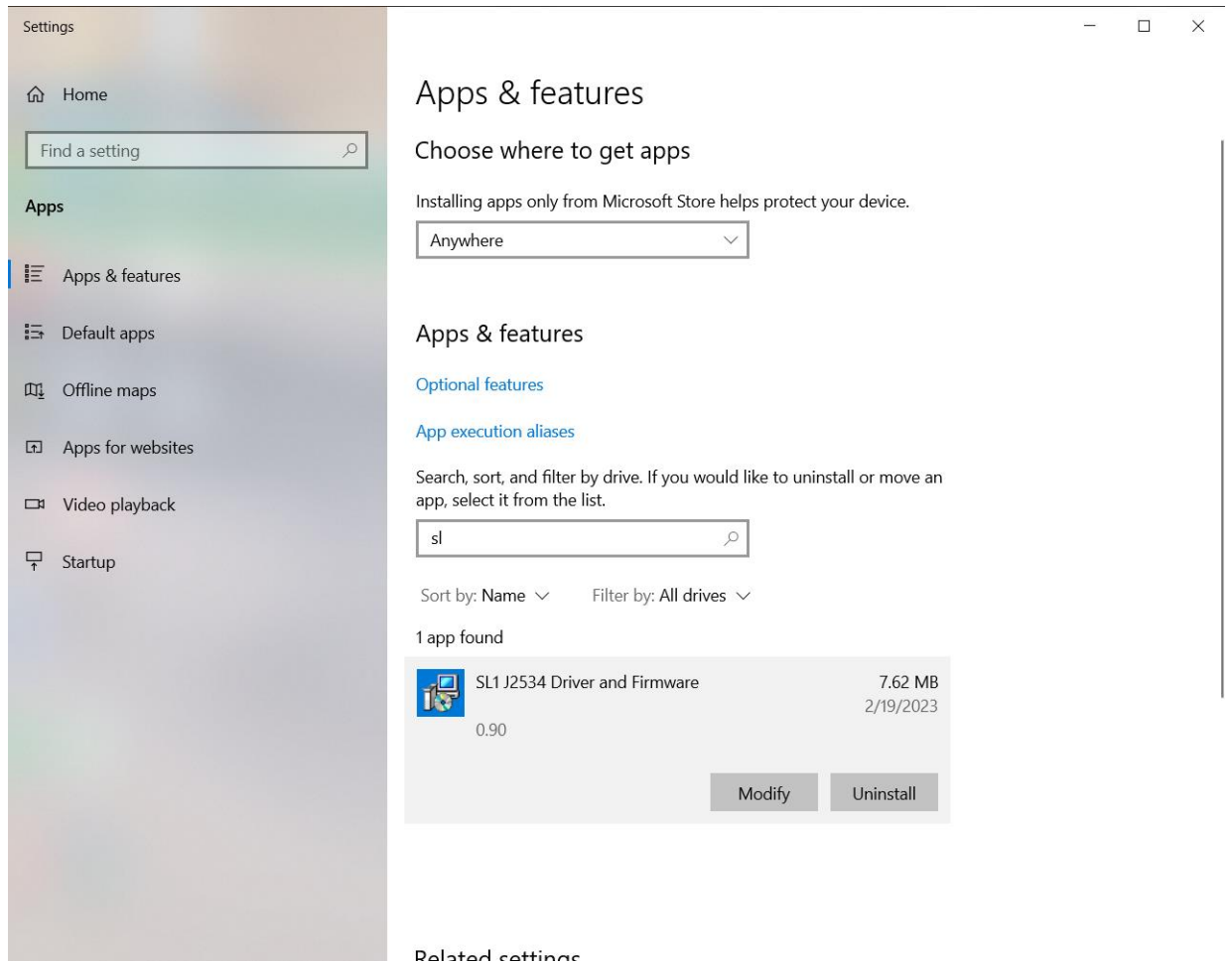
Go to Switchleg's Github for the latest .msi file here:

<https://github.com/Switchleg1/esp32-isotp-ble-bridge/releases>

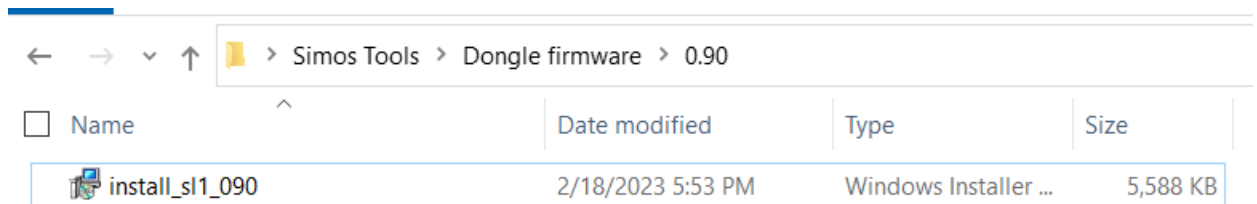
In this example we are using v0.90.

← → ▾ ↑ ⬇ This PC > Downloads			
<input type="checkbox"/> Name	Date modified	Type	Size
▼ Today (1)			
CP210x_Universal_Windows_Driver (3)	2/19/2023 1:37 PM	Compressed (zipp...	279 KB
▼ Yesterday (1)			
<input checked="" type="checkbox"/> install_sl1_090	2/18/2023 5:53 PM	Windows Installer ...	5,588 KB

3. UNINSTALL OLD FIRMWARE FIRST. To do this, you will open your Apps and Features, and search for "SL1"... Choose "uninstall". (note: I already have 0.90 installed, this is just for example purposes. This is also where you can check to see which firmware version is installed)



4. NOW we can install the new firmware version. Open the folder where you saved it and double click it:



This will install a setup shortcut right to your desktop:



NOTE: If it does NOT install a shortcut, then that means you did NOT uninstall the old firmware.

5. Now you can run that Setup shortcut on your desktop (it will ask you to run as administrator, choose yes) and you will find this window:

SLI1 Setup v0.25

Device Settings

Com Port: Silabser0 (COM4)

J2534 Connection Type: UART

Minimum Read Timeout: 1

Log Events: ☒ Error ☒ Warn ☐ Info ☐ Debug

Flash Firmware

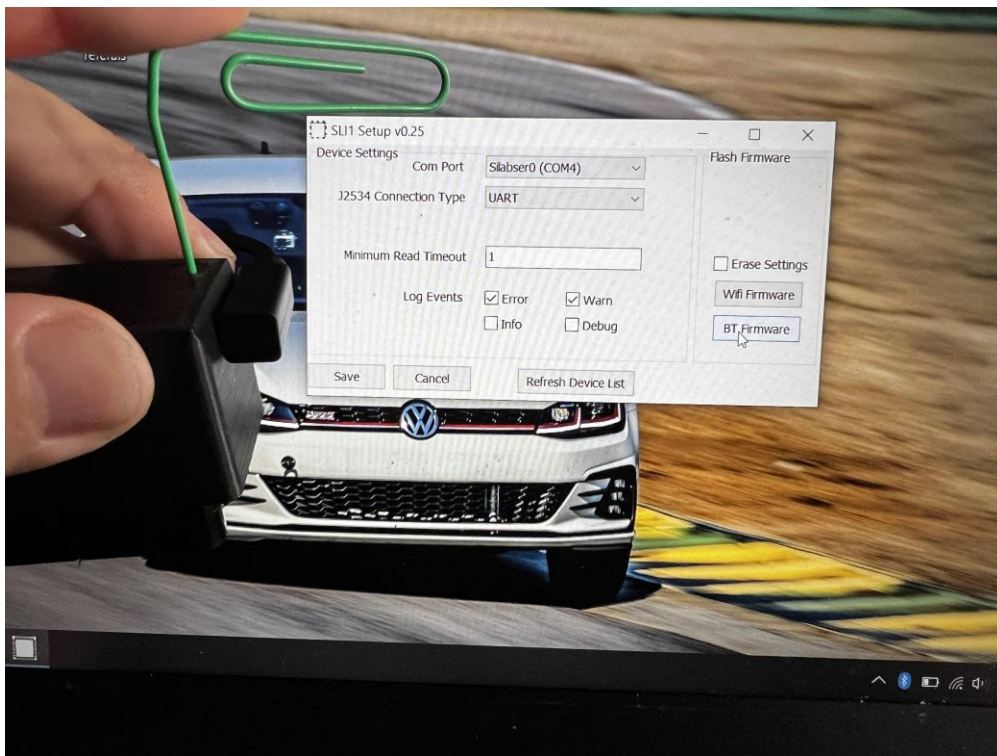
☐ Erase Settings

Wifi Firmware

BT Firmware

Save Cancel Refresh Device List

6. Now you are ready to firm up that dong! Make sure the correct COM port is selected where you device is plugged in first. Then go ahead and insert a paper clip into the hole and HOLD THE BUTTON DOWN of your SL1/A0 dongle *while* you press “BT Firmware” in the above setup program.



7. The following screen should pop up pretty quickly and count up from 0-100%. You can release the button once it starts counting up:

```
C:\Program Files (x86)\SL1 J2534\esptool.exe
esptool.py v3.0-dev
Serial port COM4
Connecting.....
Chip is ESP32-D0WDQ6 (revision 1)
Features: WiFi, BT, Dual Core, 240MHz, VRef calibration in efuse, Coding Scheme None
Crystal is 40MHz
MAC: 0c:b8:15:c1:8a:54
Uploading stub...
Running stub...
Stub running...
Changing baud rate to 921600
Changed.
Configuring flash size...
Auto-detected Flash size: 4MB
Warning: some reserved header fields have non-zero values. This image may be from a newer esptool.py?
Flash params set to 0x022f
Compressed 27680 bytes to 17898...
Wrote 27680 bytes (17898 compressed) at 0x00001000 in 0.3 seconds (effective 861.6 kbit/s)...
Hash of data verified.
Compressed 841824 bytes to 545460...
Writing at 0x0005c000... (58 %)
```

This window will flash through some stuff pretty quickly and then self close.

TROUBLESHOOTING: if this window doesn't pop up, or you never see the percentage counting up:

1. *Make sure you have a data cable*
 2. *Make sure you have the CP210x driver installed first*
 3. *Try ALL the steps above from the beginning one more time.*
 4. *Panic and message Switchleg*
-
8. Confirmation: As we sort of did before during the uninstall of the old firmware, we can go to “Apps and features”, search for “SL1”, click on “SL1 J2534 driver and firmware” to confirm which version it has been updated to. In this case it is 0.90 so we are good to go.
 9. Extra hint: Keep your stuff organized in the event you ever need to flash back to an earlier firmware version... I have a dedicated Simos Tools folder and inside of it, a dedicated Dongle Firmware folder with the raw install files backed up in case I ever need them again. Plus this write up because I forget how to do this every damn time (this article was mostly written to stop bothering Switchleg so he can continue with the big 🧠 stuff.

← → ▾ ↑ 📁 > Simos Tools > Dongle firmware				
<input type="checkbox"/> Name		Date modified	Type	Size
📁 0.31		12/22/2022 8:44 PM	File folder	
📁 0.65		1/14/2023 10:27 AM	File folder	
📁 0.80		2/8/2023 9:39 PM	File folder	
📁 0.90		2/19/2023 2:40 PM	File folder	
📁 Drivers		2/8/2023 9:20 PM	File folder	
📁 j2534dll		12/22/2022 8:45 PM	File folder	
📄 How to update dongle firmware		2/19/2023 3:13 PM	Rich Text Format	129,265 KB