DC-ROMA RISC-V Mainboard (Early Access Edition) for Framework Laptop 13 EC Firmware Flashing Instructions

Document attributes		
Document version number	V1.0	
Latest release date	February 21, 2025	
Applicable product model	DC-ROMA RISC-V Mainboard (Early Access Edition) for Framework Laptop 13	
Operating system version	Ubuntu 24.04 or Fedora 41	
Target audience	DC-ROMA RISC-V Mainboard Early Access Edition Users	

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Document abstract

This document describes how to use the ST-link to flash and upgrade EC firmware

Required Tools

ST-LINK V2







Type-C Adapter Board

Multifunctional Type-C Cable





Connection Instructions:

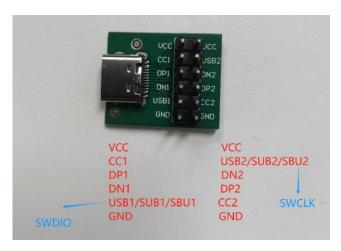
Step 1 Connect the ST-LINK (SWDIO, SWCLK, GND) to the Type-C Adapter

Board as follows.

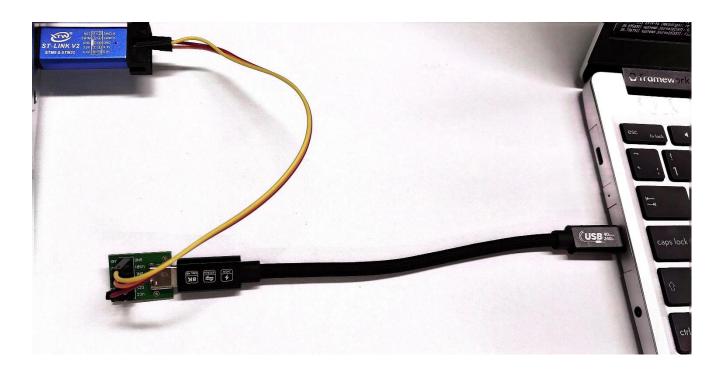
Connect SWDIO to USB1/SUB1/SBU1
Connect SWCLK to USB2/SUB2/SBU2

Connect GND to GND





Step 2 Connect the Type-C port on the lower left corner of the Framework Laptop to another Laptop using a Type-C cable.



Step 3 Ensure that the Framework Laptop is powered off and connected to the external power supply.

Attention:

- (1) The SWD signal transmitted via the Type-C adapter is directional and does not support Type-C reverse connections.
- (2) When the system shuts down, the EC enters hibernation mode, which can cause a ST-Link connection failure. To resolve this, either to force the system to remain active or supply power through an external source.

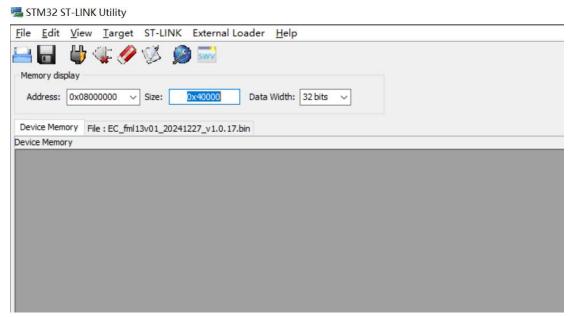
Use the STM32 ST-Link Utility to upgrade the EC using the EC Firmware upgrade package

Step 1 Download the EC upgrade package.

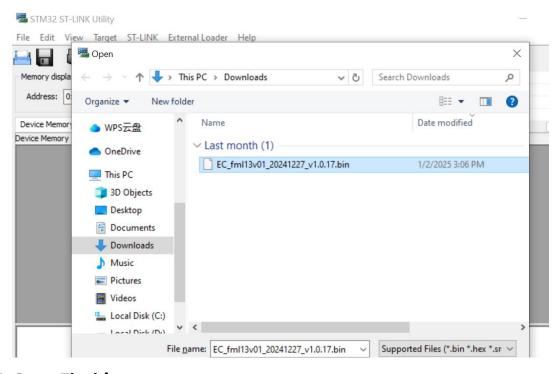
■ Website:
https://deepcomputing.io/support/download/os/EC_fml13v01_20241227_v1.0.17.
bin

Step 2 Download and install the STM32 ST-LINK Utility and open it.

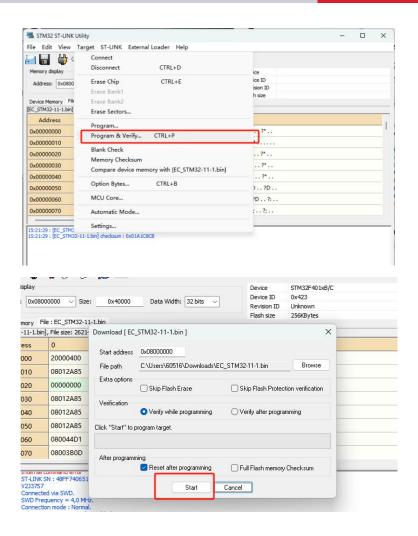
■ Website: https://www.st.com/en/development-tools/stsw-link004.html



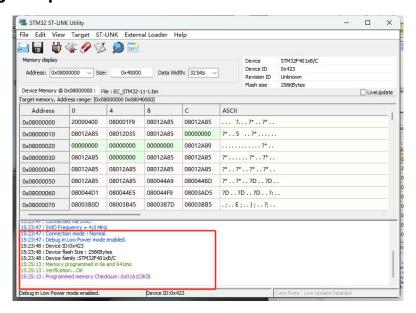
Step 3 Select the EC Flashing file EC_fml13v01_20241227_v1.0.17.bin.



Step 4 Start Flashing.



Step 5 Flashing complete.



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