



CE Workgroup Linux Foundation / Embedded Linux Conference Europe

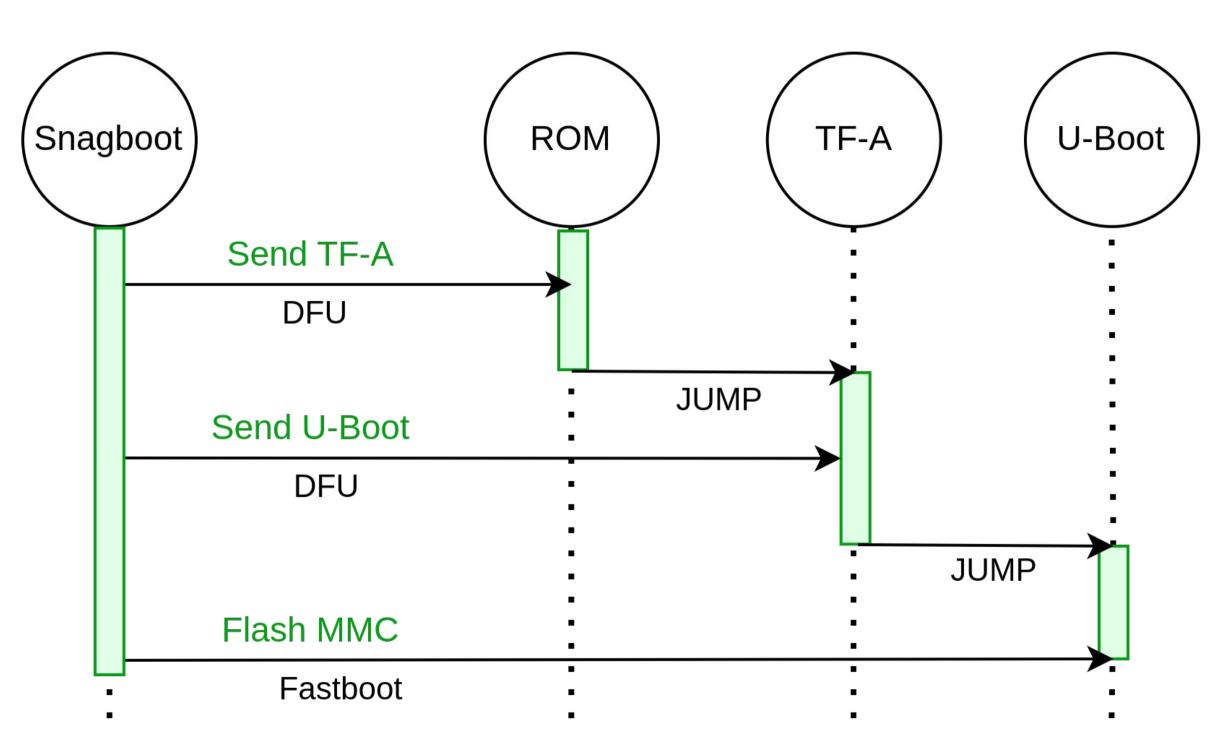
Snagboot: a generic recovery and reflashing tool

Romain Gantois

What is demonstrated

Recovery + MMC reflash of an STM32MP1 board via USB

- The board is powered up in **DFU** mode
- Trusted-Firmware-A is loaded and executed using DFU
- **U-Boot** is sent to TFA and executed using DFU
- U-Boot is used to **flash** the board's MMC using one of:
 - DFU
 - UMS
 - Fastboot



Hardware Information

STM32MP157F-DK2 board from STMicroelectronics STM32MP157 SoC Cortex-A7 + Cortex-M4

What was improved

Recovery tools for embedded platforms tend to be vendor-specific:

- STM32CubeProgrammer for ST platforms
- SAM-BA for SAMA5 platforms
- UUU for I.MX platforms

- ...

Snagboot performs SoC recovery with the same user workflow for different types of SoCs. Currently supported SoC families are:

- STM32MP1
- SAMA5Dx
- I.MX6/7/8
- AM335x
- SUNXI
- AM62x

Flashing is done in a SoC-agnostic way, using U-Boot features.

Source code or detail technical information availability

Source code and docs: https://github.com/bootlin/snagboot