

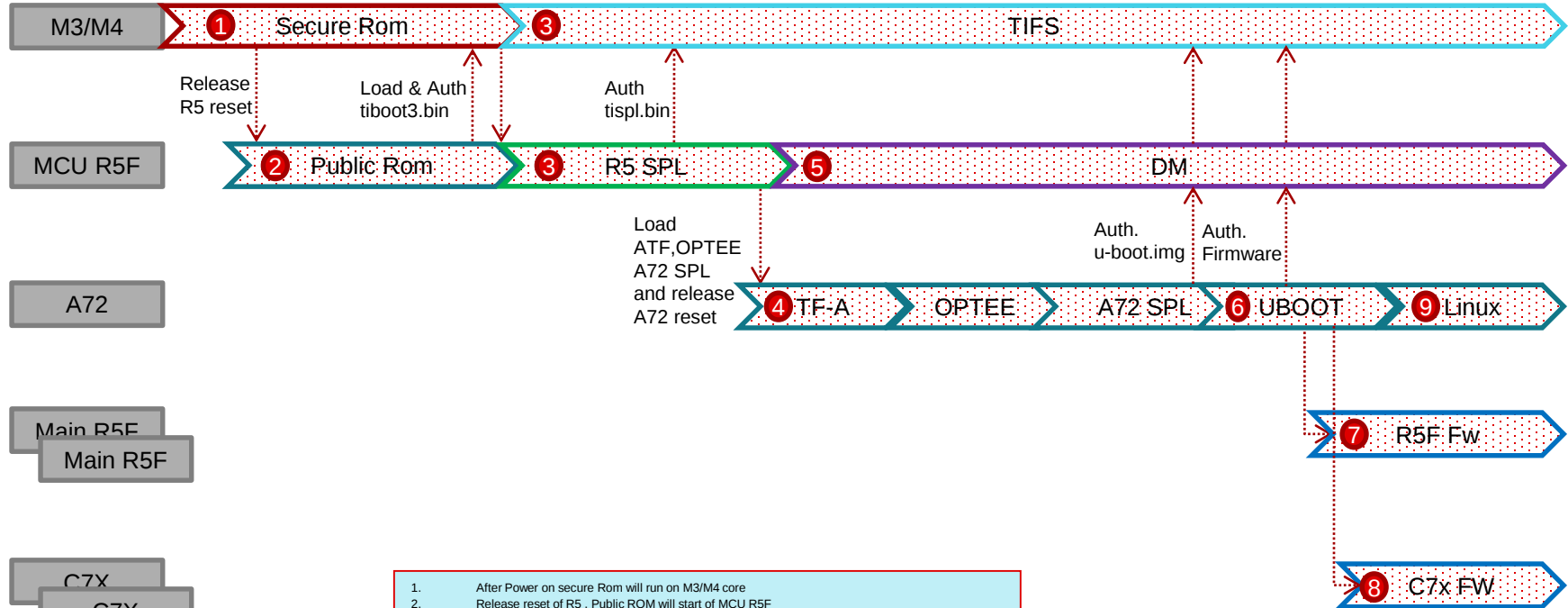
Jacinto7 Boot Flow Options

TDA4x / DRA8x

Outline

- HLOS Boot using SPL
 - Normal Boot flow
 - Falcon Boot flow
- HLOS Boot using SBL
 - Development Boot Flow
 - Optimized Boot Flow
 - Boot APP (Tertiary bootloader)

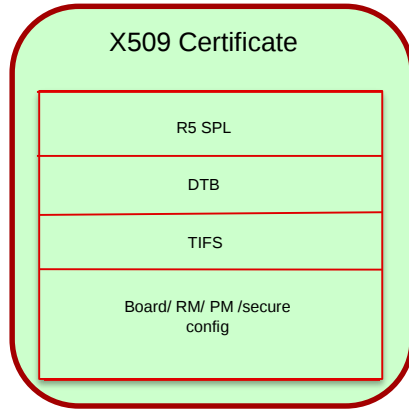
Linux Boot flow-Normal Boot flow



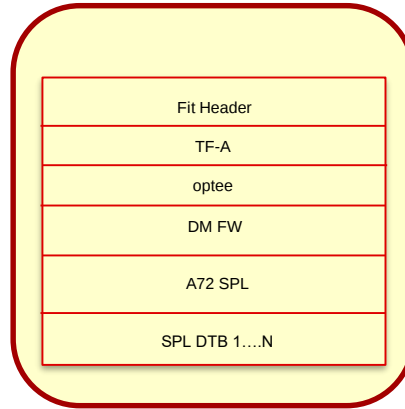
1. After Power on secure Rom will run on M3/M4 core
2. Release reset of R5 , Public ROM will start of MCU R5F
3. Public Rom read the tiboot3.bin from boot media and send it to secure ROM for authentication, after authentication secure ROM will load R5 SPL to MCU R5F and TIFS to M3/M4 core.
4. R5 SPL will read tisp1.bin from boot media, authenticate using TIFS service load ATF, OPTEE, A72 spl to its respective location.
5. Release reset on A72 and load DM to itself.
6. A72 SPL will load uboot.img
7. UBOOT will load Remote core fw on Main R5F
8. UBOOT will load Remote core fw on Main C7x
9. UBOOT load Linux

Linux Boot flow-Normal Boot flow - 2

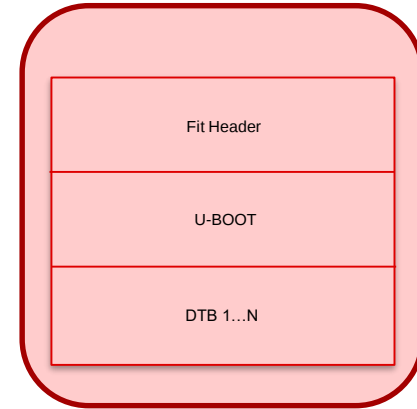
- Image Format



Tiboot3.bin

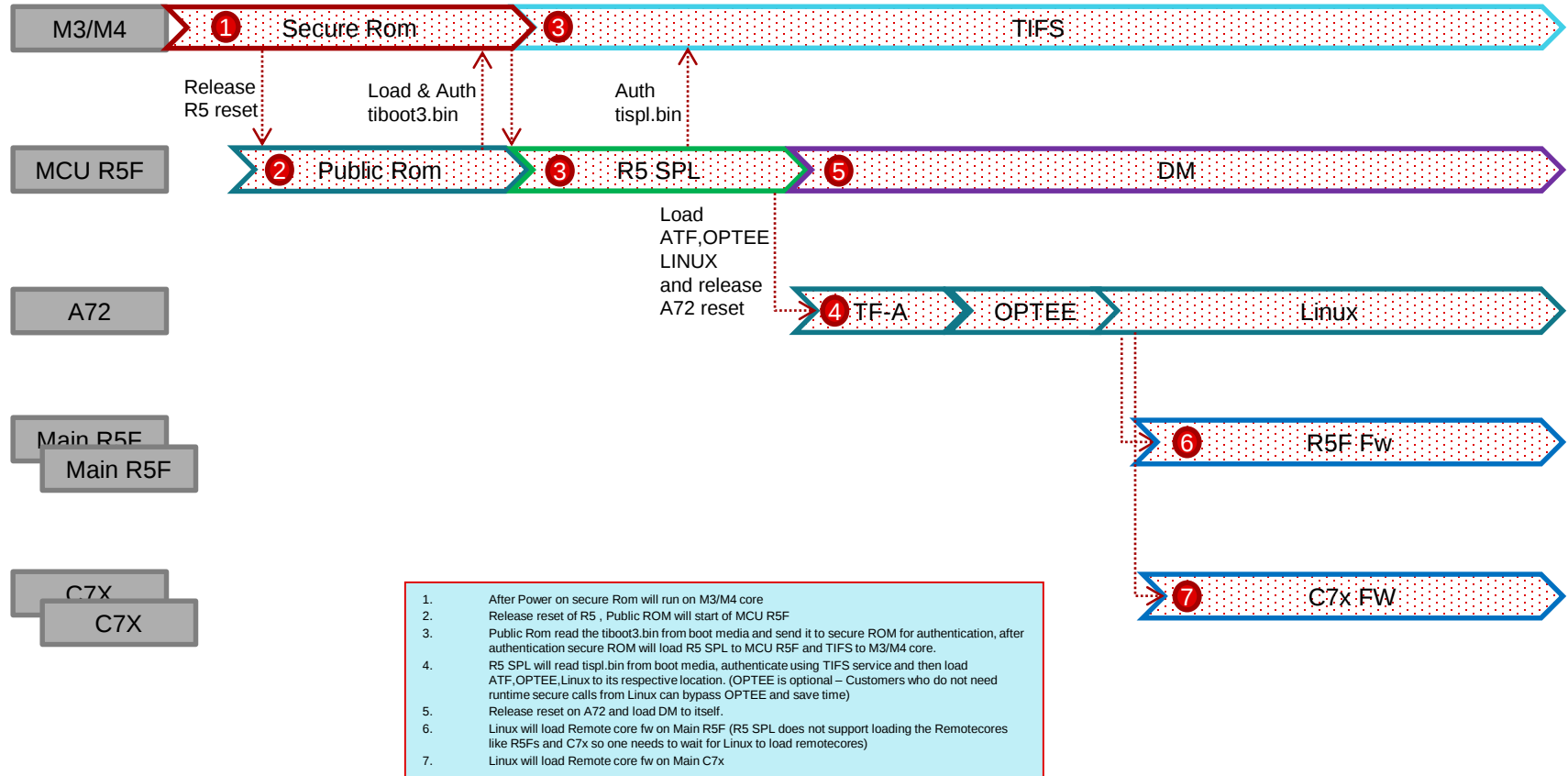


tispl.bin



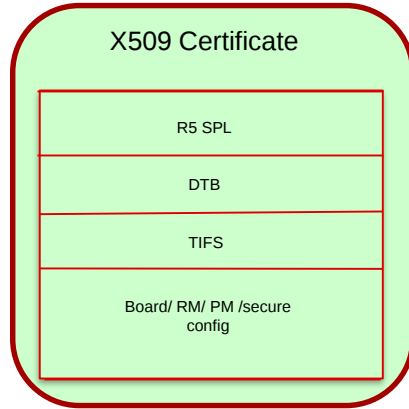
Uboot.img

Linux Boot flow-Falcon Boot flow

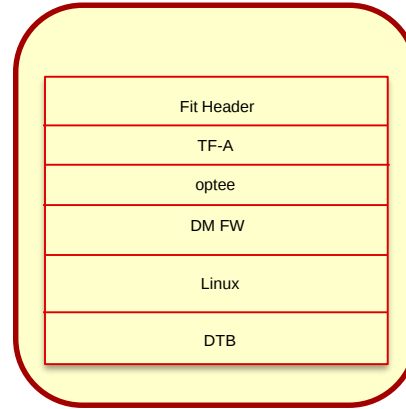


Linux Boot flow-Falcon Boot flow- 2

- Image Format

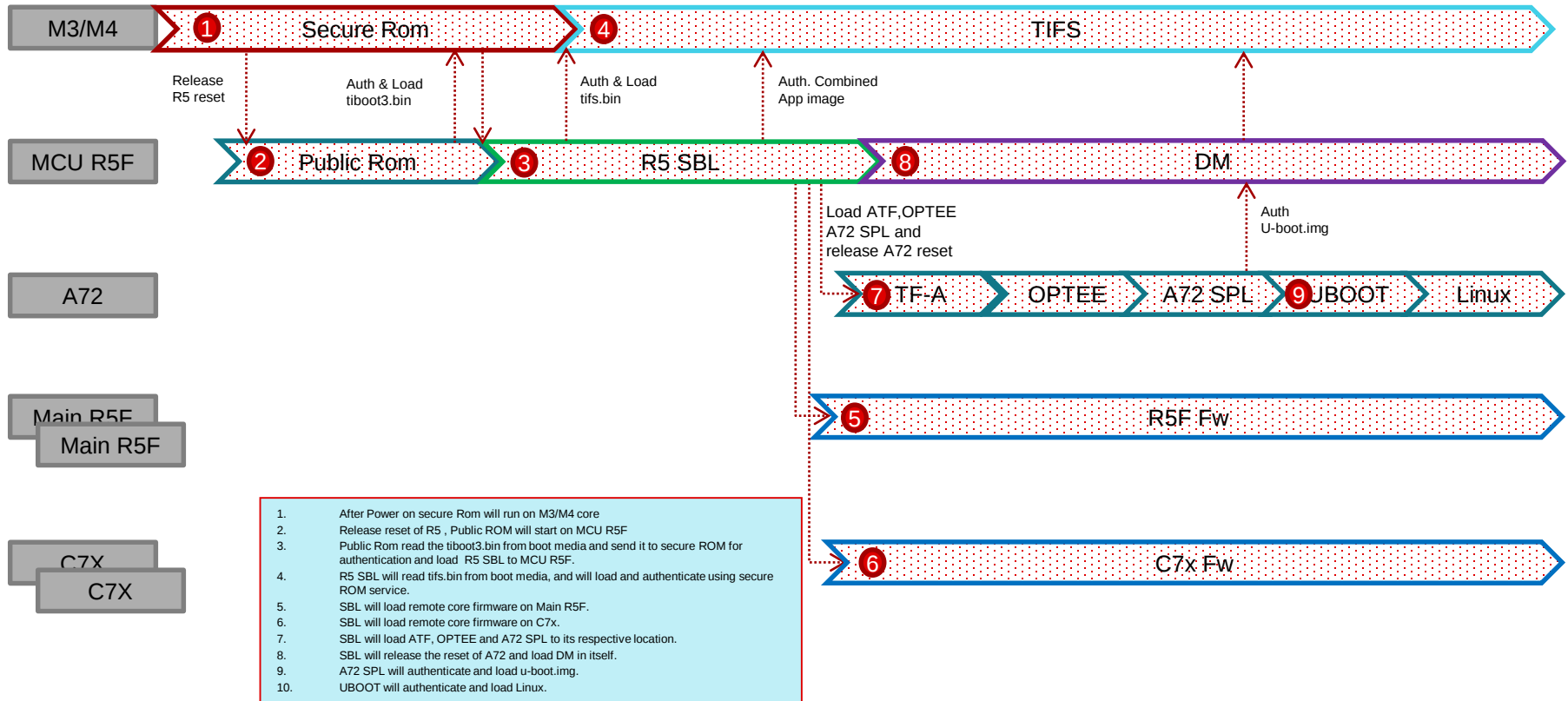


Tiboot3.bin



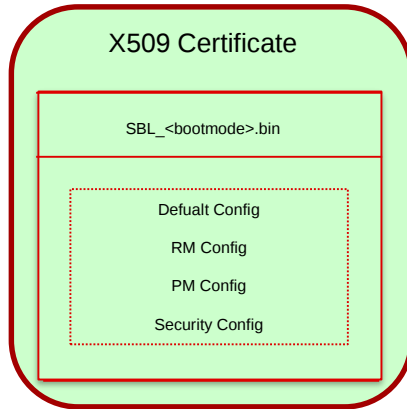
tispl.bin

HLOS Boot using SBL-Development Boot Flow

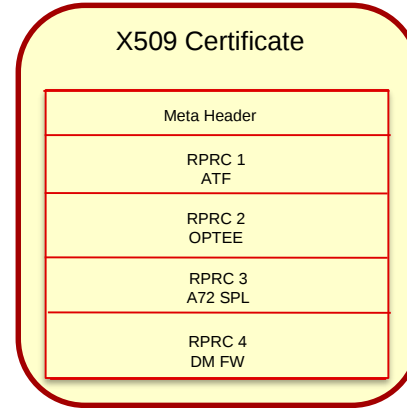


HLOS Boot using SBL-Development Boot Flow-2

- Image Format

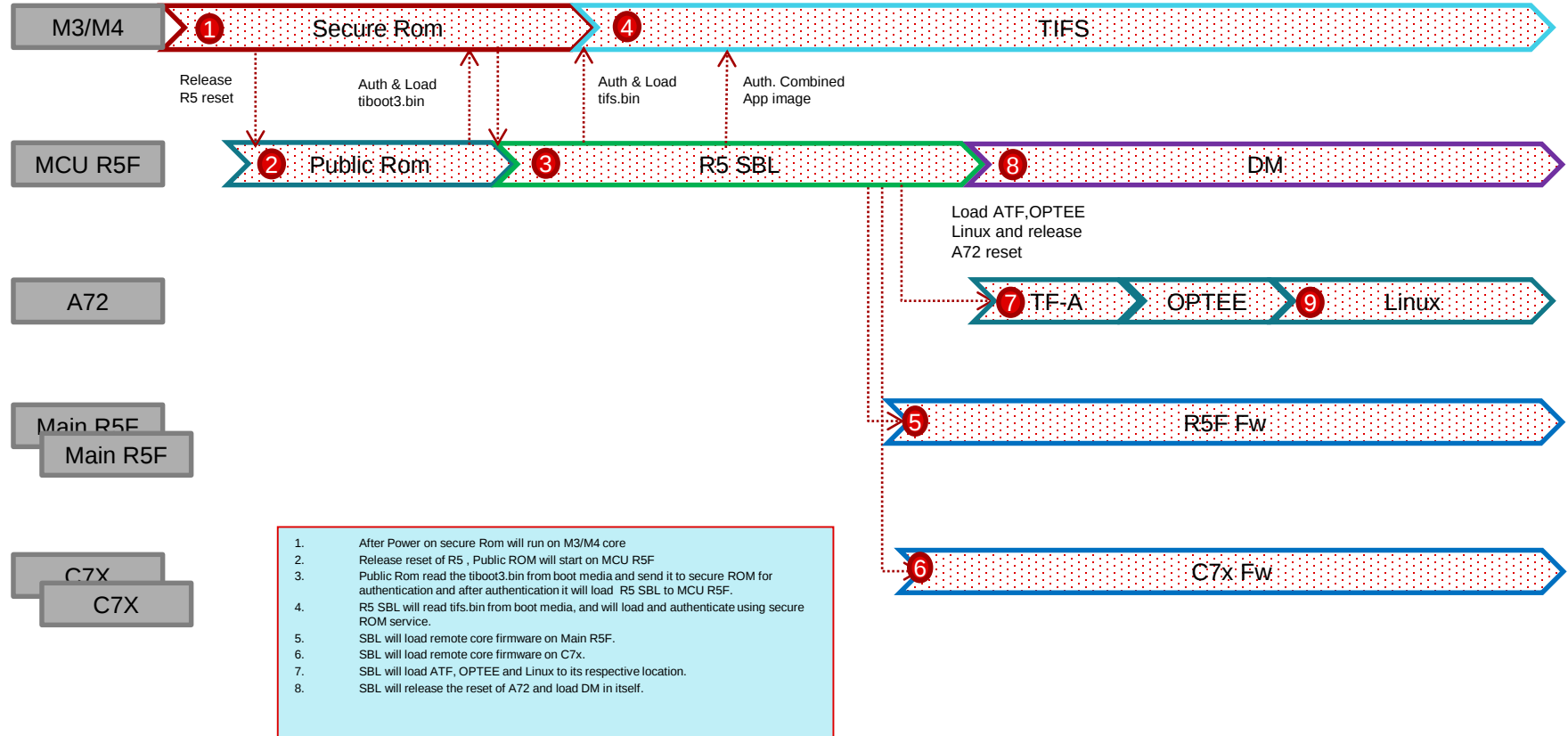


Tiboot3.bin



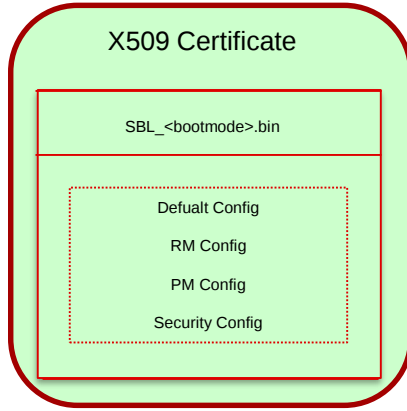
combined_dev.appimage

HLOS Boot using SBL-Optimized Boot Flow

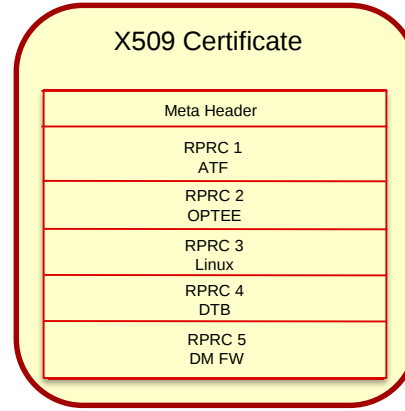


HLOS Boot using SBL-Optimized Boot Flow-2

- Image Format

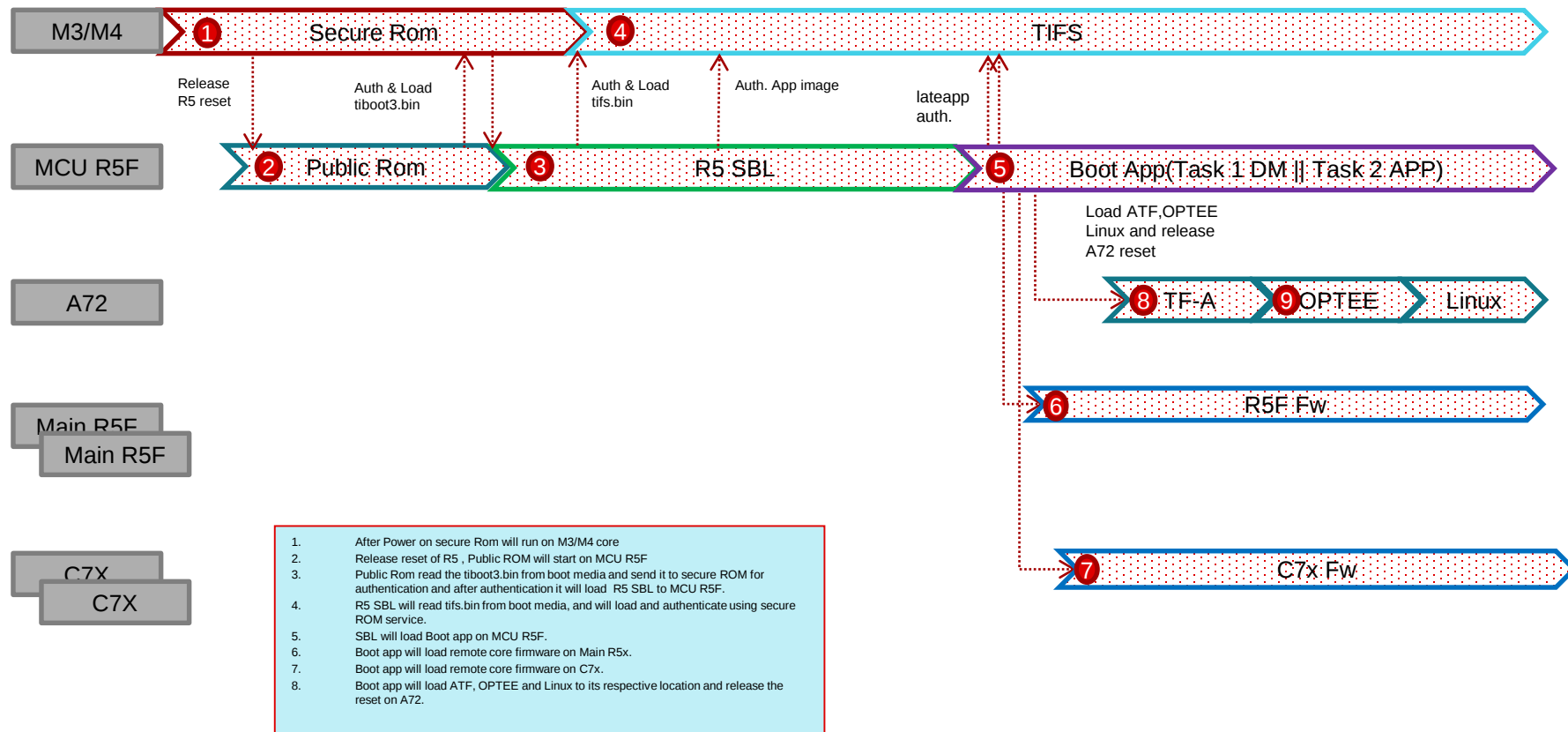


Tiboot3.bin



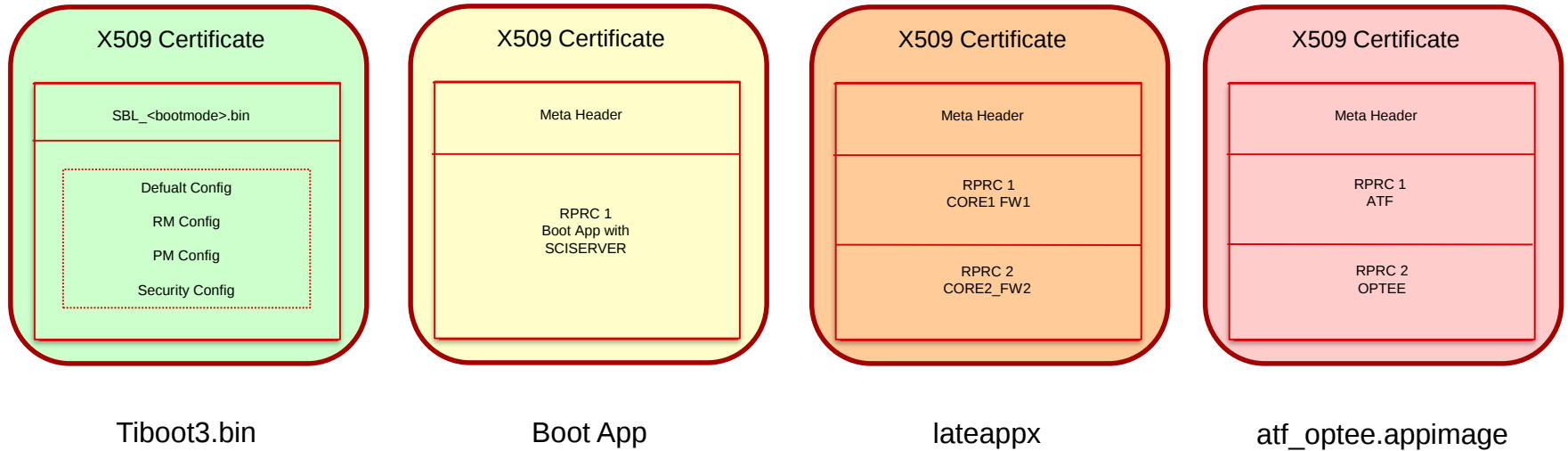
combined_dev.appimage

HLOS Boot using SBL- Boot APP (Tertiary bootloader)



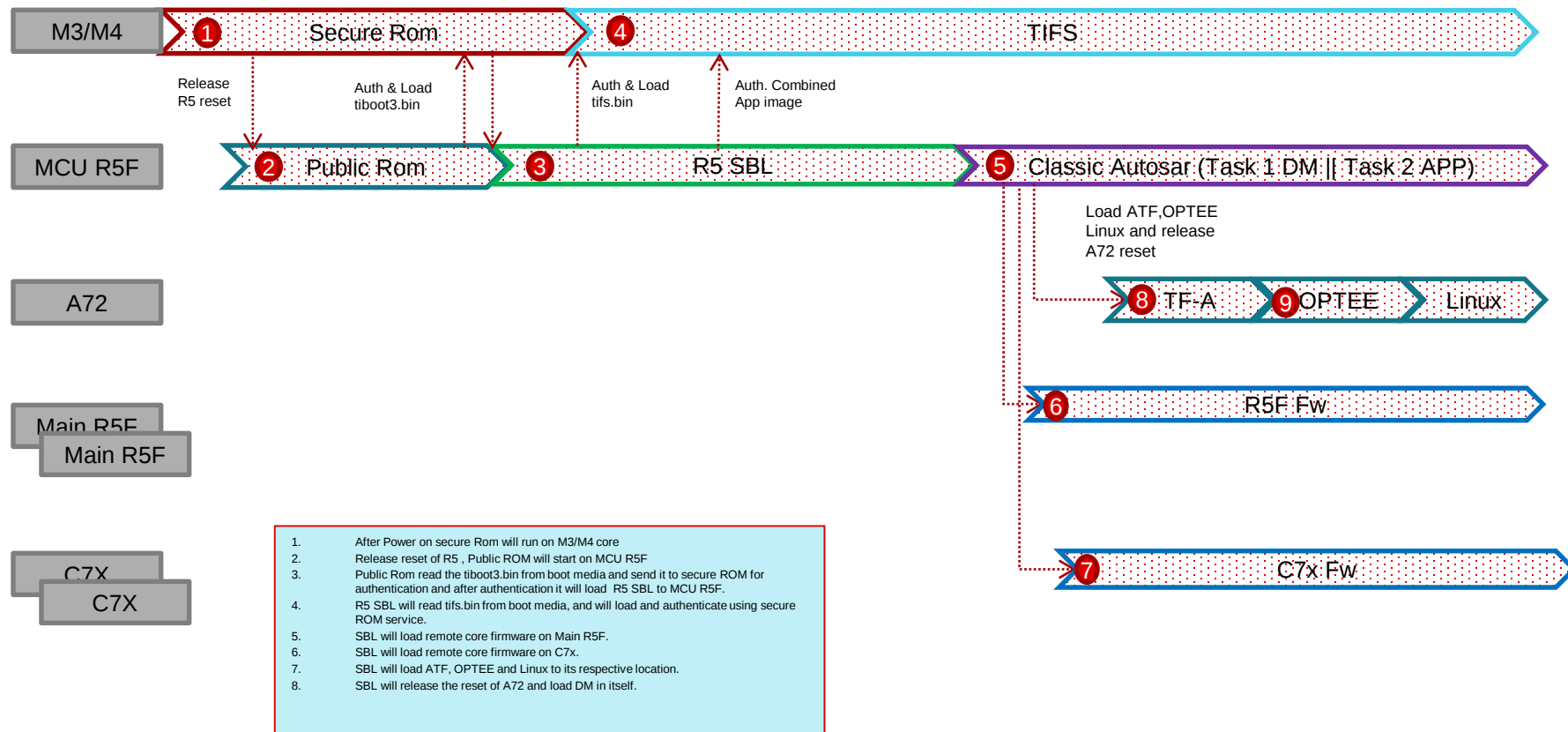
HLOS Boot using SBL- Boot APP (Tertiary bootloader) -2

- Image Format



Similar Format will be there
for tidtb_linux.appimage,
tikernelimage_linux.appimage

HLOS Boot using SBL- Early Linux + AUTOSAR



Documentation

- [J721S2 Linux Normal Boot Flow](#).
- [SBL Overview](#).
- [RTOS Combined app image](#).
- [RTOS BOOT APP](#).
- [System Firmware Authentication and Decryption Requests — TISCI User Guide](#)
- [Enable Flacon Boot Mode on AM68 device](#).