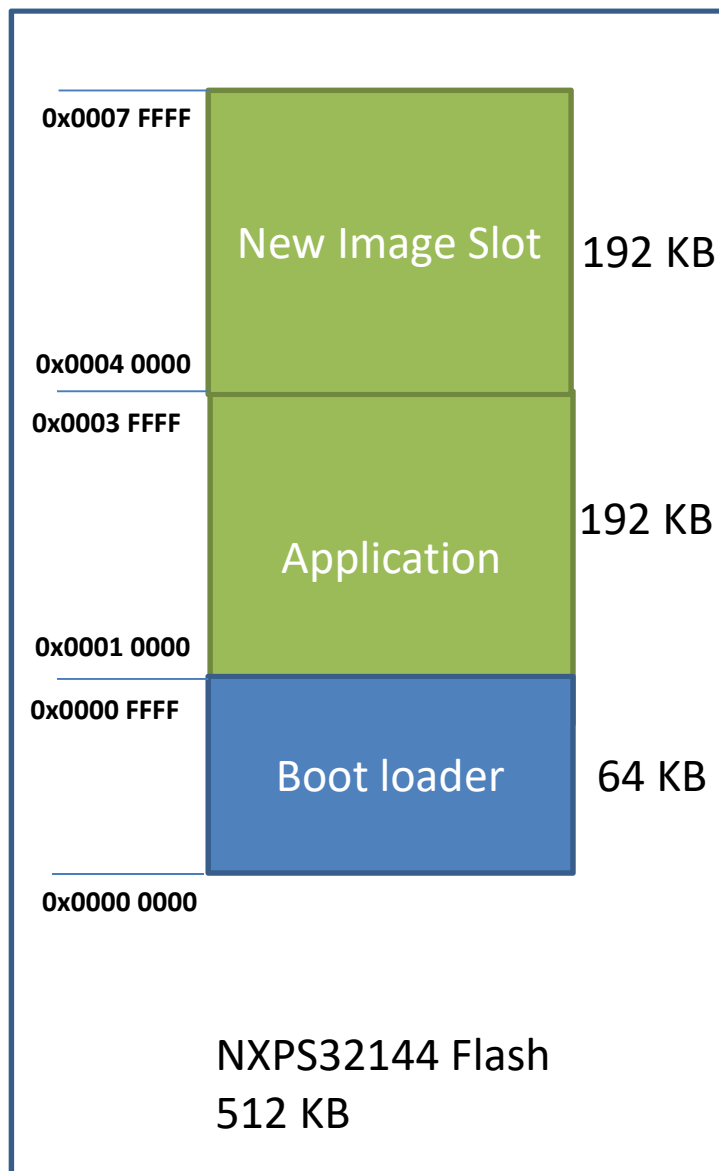


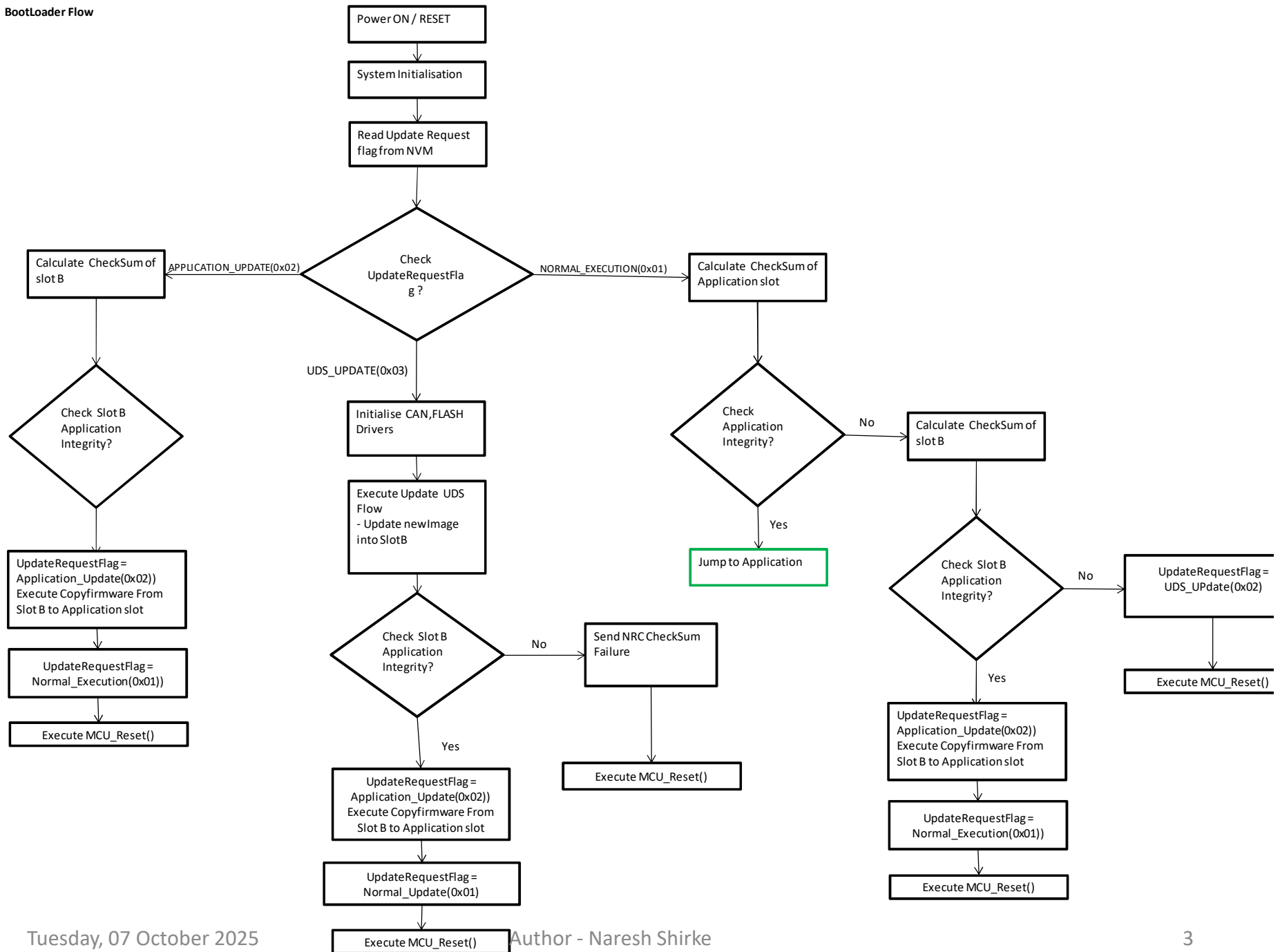
NXPS32K144_Bootloader Design

- Prepared By : Naresh Shirke Date : 6 Oct 2025



- Boot loader will write updated firmware into new image slot.
- Once the downloading procedure is completed boot loader will validate integrity.
- After integrity verification success boot loader will start writing from new image slot to application slot.

BootLoader Flow



Validation Strategy

- Unit testing of Low level driver CAN,FLASH,timer
- Unit testing high level module UDS_Updateflow, scheduler, CANTP
- Integration testing
- Bench testing complete EndtoEnd testing positive and negative scenario.
by sending hex file on CAN, power interruption, flash failure, UDS valid/invalid request.