

Bootloader

STM32H723ZG bootloader - firmware update via CAN/USB/UART, HMAC signing, anti-rollback, and safe-state preconditions.

Document ID	OV-SW-MAINMCU-BOOT
Version	0.1
Date	2026-08-08
Status	draft
Applies to	openvvvf-control-module, software-target-main-mcu
Product line	openvvvf
Normative references	OV-SAF-TARA-INDEX, OV-CA-SWM-INDEX

Placeholder / Under Revision - This page is incomplete or out of date and will be revised.

1. Bootloader

PLACEHOLDER

- This document will describe the main MCU bootloader and firmware-update mechanism. The old SWAD content will not be migrated directly.

1.1. Planned sections

1. Boot flow and recovery
2. CAN update protocol
3. USB/UART update protocol
4. HMAC-SHA256 firmware signing
5. Anti-rollback counter
6. Update preconditions and safe state
7. Key rotation and user-managed keys
8. Test cases and validation evidence