

Figure 14. Simplified diagram of the reset circuit

Software reset

The SYSRESETREQ bit in Cortex[®]-M4 Application Interrupt and Reset Control Register must be set to force a software reset on the device (refer to the STM32F3xx/F4xx/L4xx Cortex[®]-M4 programming manual (PM0214)).

Low-power mode security reset

To prevent that critical applications mistakenly enter a low-power mode, two low-power mode security resets are available. If enabled in option bytes, the resets are generated in the following conditions:

- Entering Standby mode: this type of reset is enabled by resetting nRST_STDBY bit in User option Bytes. In this case, whenever a Standby mode entry sequence is successfully executed, the device is reset instead of entering Standby mode.
- 2. Entering Stop mode: this type of reset is enabled by resetting nRST_STOP bit in User option bytes. In this case, whenever a Stop mode entry sequence is successfully executed, the device is reset instead of entering Stop mode.
- 3. Entering Shutdown mode: this type of reset is enabled by resetting nRST_SHDW bit in User option bytes. In this case, whenever a Shutdown mode entry sequence is successfully executed, the device is reset instead of entering Shutdown mode.

For further information on the User Option Bytes, refer to Section 3.4.1: Option bytes description.

Option byte loader reset

The option byte loader reset is generated when the OBL_LAUNCH bit (bit 27) is set in the FLASH CR register. This bit is used to launch the option byte loading by software.

6.1.3 Backup domain reset

The backup domain has two specific resets.

A backup domain reset is generated when one of the following events occurs:

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