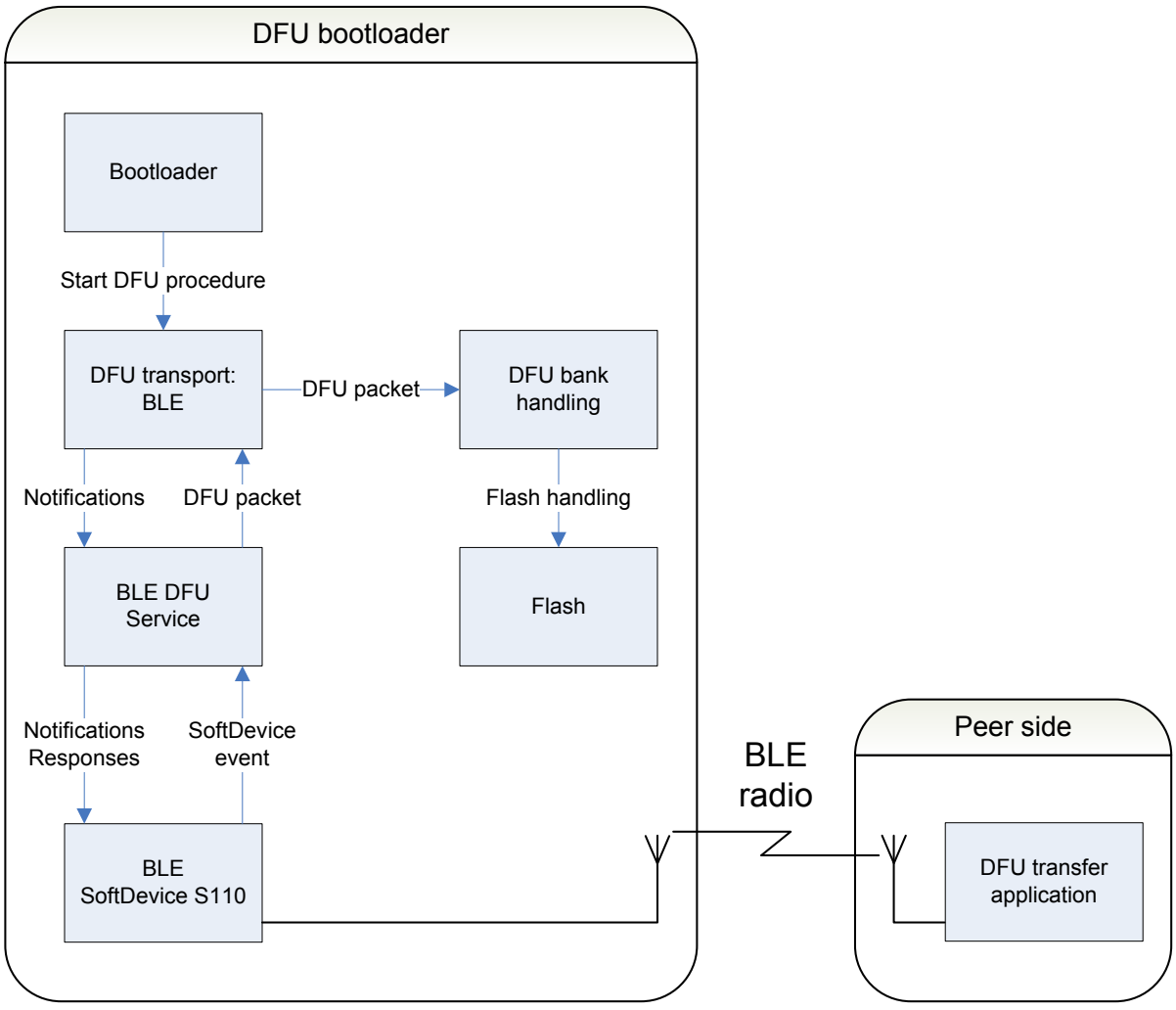
Architecture of the DFU process

This information applies to the following SoftDevices: ***S130, S132***

New firmware images can be transferred over two different transport protocols: BLE or using serial wire (HCI/UART). In both cases, the DFU bank handling is responsible for writing received data packets to flash memory.

The BLE transport uses a BLE service for data transfer (see BLE DFU Service) and relies on the S13x SoftDevice.

The following figure shows a schematic overview of the DFU process using BLE:

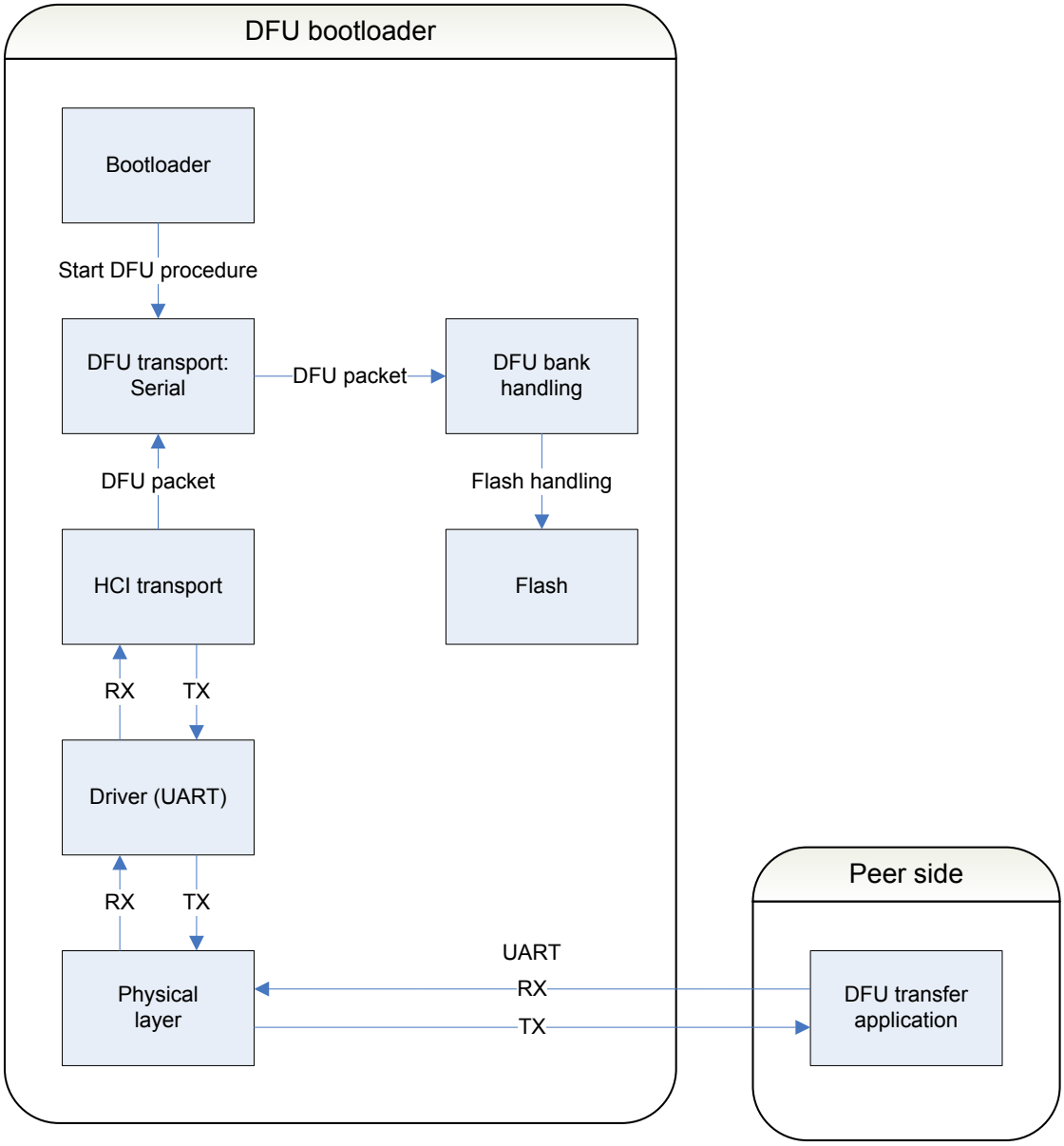


Architectural overview of the DFU process using the BLE transport protocol

Alternatively, new images can be transferred using HCI over UART (serial transport). The HCI transport layer increases robustness of the transfer. See HCI Transport for more information about UART_HCI, and Serial (HCI) packet format for more information about the packet format.

Serial transport does not use a SoftDevice. However, you must install a SoftDevice on your device to correctly create the Master Boot Record.

The following figure shows a schematic overview of the DFU process using with UART.



Architectural overview of the DFU process using serial transfer

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Please send us your feedback about the documentation! For technical questions, visit the Nordic Developer Zone <https://devzone.nordicsemi.com/questions/>.