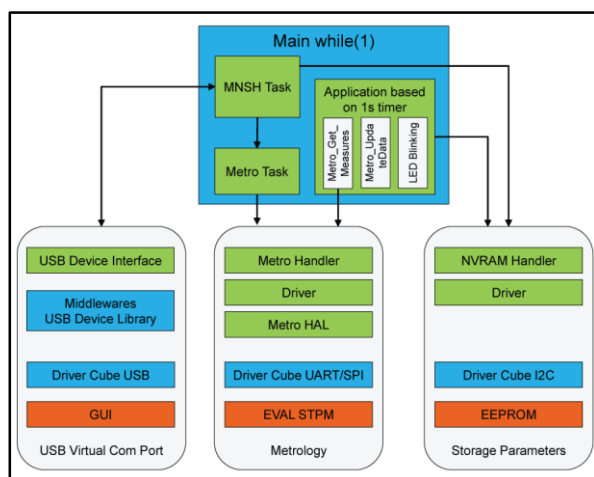


Three-phase firmware implementation for STM32F4 discovery kit and EVALSTPM32

Data brief



Description

The firmware implements three-phase application development using STPM3x and STM32F407 devices. It has been developed for the STM32F4-Discovery kit based on STM32F407VGT to interface with the EVALSTPM32, but it can easily be ported to other microcontrollers.

STM32 initialization is based on the STM32CubeMX tool chain and STPM driver integration is based on the IAR Tool chain with ST-LINK (embedded on board).

The firmware includes: STPM management (communication, reset, latch, etc.), full metrology measurement, NVM management with EEPROM storage; communication through USB in virtual com port mode, two timers for main state machine.

Features

- Complete metrology for 4 STPMs
- EEPROM support for saving parameters (optional)
- USB Virtual Com Port (VCP) for supporting GUI and LabTools
- Minishell (Command line parser) support for sending commands through USB
- STPM communication over UART or SPI
- STM32 handlers and drivers based on CubeMX
- Simple tasks based on timer

1 Revision history

Table 1: Document revision history

Date	Version	Changes
21-Jul-2016	1	Initial release.

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