STM32-MAT/TARGET

STM32 embedded target for MATLAB and Simulink

Data brief

Features

- Simulink applications configuration for STM32 microcontrollers.
- Available for 3 toolchains:
  - Atollic: TrueSTUDIO
  - IAR: EWARM
  - Keil: µVision4
- Automatic "C" code generation for STM32
- Processor In the Loop (PIL) with Usart RTioStream
- Reporting
  - Code generation
  - Code execution profiling
- STM32 peripherals Simulink library models

Description

The STM32 Embedded Target enables you to quickly deploy your application models in MATLAB and Simulink to STM32 MCUs.

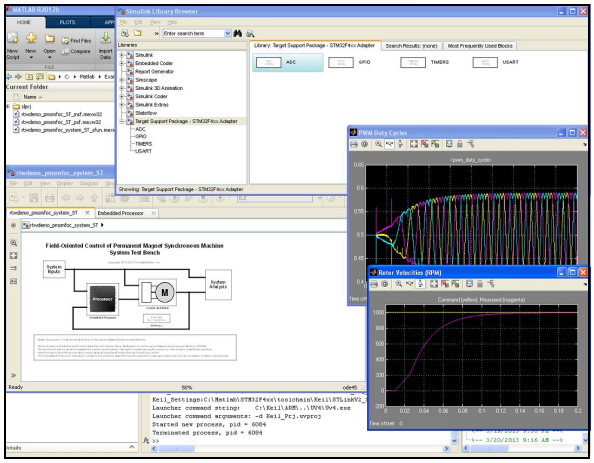
In a first step, it gives possibility to run Simulink application models on STM32 F4 target using Processor In the Loop (PIL) configuration and USART communication link.

The process from "C" code generation to programming STM32 F4 is fully automated. Code is built using one of three possible toolchains from Atollic, IAR or Keil.

Code generation report is automatically generated.

Code execution profiling report is automatically generated for PIL execution.

In a second step, STM32 Embedded Target provides a Simulink blockset library containing several STM32 F4 peripherals to set parameters and generate peripherals initialization "C" code.



Finally, generated code can be integrated to existing application or built and download to target.

These capabilities and functionalities are easy to use and are available as soon as STM32F4xx product folder and subfolders are added to the MATLAB path.

All source files are provided.

Ordering Information

STM32 embedded target for MATLAB and Simulink is available for free download from www.st.com/stm32-mat-target.

1 Revision history

Table 1. Document revision history

Date	Revision	Changes
04-Apr-2013	1	Initial release.

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