

## RapidSTM32

The content presented in this RapidSTM32 wiki describes our very first blockset and should be used as a concept and historical reference only. The software is no longer available.

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### [Frequently Asked Questions](#)

This section explains a few frequently asked questions.

### [Learn RapidSTM32 in A Day](#)

This tutorial aims at teaching beginners how to use RapidSTM32 Blockset in ONE DAY (approximately 6 hours). After completing the tutorials, you will have enough basic knowledge to use the Blockset to implement a variety of basic but useful applications such as:

- Real-time data acquisition into Matlab/Simulink
- Add your own signal processing algorithm in Matlab (m-script) language
- Control external hardware from Simulink
- Use digital input/output ports
- Generate PWM signals
- Simulate and actually display some data on a character LCD
- Send data to a PC via USB as a (Virtual) COM port
- Understand the basic architecture of the generated code
- Create an arbitrary function generator with Digital to Analog Module
- Create a data logger to micro SD card

Yes!! all those within 6 hours, no kidding. We are truly taking about Rapid Prototyping . That's [Why our duck can peel banana skin? :](#))

#### [Common "How to"](#)

This section shows basic common "how to" required for most RapidSTM32 projects.

1. [Getting Ready](#) (Setting up for RapidSTM32 Blockset)]]
2. [Create a new model and set it to use RapidSTM32 target](#)
3. [Set FiO Std in USB In Application Programming \(IAP\) Mode](#)
4. [Initiate the Build Process](#)
5. [Set FiO Std in Run Custom User Program Mode](#)
6. [Set FiO Std in Mass Storage Device Mode](#)

#### [Advanced "How to"](#)

This section shows some useful "how to" for advanced users.

1. [Create a blank template for manual C coding for use with FiO boards](#)
2. [Modify or add custom C code for FiO Boards from Keil RVMDK](#)
3. [Generate and use the generated C code with Non-FiO Boards](#)

#### [RapidSTM32 Blockset Reference](#)

This section provides reference information about the Blockset and its usages.

1. [RapidSTM32 Basics](#)
2. [Command-Line Function Reference](#)
  - [Communication](#)
  - [Programming](#)
3. [Block Reference](#)
  - [Add-on Modules](#)
  - [Device Configuration](#)
  - [On-Chip Peripherals](#)

## [Sample Projects](#)

This section shows various sample projects from basic interfaces to external hardware/peripherals to a complete Automatic Control and Digital Signal Processing (DSP) design and analysis projects. These projects aims at showing the work flow and benefits of Model-based design and Rapid Prototyping at works. Before diving in these sample projects, it is recommended that you familiarize yourself with RapidSTM32 from [Learn RapidSTM32 in A Day](#).

Sample projects are as follows.

- [A Fault-Tolerant Fuel Control System \(Integrate RapidSTM32 Blockset with existing Simulink demos\)](#)
- [Measure water level with a pressure sensor](#)
- [[Open Loop Example: FiO ADC to Simulink Scope and Simulink Slide bar to PWM]]
- [[Closed Loop Example: FiO ADC to Simulink algorithm to FiO PWM]]
- [A simple GPS Simulation Model](#)
- [GPS data logger](#)

## RapidSTM32 Training

This page list available training workshop and materials. Example workshop include:

HIL Basic Concept Workshop

RapidSTM32 Community

This section shows:

RapidSTM32 Users List

Contributions from RapidSTM32 community

Download Repository

Blockset download

Demo files download

Training videos download