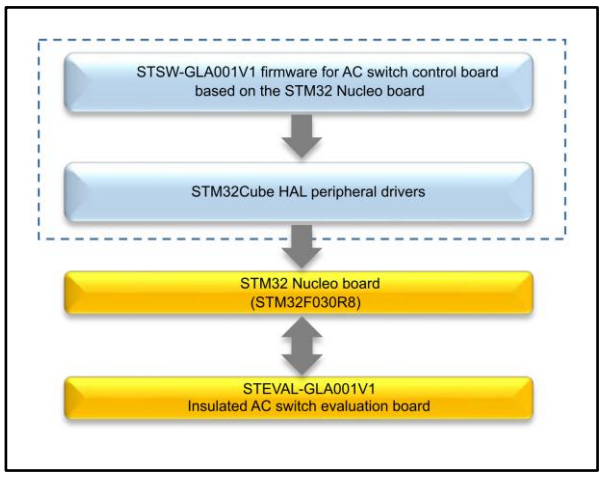
STSW-GLA001V1

AC switch control evaluation firmware

Data brief



Features

- Based on the STM32Cube embedded software libraries
- Support for the NUCLEO-F030R8 board
- Configuration and independent control of three TRIACs and AC switches embedded in the STEVAL-GLA001V1 evaluation board:
  - On/Off control (DC and pulse modes)
  - Phase control mode
  - Timer mode
- Hardware user interface via push-buttons and switches
- Automatic mains frequency detection at switch-on
- PC user interface through a serial terminal as Windows HyperTerminal or Tera Term to:
  - configure the firmware parameters
  - monitor the main firmware variables
  - control command lines (i.e., start and stop commands)

Description

The STSW-GLA001V1 firmware is designed to be used with the STEVAL-GLA001V1 insulated AC switch control evaluation board to evaluate its embedded TRIACs and AC switches, implementing different control modes.

The firmware is developed from the STM32Cube embedded software libraries for STM32F0 series using the IAR Embedded Workbench for ARM.

The firmware also lets you interact with the STEVAL-GLA001V1 hardware user interface and allows the configuration of some parameters using a PC user interface.

Thanks to the dynamic storage of the configuration parameters in a dedicated section of the Flash memory embedded in the STM32 microcontroller, you can change any parameter any time without needing to compile and program the MCU via third-party tools.

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Revision history

Table 1: Document revision history

Date	Version	Changes
17-Nov-2017	1	First release.

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