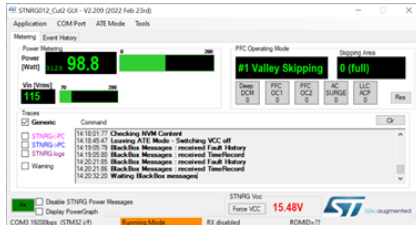# Graphical user interface for STEVAL-PCC020V2 USB to I²C/UART interface for STNRG012 products

Features

- Real-time monitoring of the STNRG012 PFC and LLC parameters
- Decoding of the STNRG012 specific messages
- Automated or semiautomated PFC calibration
- Access to the NVM parameters
- Access to the fault and event history
- Access to the optional E²P for specific patch uploads
- Interface board firmware upgrade through the GUI

Description

The STSW-STNRG012GUI graphical user interface monitors and configures the main parameters of the STNRG012 PFC/LLC controller.

The GUI allows monitoring the controller key parameters in real-time (instantaneous power, PFC mode of operation, input voltage, V_{CC}).

The STSW-STNRG012GUI also provides an easy and intuitive way of tuning the STNRG012 NVM parameters (each of them listed in the GUI).

To facilitate the designers' activity, the STSW-STNRG012GUI embeds a comprehensive wizard to calibrate the PFC parameters. The calibration can be performed automatically (assuming that the AC source and the DC load have GPIB remote capabilities) or semiautomatically (the GUI prompts the user for actions on the instruments).

In case an optional E²P is available in the design, the STSW-STNRG012GUI is able to decode the messages of the fault and event history stored in the E²P memory. It can program also the E²P memory with a firmware patch if needed.

The STSW-STNRG012GUI requires a STEVAL-PCC020V2 interface board connected to an STNRG012 controller and a PC connected via USB.

Product summary table	
Graphical user interface for STEVAL-PCC020V2 USB to I²C/UART interface for STNRG012 products	STSW-STNRG012GUI
USB to I²C/UART interface board for STNRG digital power controller products	STEVAL-PCC020V2
Digital combo multi-mode PFC and time-shift LLC resonant controller for AC and DC input line	STNRG012
Applications	Lighting and Controls
	Power Supplies and Converters

Revision history

Table 1. Document revision history

Date	Revision	Changes
21-Apr-2022	1	Initial release.

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