

Data brief

# Graphical user interface for the STEVAL-PCC020V2 USB to I<sup>2</sup>C/UART interface board for STNRG011/STNRG011A products





Product summary table		
Graphical user interface for the STEVAL-PCC020V2 USB to I <sup>2</sup> C/UART interface board for STNRG011	STSW- STNRG011GUI	
USB to I <sup>2</sup> C/UART interface board for STNRG digital power controller products	STEVAL-PCC020V2	
Digital combo multi-mode PFC and time-shift LLC resonant controller	STNRG011	
Applications	Lighting and Controls Power Supplies and Converters	

#### **Features**

- Real-time monitoring of STNRG011 PFC and LLC parameters
- Decoding of STNRG011/STNRG011A specific messages
- Automated or semi-automated PFC calibration
- Access to NVM parameters
- Access to Fault and Event history
- Access to optional E<sup>2</sup>P for specific patch upload
- STEVAL-PCC020V2 interface board firmware upgrade through GUI

## **Description**

The STSW-STNRG011GUI graphical user interface is used to monitor and configure the mains parameters of the STNRG011/STNRG011A PFC/LLC controllers.

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

The STSW-STNRG011GUI also provides an easy and intuitive way of tuning the STNRG011/STNRG011A NVM parameters (each of them listed in the GUI).

To facilitate supply designers' activity, the STSW-STNRG011GUI embeds a comprehensive wizard to calibrate the PFC parameters. The calibration can be performed automatically (assuming AC source and DC load have GPIB remote capabilities) or semi-automatically (the GUI prompts the user for actions on the instruments).

In case an optional  $E^2P$  is available in the design, the STSW-STNRG011GUI is able to decode Faults and Event history messages stored in the  $E^2P$  memory. It can program also the  $E^2P$  memory with a firmware patch if needed.

The STSW-STNRG011GUI requires an STEVAL-PCC020V2 interface board connected to an STNRG011/STNRG011A controller and a PC via USB.

The GUI is compatible with WindowsXP, Windows 7/8,10. No specific third-party software is needed.



# **Revision history**

Table 1. Document revision history

Date	Version	Changes
23-Feb-2018	1	Initial release.
18-Jan-2021	2	Added STEVAL-PCC020V2 compatibility information.
04-Apr-2022	3	Added STNRG011A reference.

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