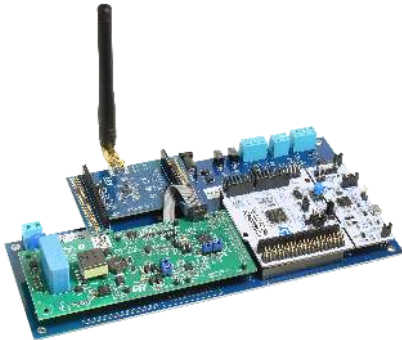## ST8500 Hybrid PLC&RF connectivity development kit

Features

- Hybrid PLC&RF connectivity development kit based on ST market-proven and widely used connectivity chipsets ST8500, STLD1 and S2-LP, respectively as protocol controller, PLC line driver and RF transceiver
- Modular board architecture:
  - EVALMODST8500-1, full-feature PLC module based on ST8500 and STLD1
  - X-NUCLEO-S2868A2 for evaluation of RF connectivity in the 863-870 MHz band
  - NUCLEO-G070RB with STM32G070RB microcontroller as programmable application controller and interface to PC thanks to the onboard ST-LINK acting also as USB Virtual COM port
  - ST8500GH-MB base board for module interconnection plus RS485 and CAN bus connectivity to develop Smart Connectivity applications
- 12 V, 1 A universal DC adapter included for easy start and usage
- Easy expansion of the application functionalities through the STM32 Nucleo open development platform, with a wide choice of specialized shields to be connected to the NUCLEO-G070RB

Application

- Smart Infrastructure
- Smart Industrial
- Smart Metering
- Smart Grid
- Smart City
- Smart Lighting

Product status link
EVLKST8500GH868

Description

The EVLKST8500GH hybrid connectivity solution for the ST8500 SoC platform combines the advantages of both PLC and RF technologies to enable applications with the best coverage in any network conditions and topologies.

You can easily explore features and benefits of the ST hybrid PLC&RF solution using the EVLKST8500GH868 kit together with the STSW-ST8500GH firmware and documentation package.
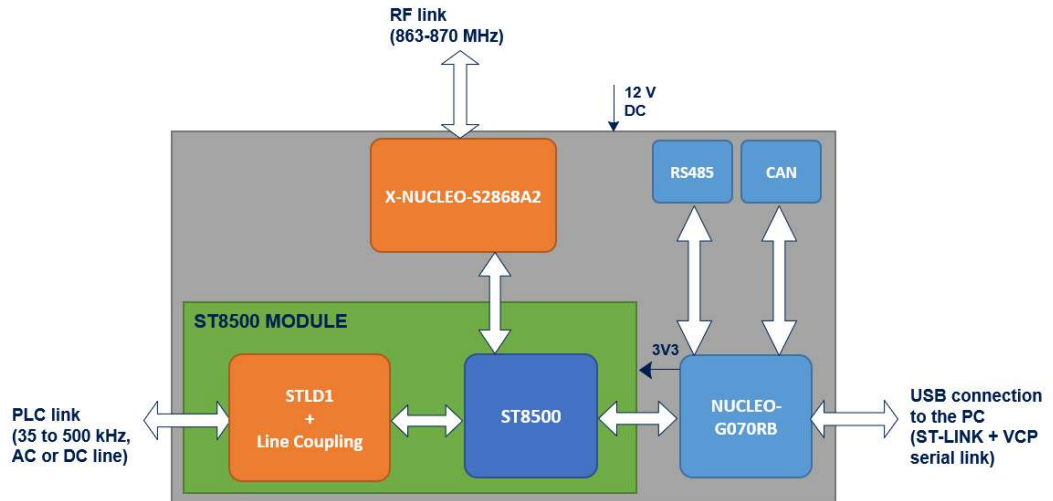
Messages between two nodes in the PLC&RF hybrid network are sent over the best available medium PLC or RF. The media selection for each link in the network is done automatically and adjusted dynamically, enabling highly efficient hybrid mesh networking.

The ST hybrid PLC&RF solution is based on open standards and enables seamless integration into existing G3-PLC networks and adoption in multiple applications and systems.

Note that at least two EVLKST8500GH868 kits must be ordered to test hybrid PLC&RF connectivity between two nodes.

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DB4329 - Rev 1 - November 2020
For further information contact your local STMicroelectronics sales office.

www.st.com

1 Block diagram

Figure 1. Block diagram

Revision history

Table 1. Document revision history

Date	Version	Changes
12-Nov-2020	1	Initial release.

Contents

IMPORTANT NOTICE – PLEASE READ CAREFULLY