ST8500 programmable power line communication modem
System on Chip evaluation kit

Data brief

Features

- Power line communication evaluation kit based on ST8500 and STLD1 devices
- Complete power line communication (PLC) reference design, suitable to evaluate several narrow-band PLC protocols (G3, PRIME, etc.) in the frequency range up to 500 kHz
- Modular board architecture
  - ST8500 full performance PLC module including the companion STLD1 line driver
  - STM32 microcontroller mother board for system management, application host controller and interface to PC
  - STEVAL-ISA175V1, wide-range input voltage, 9.4 W power supply board based on VIPER26HD
- Optional 12 - 15 V DC input available for laboratory tests without AC mains connection

Description

Based on the ST8500 power line communication System on Chip, the EVALKITST8500-1 evaluation kit embeds all the functions required for a turnkey power line communication network. Depending on the PLC protocol targeted, different firmware releases should be loaded on the host Flash memory. Please check software release availability with your local STMicroelectronics sales office.

Intuitive graphical user interface (GUI) for the Windows® environment allows the user to upgrade the firmware release, configure and control the evaluation kit.
1 Block diagram

Figure 1. Block diagram
## Revision history

Table 1. Document revision history

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<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
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<tbody>
<tr>
<td>15-Nov-2017</td>
<td>1</td>
<td>Initial release.</td>
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