

EVALKITST75MM-1

ST75MM METERS AND MORE® compliant power line communication demonstration kit

Data brief



Features

- METERS AND MORE compliant power line communication (PLC) demonstration and development kit based on the ST75MM system-on-chip
- Suitable for PLC evaluation over AC mains network

- Flexible two-board architecture:
 - EVALST75MM-1: PLC board based on the ST75MM power line networking system-on-chip compliant to the METERS AND MORE standard
 - EVLALTAIR900-M1: wide-range input voltage, 7.5 W power supply board based on the ALTAIR04-900 quasiresonant current-mode SMPS controller
- STM32 on-board microcontroller to manage the ST75MM device and to facilitate development of a stand-alone PLC node
- USB and JTAG direct access to the STM32 host for programming and usage
- Suitable for CENELEC EN50065 compliant applications in the range of 95 - 148.5 kHz

Description

Built around the ST75MM power line networking system-on-chip in compliance with the METERS AND MORE standard, the EVALKITST75MM-1 embeds all the additional functions required for a turnkey power line communication node: the AC power supply based on the ALTAIR4-900 and the STM32 microcontroller to either control the system as a stand-alone application or to connect the EVALKITST75MM-1 to an external host.

The typical application environment consists of two or more EVALKITST75MM-1 devices connected to the same mains line, to evaluate the performance in a communication system.

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office

Block diagram EVALKITST75MM-1

Block diagram

EVALKITST75MM-1 Power supply board LINE **EVLALTAIR900-M1** AC mains Power supply unit **NEUTRAL** connector 13 V 3.3 V 3.3 V USB, JTAG, GPIO STM32 AC line ST75MM Microcontroller coupling connectors EVALST75MM-1

Figure 1: EVALKITST75MM-1 functional block diagram

EVALKITST75MM-1 Revision history

Revision history

Table 1: Document revision history

Date	Revision	Changes
16-Oct-2017	1	Initial release.

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