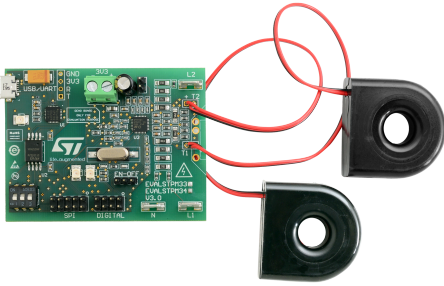


## Dual-phase energy metering evaluation board with 2 current transformers based on the STPM34



*EVALSTPM34 board*

### Features

- 0.2% accuracy dual or split-phase meter
- $V_{nom(RMS)} = 140$  to  $300$  V,  $I_{nom}/I_{max(RMS)} = 5/100$  A,  $f_{lin} = 50/60$  Hz  $\pm$  10%
- Connector for USB isolated hardware programmer tool STEVAL-IPE023V1 and PC GUI
- USB-to-UART isolated connector to PC GUI using virtual COM port
- SPI/UART switch for device peripheral selection
- 2 programmable LEDs on board
- Digital expansion to external system-on-chip or MCU
- 3.3 V power supply: external or through STEVAL-IPE023V1 isolated USB board
- IEC61000 standard compliant
- RoHS compliant

#### Product status link

[EVALSTPM34](#)

#### Product label



### Application

- Energy metering solutions
- Smart metering systems

### Description

The EVALSTPM34 evaluation board is a class 0.2, dual-phase meter with 2 CTs for power line systems with  $V_{nom} = 140$  to  $300$  V<sub>(RMS)</sub>,  $I_{nom} / I_{max} = 5/100$  A<sub>(RMS)</sub>,  $f_{lin} = 50/60$  Hz  $\pm$  10% and  $T_{amb} = -40$  to  $+85$  °C.

Measured active/reactive power can be output from two programmable LEDs on the board.

The board can be interfaced with a PC running evaluation software through an isolated USB-to-UART port, or through the STEVAL-IPE023V1 USB (SPI) isolated interface tool for configuration and data reading.

The board also has SPI/UART pins available to interface a microcontroller for application development.

## Revision history

**Table 1. Document revision history**

Date	Version	Changes
31-Mar-2014	1	Initial release
28-Apr-2022	2	Added <a href="#">Section Application</a> .

## Contents

Revision history .....	2
List of tables .....	4

## List of tables

**Table 1.** Document revision history . . . . . 2

**IMPORTANT NOTICE – READ CAREFULLY**

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgment.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to [www.st.com/trademarks](http://www.st.com/trademarks). All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2022 STMicroelectronics – All rights reserved