

# STEVAL-IPE016V1

Single-phase energy metering demonstration board with one current transformer and one shunt resistor based on the STPM10

Data brief

#### **Features**

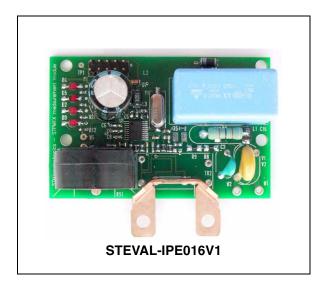
- Single-phase, class 0.5 accuracy
- $V_{nom}(RMS) = 140 \text{ to } 300 \text{ V}, I_{nom} / I_{max}(RMS) = 2/20 \text{ A}, f_{lin} = 45 \text{ to } 65 \text{ Hz}$
- Tamper detection for power line systems
- Capacitive power supply
- SPI interface connector
- RoHS compliant

### **Description**

The STEVAL-IPE016V1 demonstration board is a class 0.5, single-phase microprocessor-based meter with tamper detection for power line systems of  $V_{nom}$  = 140 to 300  $V_{RMS}$ ,  $I_{nom}/I_{max}$  = 2/20  $A_{RMS}$ ,  $f_{lin}$  = 45 to 65 Hz and  $T_{amb}$  = -40 to +85 °C.

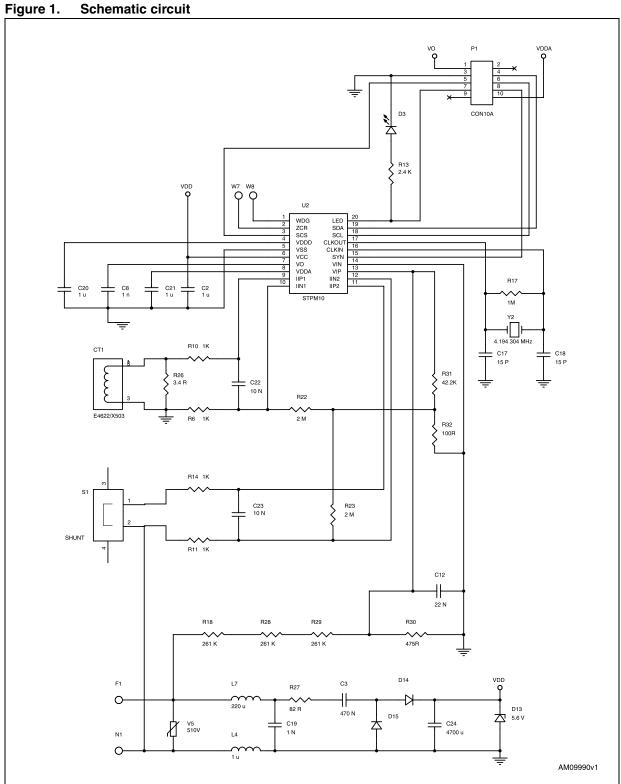
The tamper detection feature implements one current transformer and one shunt resistor to monitor the live and neutral wire currents.

The STEVAL-IPE016V1 demonstration board has a 10-pin connector to be interfaced to a microcontroller or to a PC through a parallel or serial programmer for reading data.



STEVAL-IPE016V1 **Schematic** 

#### **Schematic** 1



STEVAL-IPE016V1 Revision history

# 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
22-Dec-2011	1	Initial release.

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