

## STEVAL-IPE017V1

# Single-phase energy metering demonstration board with one shunt resistor based on the STPM10

Data brief

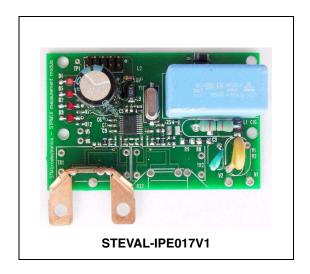
#### **Features**

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

### **Description**

The STEVAL-IPE017V1 demonstration board is a class 0.5, single-phase microprocessor-based meter 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. One shunt resistor is used for current sensing.

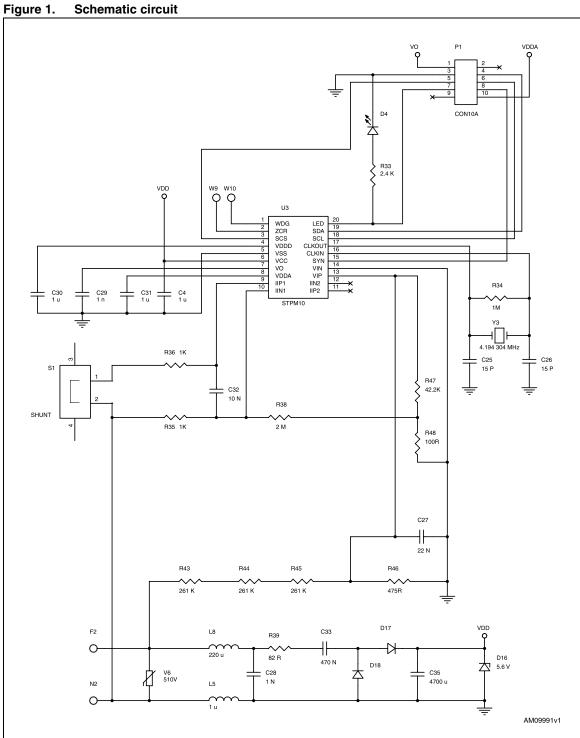
The STEVAL-IPE017V1 demonstration board has a 10-pin connector to be interfaced to a microcontroller or to a PC through a parallel or serial programmer for reading data.



**Schematic** STEVAL-IPE017V1

#### **Schematic** 1

Schematic circuit



2/4 Doc ID 022629 Rev 1 STEVAL-IPE017V1 Revision history

# 2 Revision history

Table 1. Document revision history

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

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