



STEVAL-IPE017V1

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

Data brief

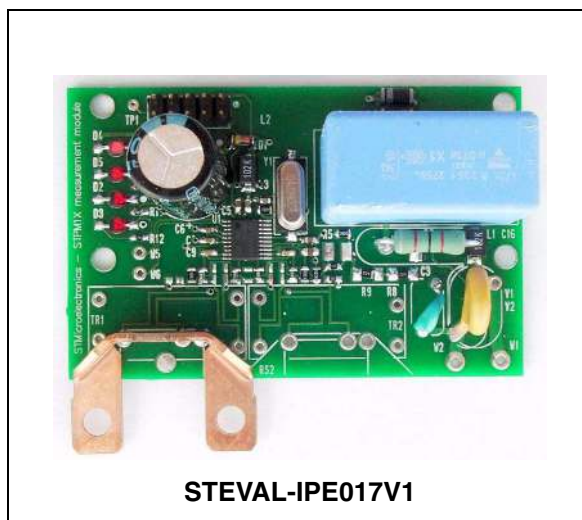
Features

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

Description

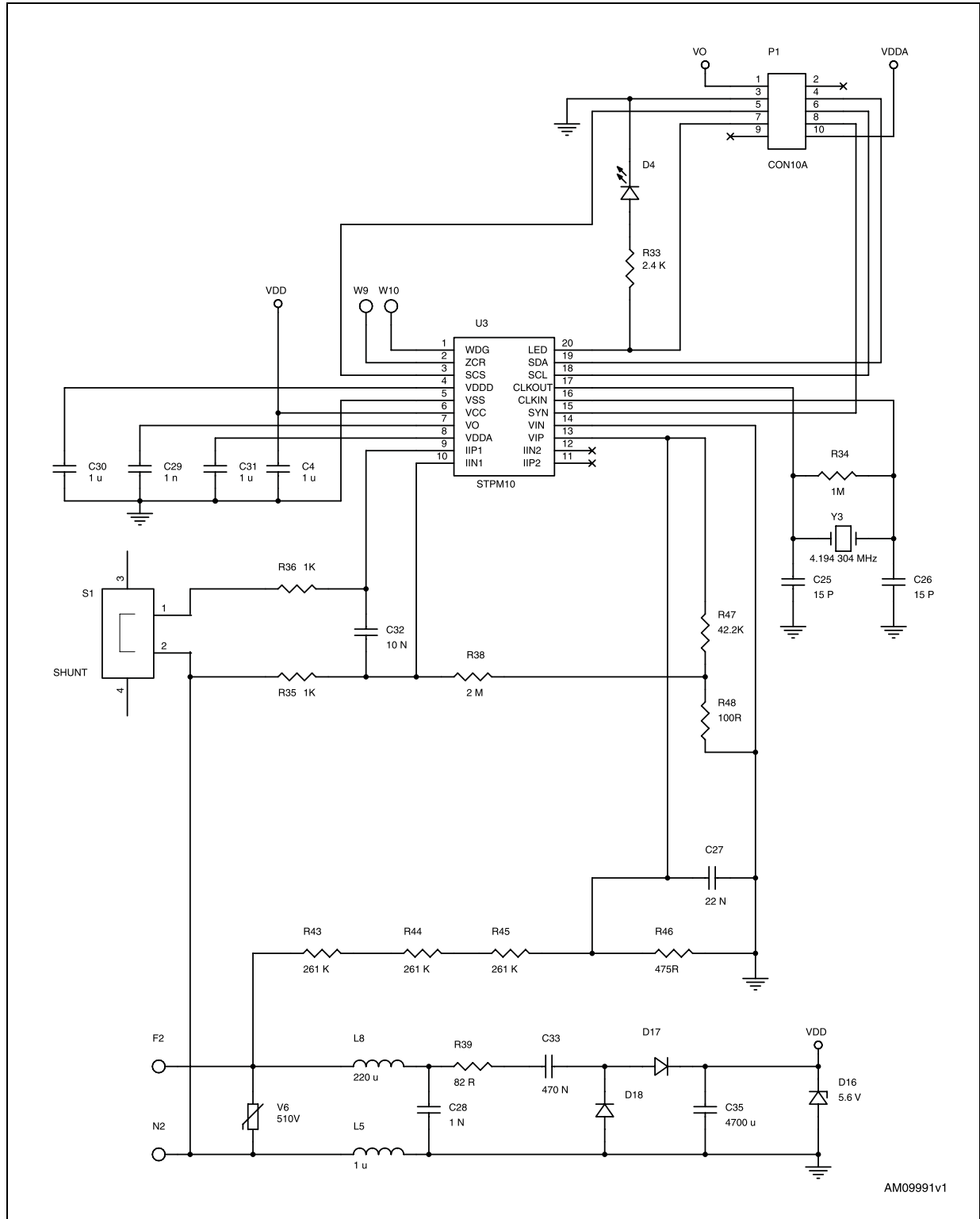
The STEVAL-IPE017V1 demonstration board is a class 0.5, single-phase microprocessor-based meter for power line systems of $V_{\text{nom}} = 140$ to 300 V_{RMS}, $I_{\text{nom}}/I_{\text{max}} = 2/20$ A_{RMS}, $f_{\text{lin}} = 45$ to 65 Hz and $T_{\text{amb}} = -40$ to $+85$ °C. One shunt resistor is 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.



1 Schematic

Figure 1. Schematic circuit



AM09991v1

2 Revision history

Table 1. Document revision history

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

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