



STEVAL-IPE018V1

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

Data brief

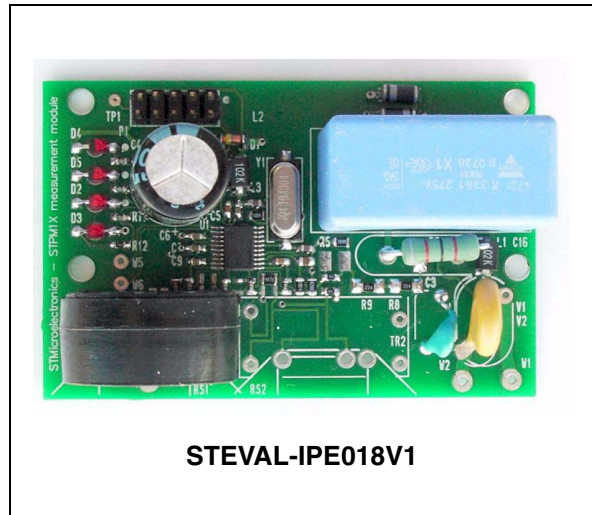
Features

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

Description

The STEVAL-IPE018V1 demonstration board is a class 0.5, single-phase microprocessor-based meter for power line systems of $V_{\text{nom}} = 140 \text{ to } 300 \text{ V}_{\text{RMS}}$, $I_{\text{nom}} / I_{\text{max}} = 2/20 \text{ A}_{\text{RMS}}$, $f_{\text{lin}} = 45 \text{ to } 65 \text{ Hz}$ and $T_{\text{amb}} = -40 \text{ to } +85 \text{ }^{\circ}\text{C}$. One current transformer is used for current sensing.

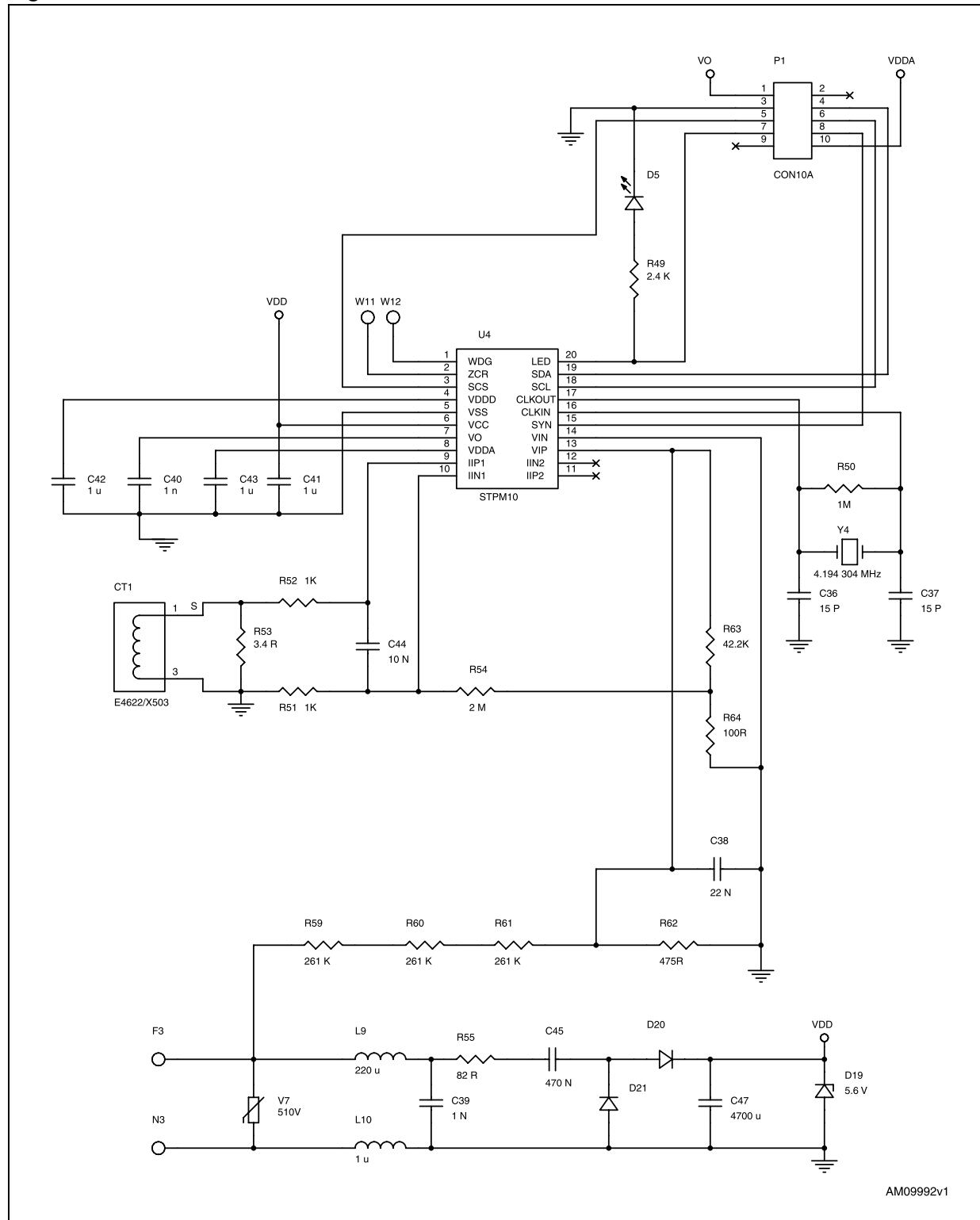
The STEVAL-IPE018V1 demonstration board has a 10-pin connector to be interfaced to a microcontroller or to a PC through a parallel or serial programmer for reading data.



STEVAL-IPE018V1

1 Schematic

Figure 1. Schematic circuit



2 Revision history

Table 1. Document revision history

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

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