



# STEVAL-IPE018V1

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

Data brief

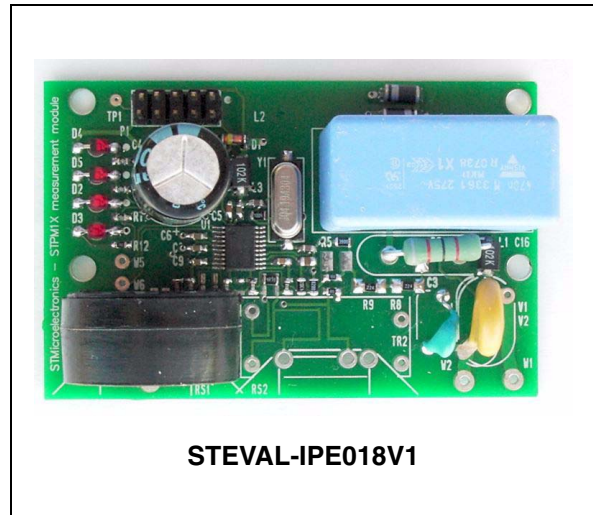
## Features

- Single-phase, class 0.5 accuracy
- $V_{\text{nom}}(\text{RMS}) = 140$  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

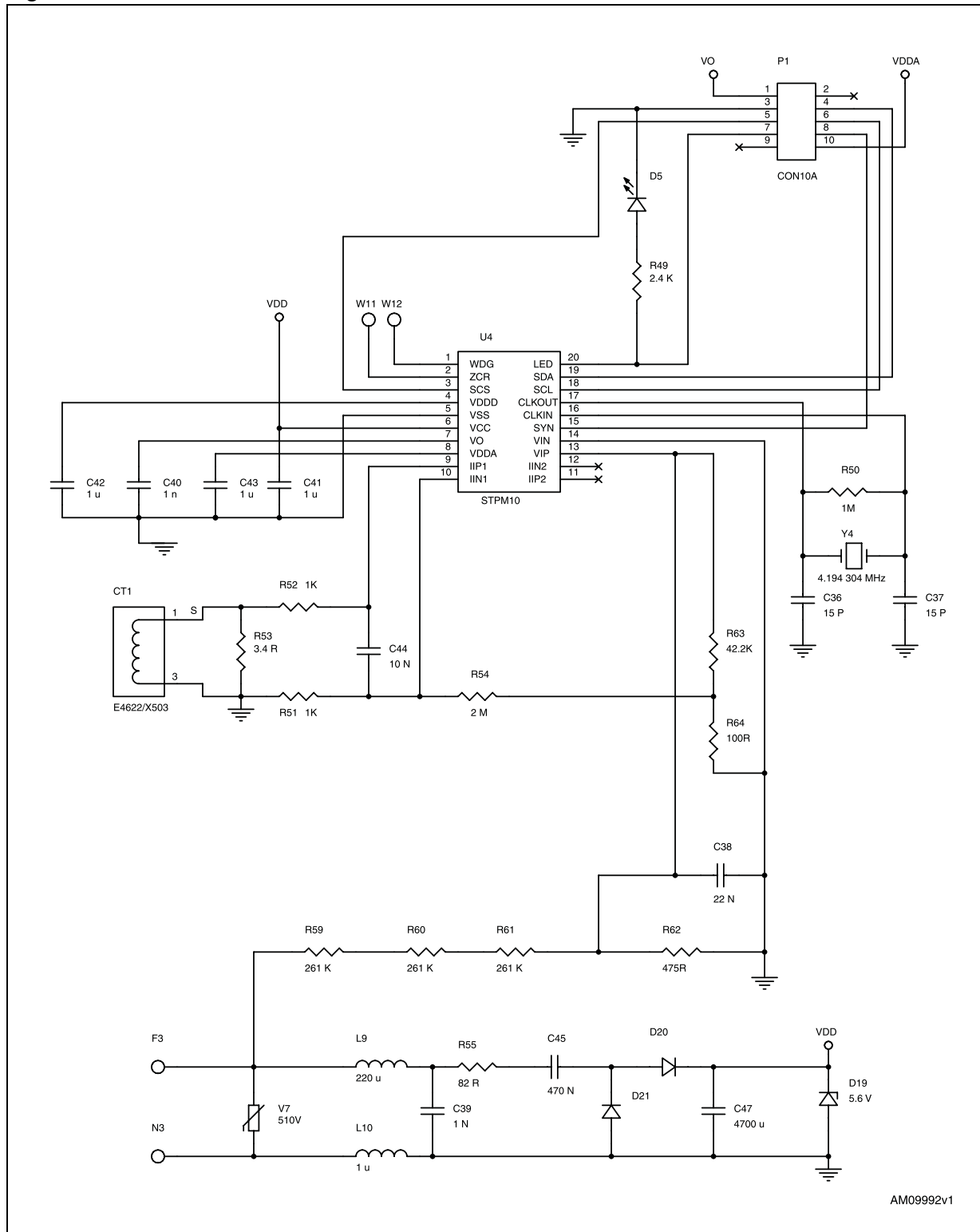
The STEVAL-IPE018V1 demonstration board is a class 0.5, single-phase microprocessor-based meter for power line systems of  $V_{\text{nom}} = 140$  to  $300$  V<sub>RMS</sub>,  $I_{\text{nom}} / I_{\text{max}} = 2/20$  A<sub>RMS</sub>,  $f_{\text{lin}} = 45$  to  $65$  Hz and  $T_{\text{amb}} = -40$ 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



# 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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