



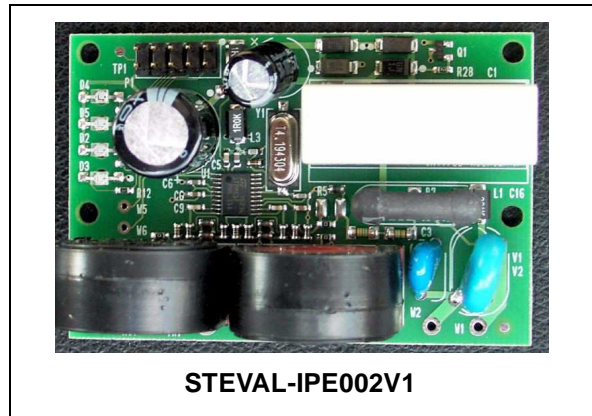
# STEVAL-IPE002V1

## Electricity Meter (mono phase) - Measurement Board 2 Current Transformers

Data Brief

### Features

- Single-phase, 0.5 class accuracy guaranteed
- $U_{NOM}(RMS) = 140$  to  $300V$ ,  
 $I_{NOM}/I_{MAX}(RMS) = 2/20A$ ,  $f_{LIN} = 45$  to  $65Hz$ ,  
 $T_{AMB} = -40$  to  $+85\text{ }^{\circ}C$
- Tamper detection for power line systems
- LED checking for:
  - Functioning
  - No Load Condition
  - Tamper Detection
  - Reverse Energy Direction
- Stepper Motor Display Connector
- Capacitive Power Supply
- SPI Interface Connector:
  - Active, Reactive Apparent Power consumption
  - $V_{RMS}$ ,  $I_{RMS}$  and Line Frequency
  - Status



### Applications

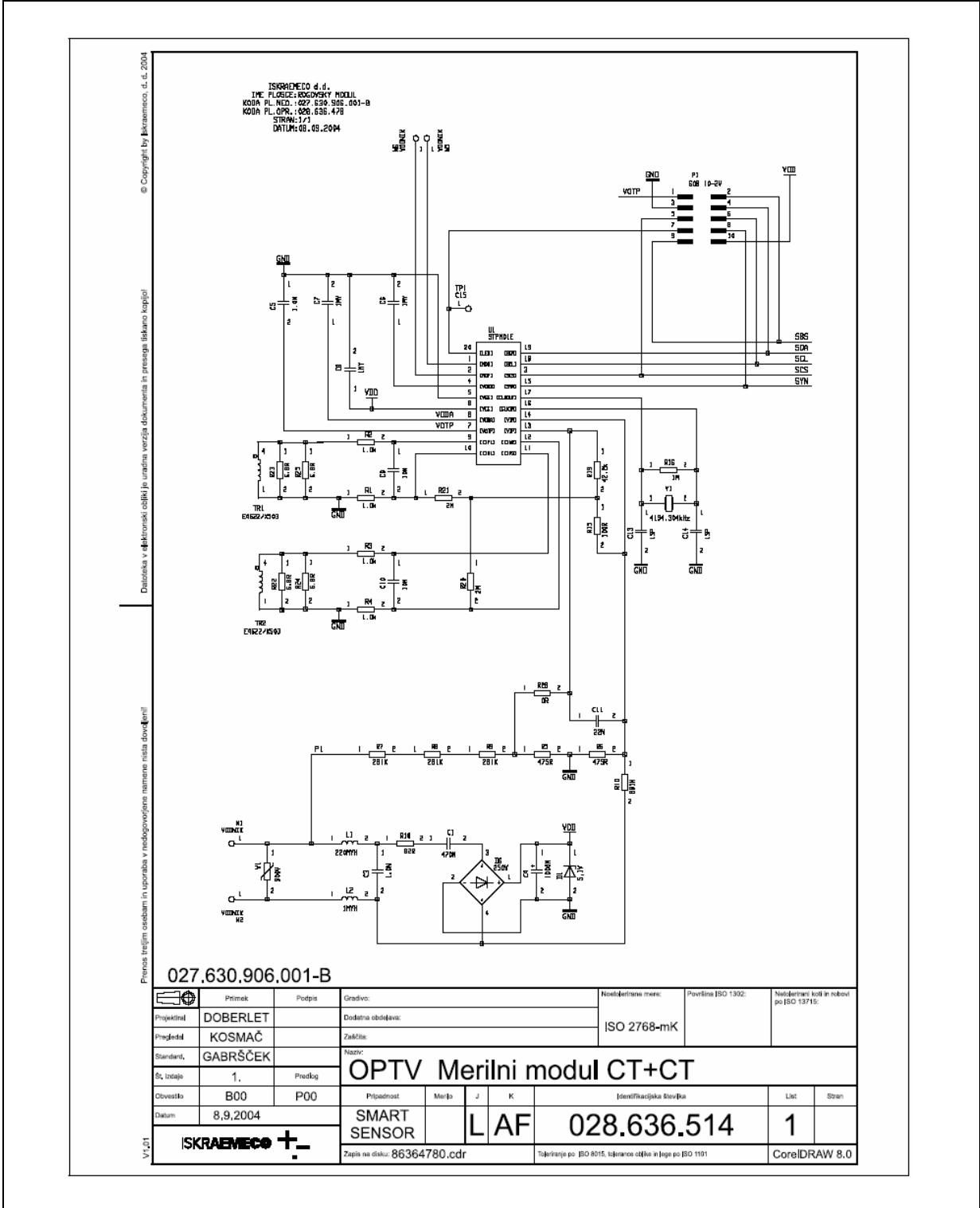
This metering module can be used to build a Class 0.5 Single-phase standalone or microprocessor based meter with or without Tamper detection for power line systems of  $U_{NOM} = 140$  to  $300V_{RMS}$ ,  $I_{NOM}/I_{MAX} = 2/20A_{RMS}$ ,  $f_{LIN} = 45$  to  $65Hz$  and  $T_{AMB} = -40$  to  $+85\text{ }^{\circ}C$ .

In standalone mode, a stepper motor display should be connected to pins W5 and W6. A user can select the type of stepper or the constant of output pulse frequency by changing LVS or KMOT configurators respectively.

In Microprocessor based mode, a control board with a microprocessor should be connected to the male connector P1 of the module using a 10-wire flat cable.

# 1 Board Schematic

Figure 1. Scheme



## 2 Revision history

| Date        | Revision | Changes          |
|-------------|----------|------------------|
| 12-Jan-2006 | 1        | Initial release. |

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