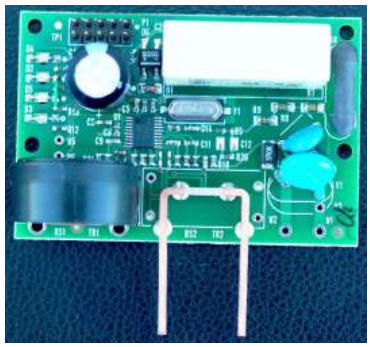
STEVAL-IPE003V1

Electricity Meter (mono phase) - Measurement Board 1 Current Transformer + Shunt

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 °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



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Applications

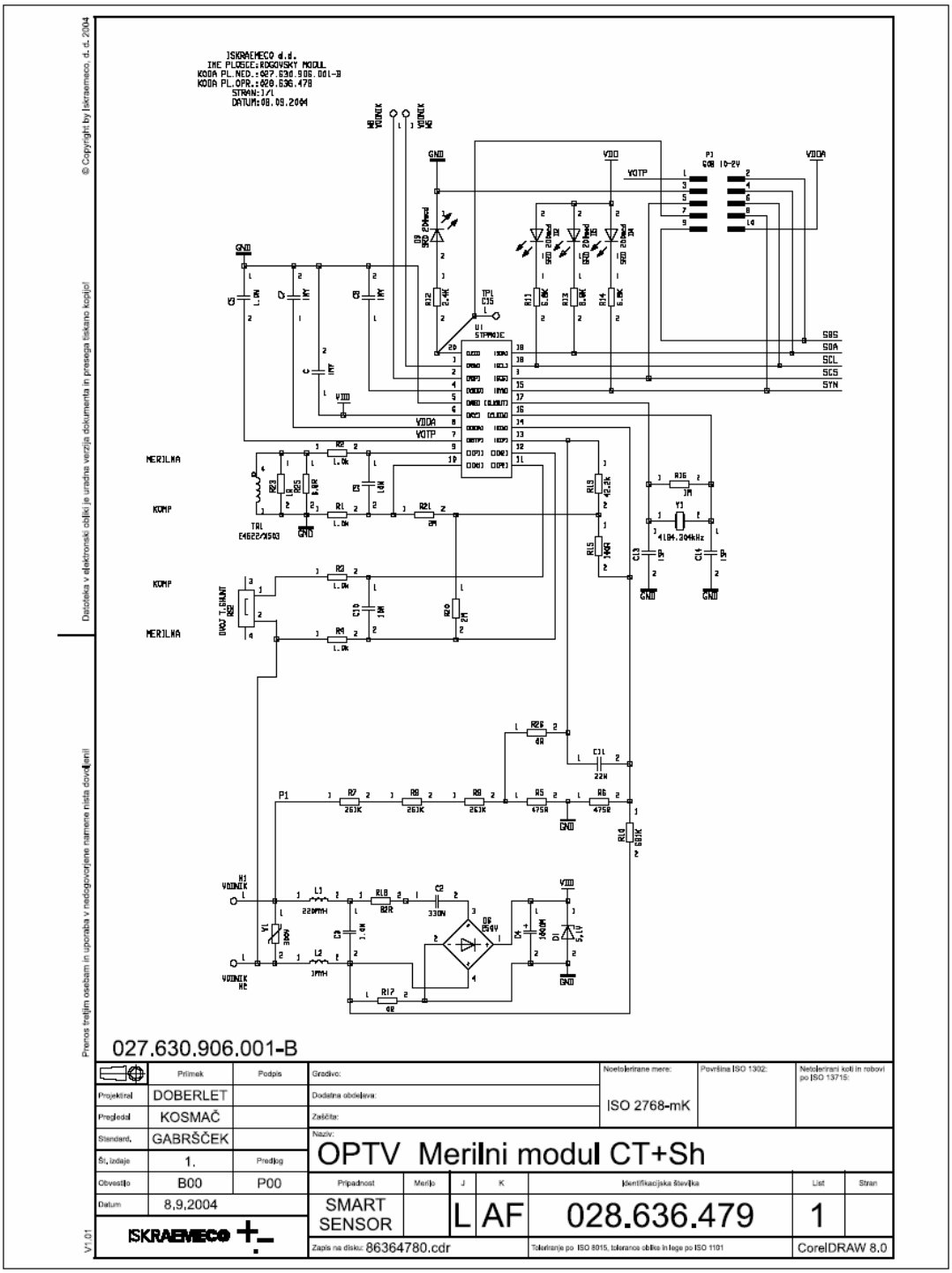
This metering module can be used to build a Class 0.5 Single-phase standalone or microprocessor based meter with or without Tamper detection for power line systems of U_{NOM} = 140 to 300V_{RMS}, I_{NOM}/I_{MAX} = 2/20A_{RMS}, f_{LIN} = 45 to 65Hz and T_{AMB} = -40 to +85 °C.

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.