



STEVAL-IPE006V2

High end meter Demonstration board

Data Brief

Features

- Active, reactive, apparent, fundamental active energy, V_{RMS} , I_{RMS} and frequency measurements
- Anti-tampering on neutral wire
- Tamper detection on meter box, time stamp even during power-down
- PFI/PFO: power management, data backup
- LCD display
- Power line communication
- Automatic meter reading demonstration
- SMPS power supply
- RS232 IAP
- PC interface control
- Class 1



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Applications

The STEVAL-IPE006V2 is a first modular metering solution integrating all features for single multifunction energy meter. The measured values can be observed on the board's LCD or through the serial interface on a PC screen. All the parameter settings are changeable using a user friendly GUI. For safety reasons, the power supply and metering parts are galvanically isolated from the rest of the board. Application engineers can use this board to evaluate the components or quickly start with their own power meter product development project. All software and firmware source codes, as well as Gerber files and the bill of material are provided to help you get started easily and allow you to focus on the specific requirements of your application.

1 Board schematic

Figure 1. Energy meter section schematic

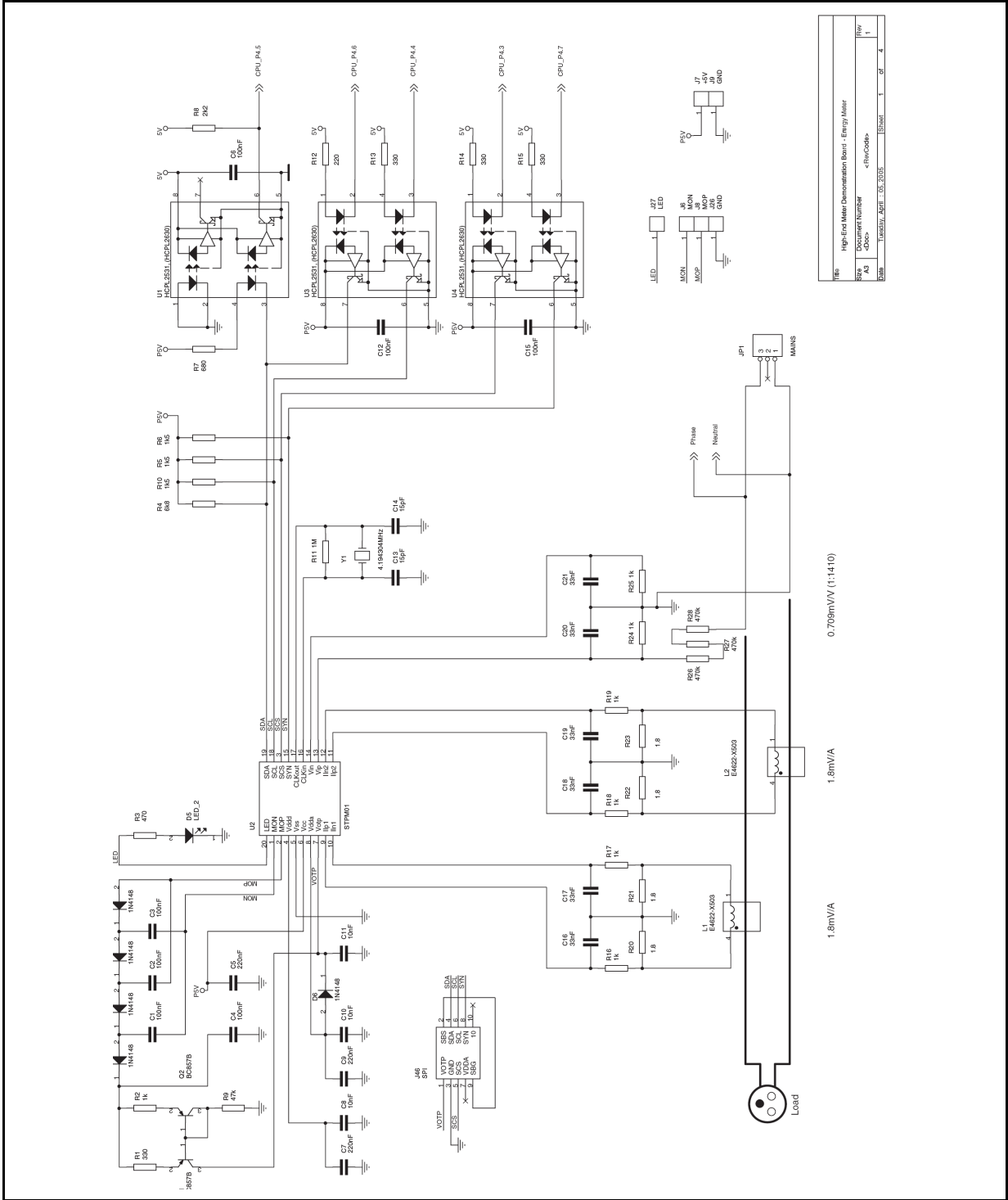


Figure 2. PLM & power supply section schematic

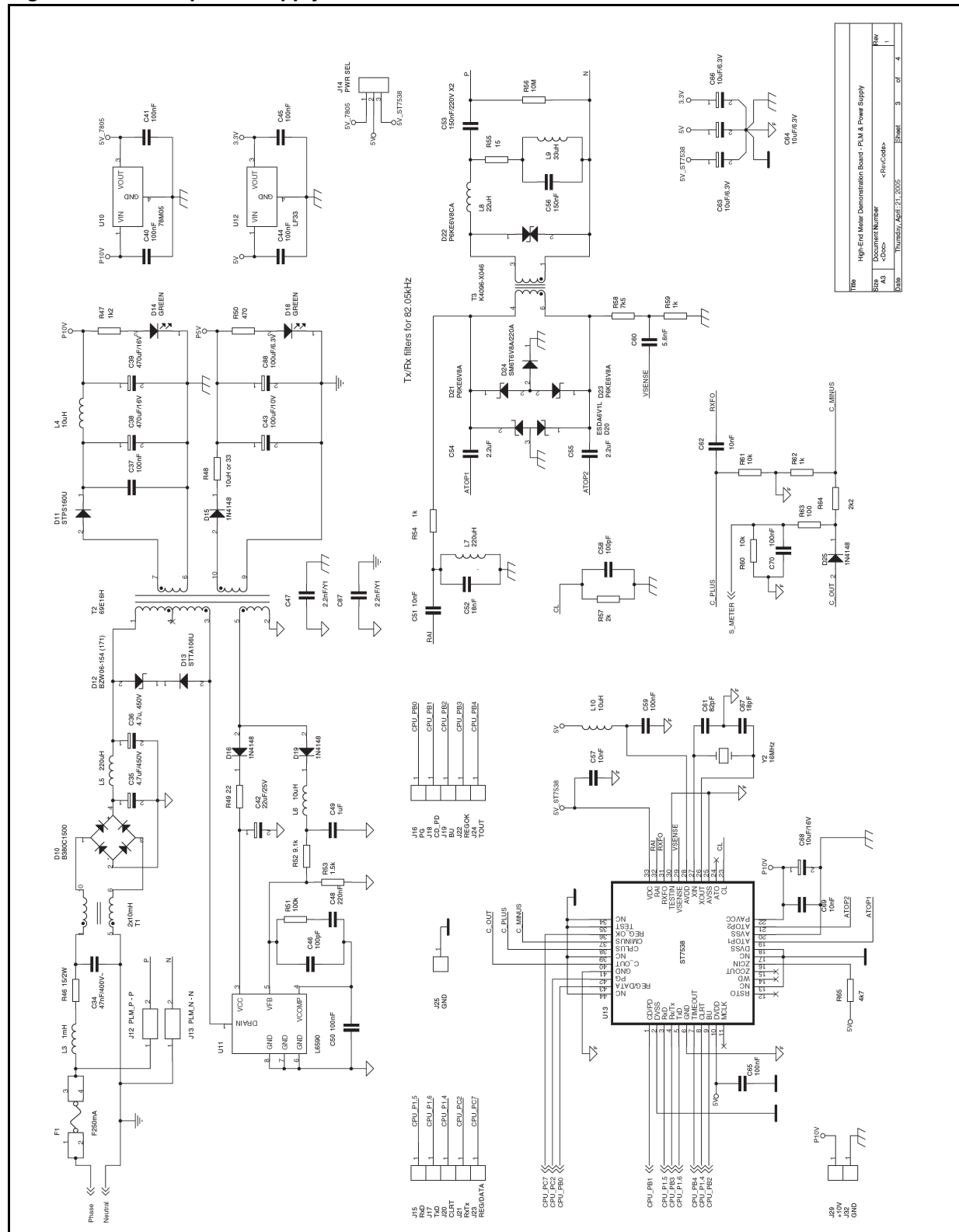
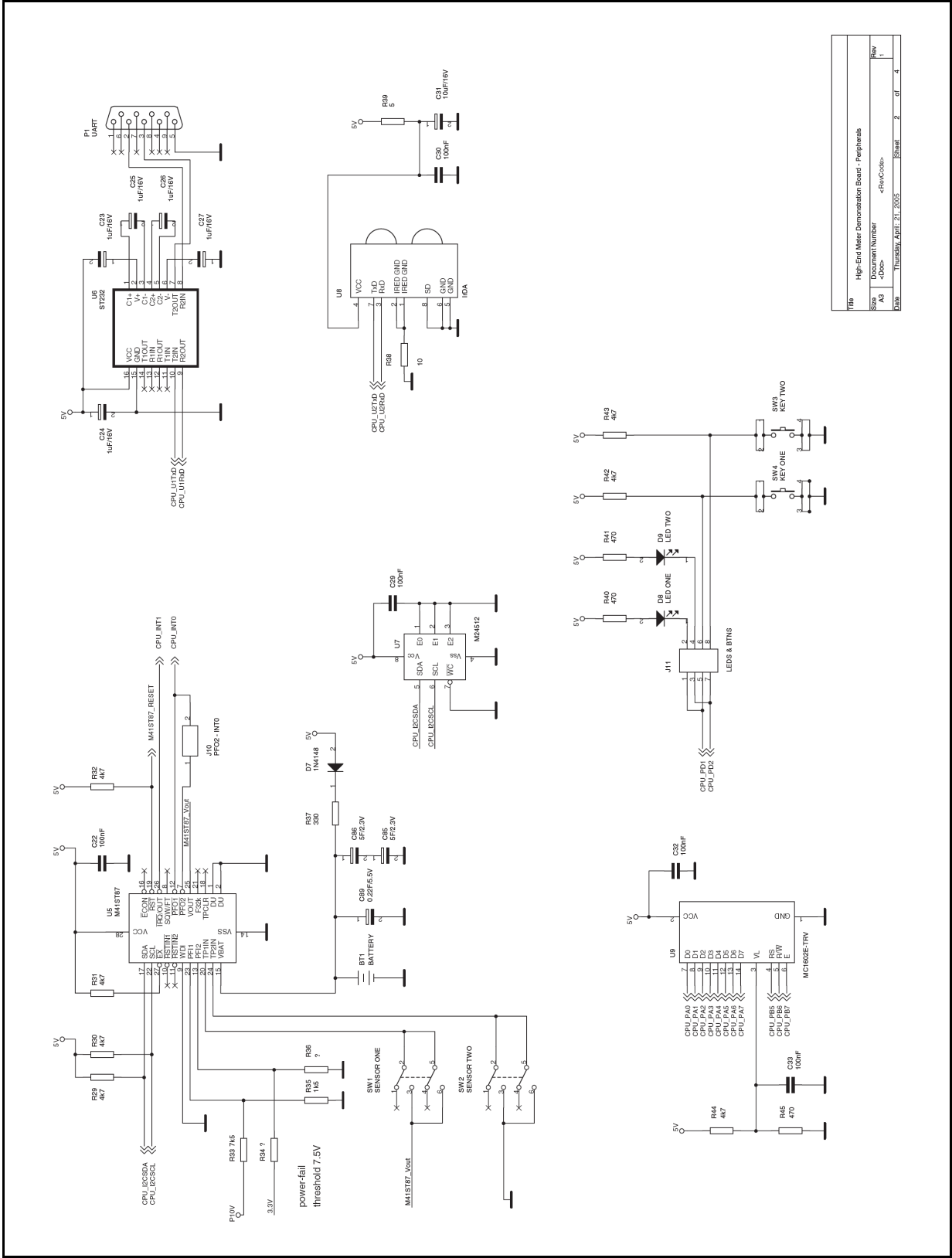


Figure 4. Peripheral section schematic



2 Revision history

Table 1. Revision history

Date	Revision	Changes
13-Jul-2006	1	Initial release.

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