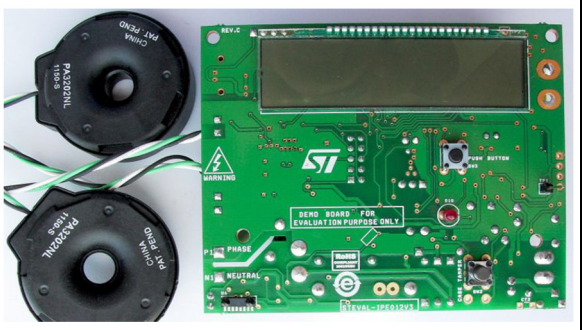
STEVAL-IPE012V3

Single-phase energy meter with Rogowski coil sensor based on the STPM01 and STM8L152C6

Data brief

Features

- Accuracy: class 1 with dynamic range 200:1
- Nominal voltage: 240 V
- Nominal current: 10 A (I_{TYP})
- Maximum current: 80 A (I_{MAX})
- Operating range: 0.6 V_b to 1.2 V_b
- Meter constant: 3200 impulses/kWh
- Power frequency range: 45 Hz to 65 Hz
- Sensor: primary side Rogowski coil and secondary side Rogowski coil
- Communication interface: IrDA®
- RoHS compliant



STEVAL-IPE012V3

Description

The STEVAL-IPE012V3 demonstration board implements a single-phase energy meter based on the STPM01 metering IC and STM8L152C6 microcontroller.

This demonstration board offers a fully functional single-phase solution with parameter display, tamper management, maximum demand (MD) calculation, EEPROM data logging, and low power management.

For further information contact your local STMicroelectronics sales office. www.st.com

1 Schematic diagram

Figure 1. Schematic diagram (part 1)

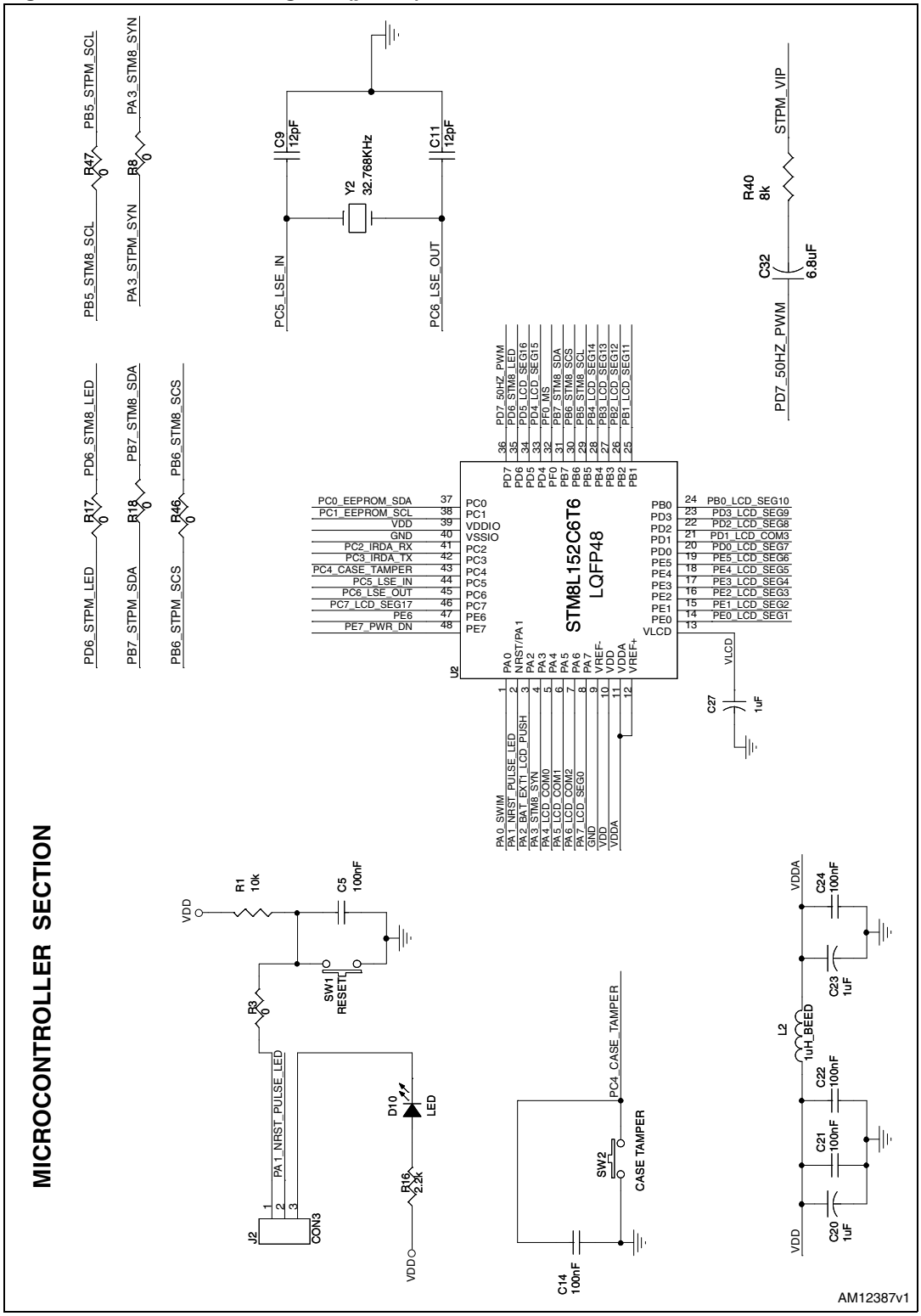


Figure 2. Schematic diagram (part 2)

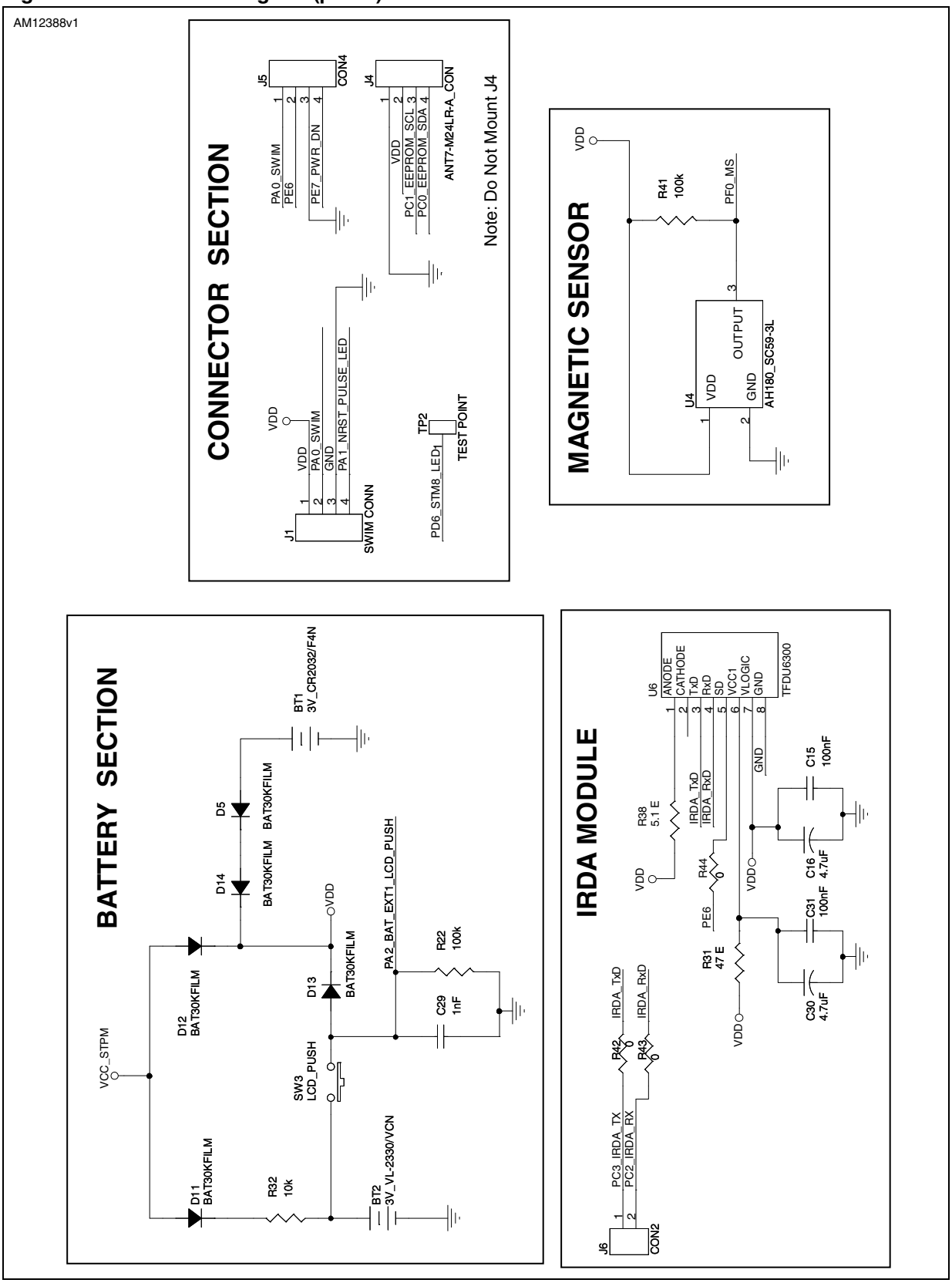


Figure 3. Schematic diagram (part 3)

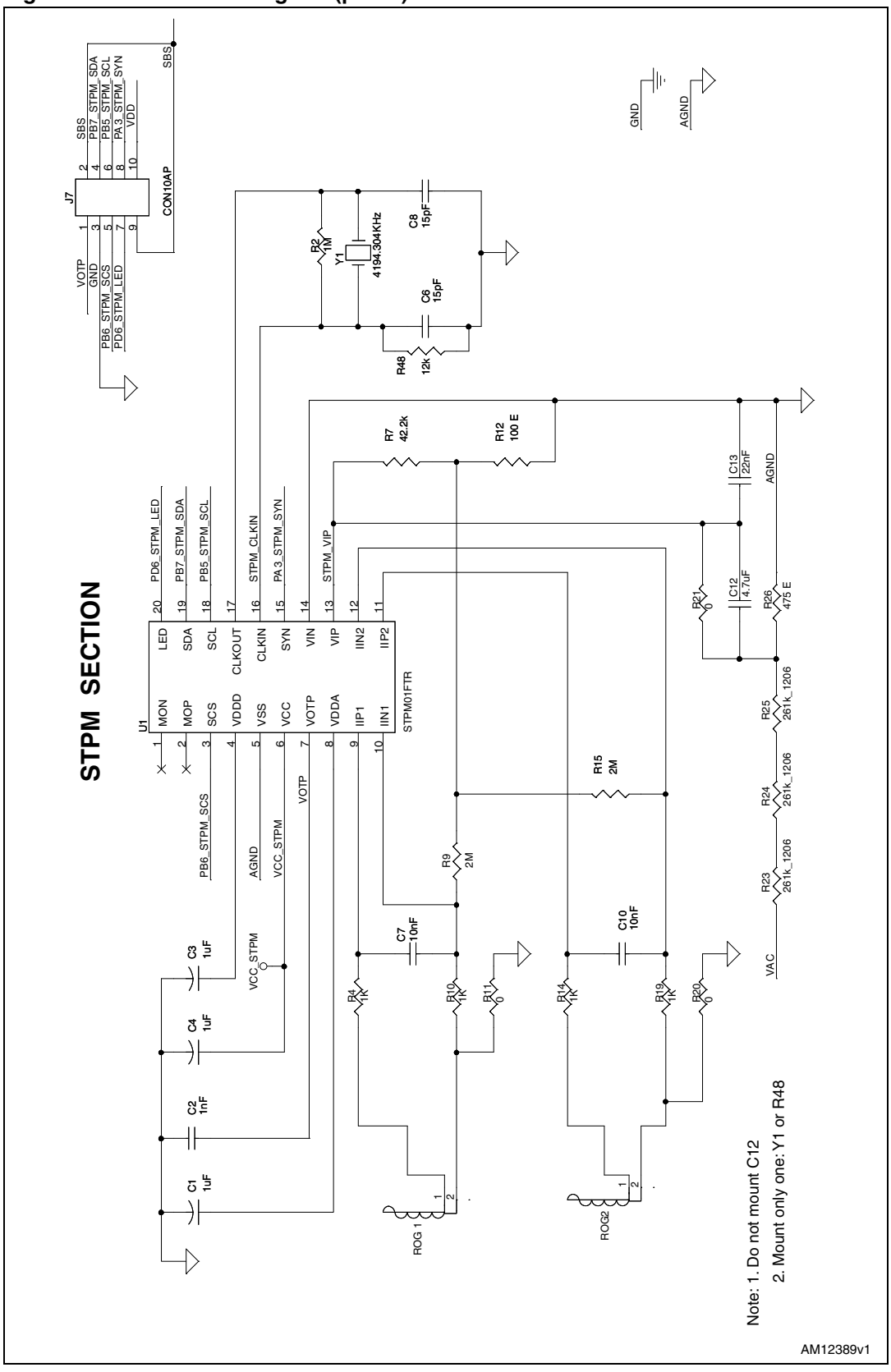
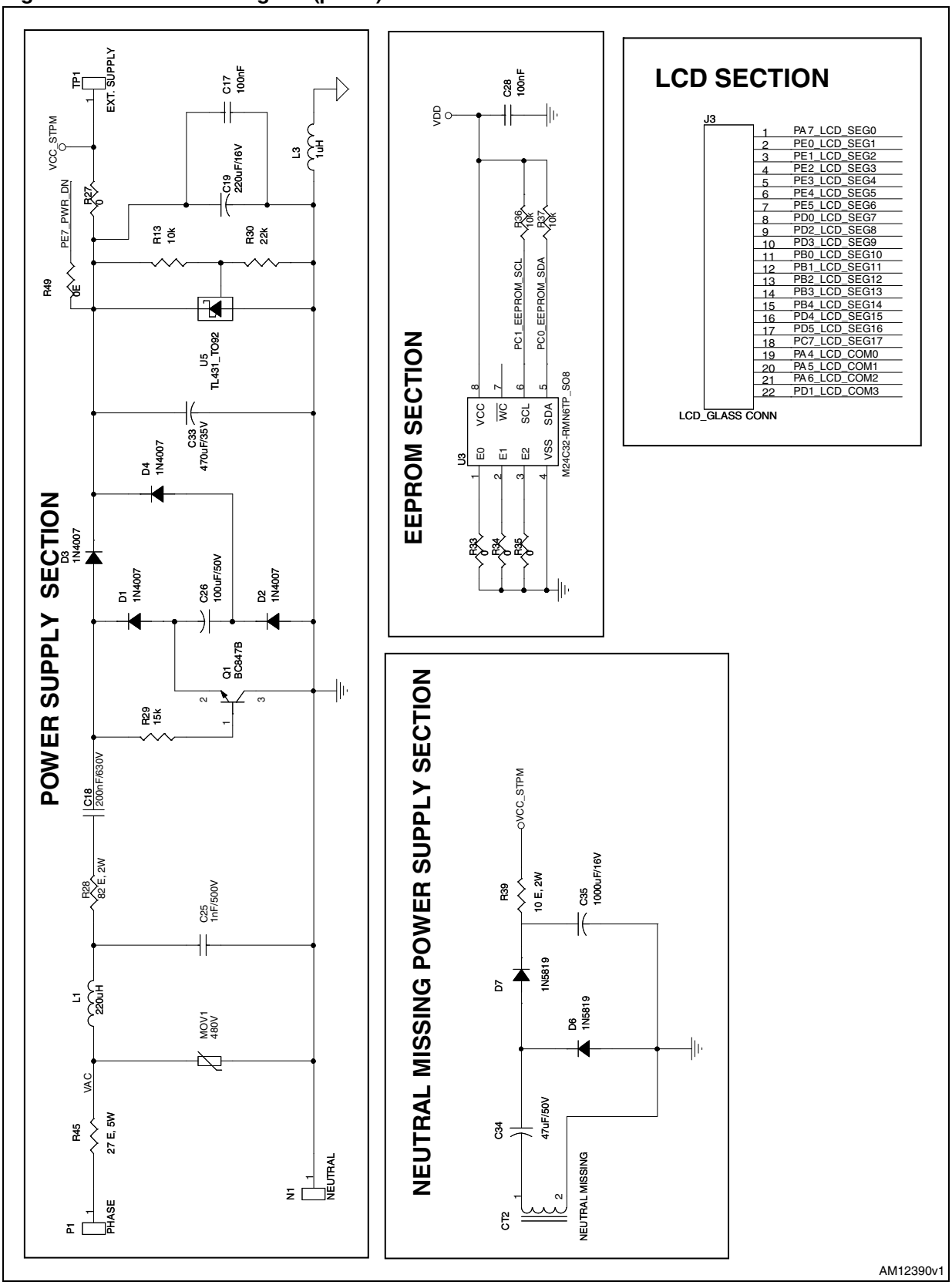


Figure 4. Schematic diagram (part 4)



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
09-Jun-2012	1	Initial release.

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