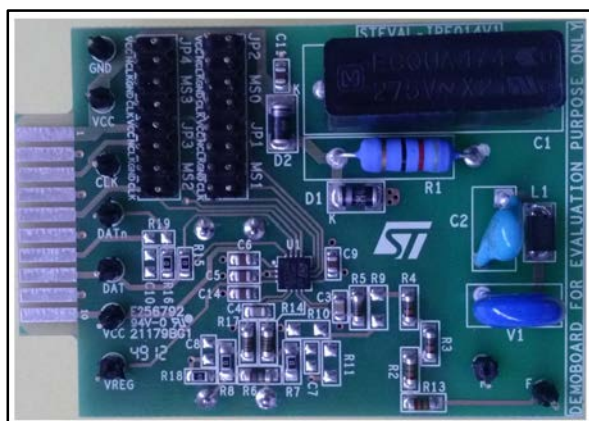


## Multiphase energy meter daughterboard based on the STPMS2 smart sensor device

Data brief



### Description

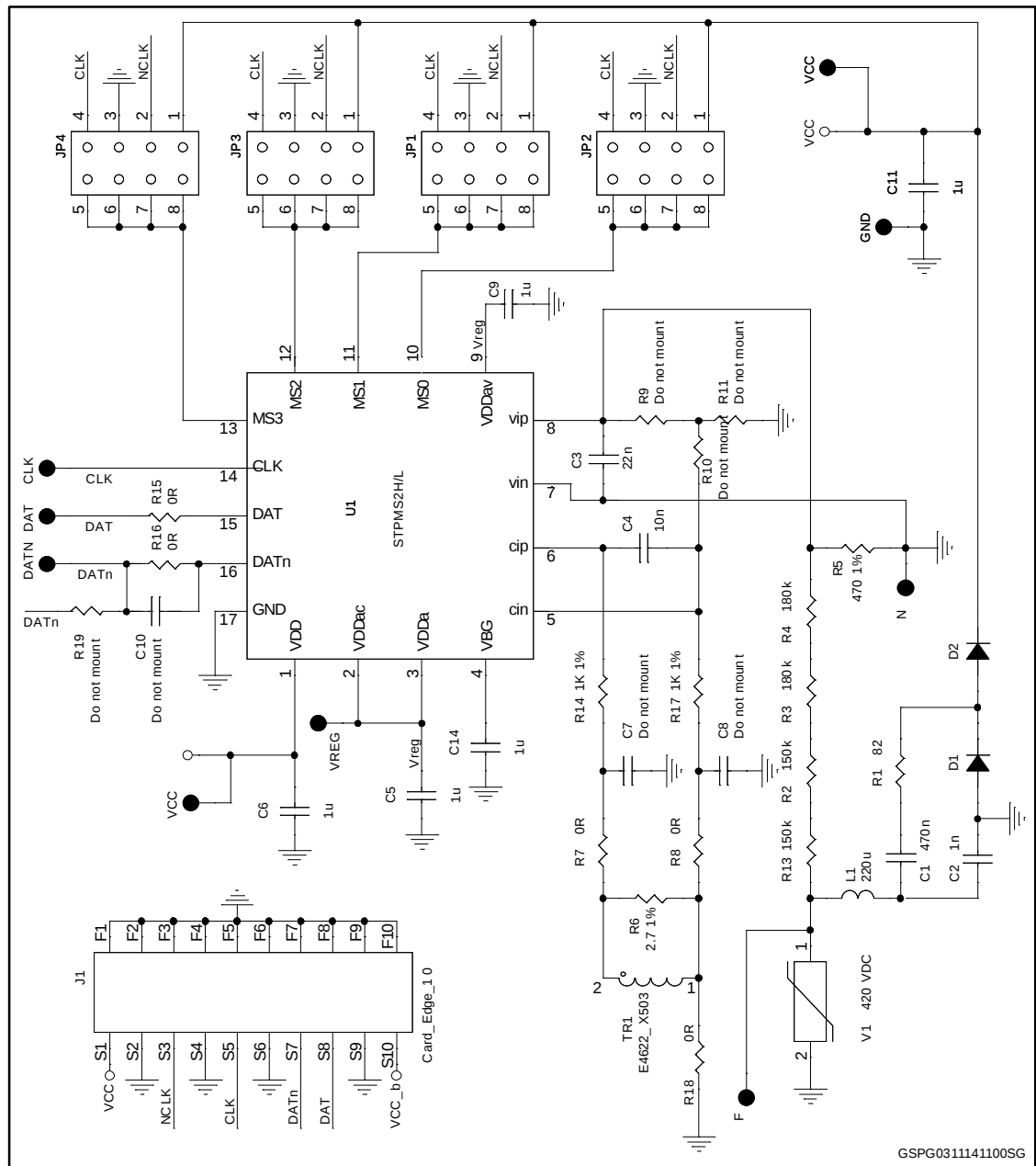
The STEVAL-IPE014V1 is a daughterboard based on the STPMS2 "smart sensor" device, and is designed for use with the STPMC1-based STEVAL-IPE010V2 motherboard. Together the system provides a complete, ready-to-use energy meter application. When connected to the motherboard, each STEVAL-IPE014V1 daughterboard serves a single phase, converting and multiplexing the voltage and current information and sending the stream to the STPMC1 energy calculator IC.

### Features

- Modular and programmable
- Supports:
  - 3-phase, 4-wire RSTN, 4-system RSTN (tamper); extra module required
  - 3-phase, 4-wire RSTN, 3-system RST
  - 3-phase, 3-wire RST\_, 3-system RST\_(tamper)
  - 3-phase, 3-wire RST\_, 2-system R\_T\_(Aron)
  - 2-phase, 3-wire \_STN, 2-system \_ST\_(America)
  - 1-phase, 2-wire \_TN, 2-system \_ST\_(tamper)
  - 1-phase, 2-wire \_TN, 1-system \_T\_
- 4 LED indicators to display:
  - Power
  - No load condition
  - Tamper detection
  - Reverse current direction
- Embedded capacitive power supply
- Isolation of current channel
- RoHS compliant

# 1 Schematic diagram

Figure 1: STEVAL-IPE014V1 circuit schematic



## 2 Revision history

**Table 1: Document revision history**

| Date        | Rev | Changes                       |
|-------------|-----|-------------------------------|
| 24-Aug-2011 | 1   | First release.                |
| 03-Nov-2014 | 2   | Description has been updated. |

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