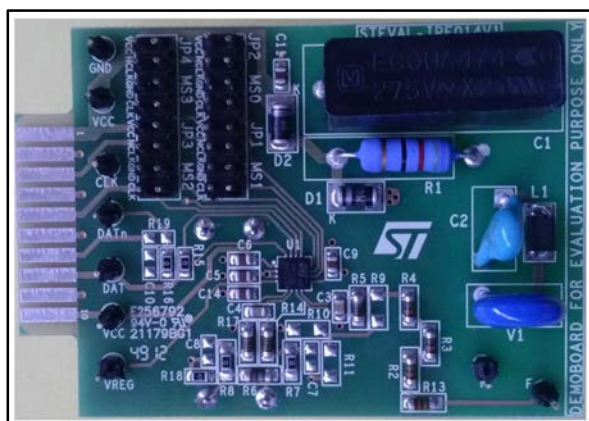


Multiphase energy meter daughterboard based on the STPMS2 smart sensor device

Data brief



Description

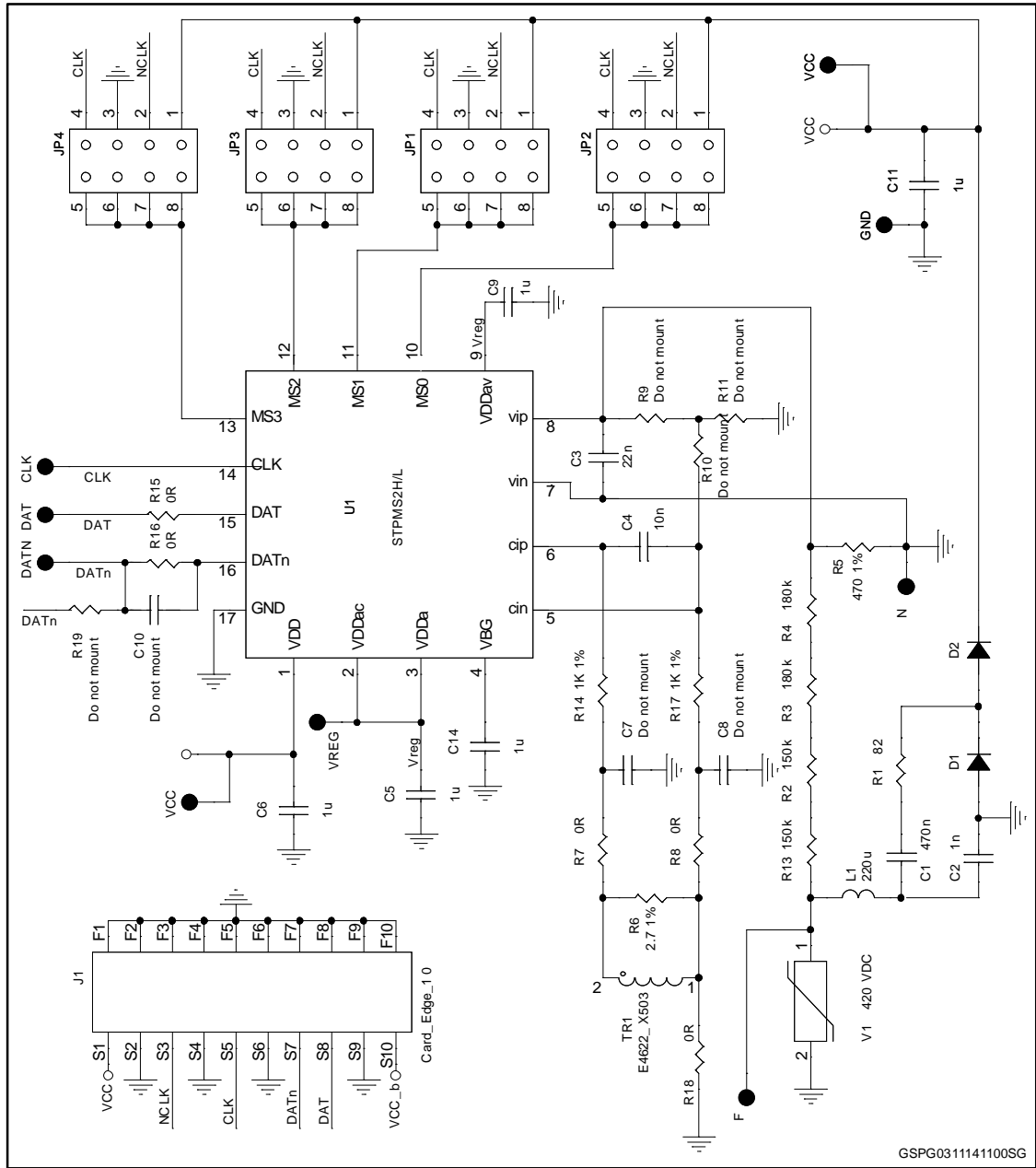
The STEVAL-IPE014V1 is a daughterboard based on the STPMS2 "smart sensor" device, and is designed for use with the STPMC1-based STEVAL-IPE010V2 motherboard. Together the system provides a complete, ready-to-use energy meter application. When connected to the motherboard, each STEVAL-IPE014V1 daughterboard 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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