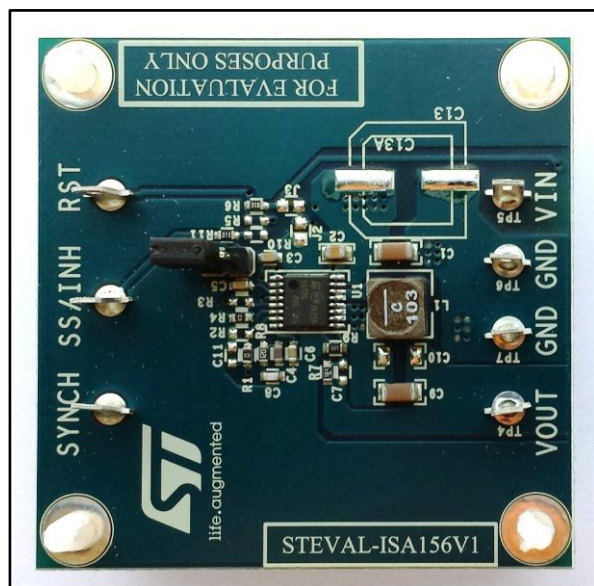


38 V, 2 A synchronous step-down switching regulator evaluation board based on the L6986

Data brief



Features

- 4 V to 38 V operating input voltage
- Low consumption mode or low noise mode

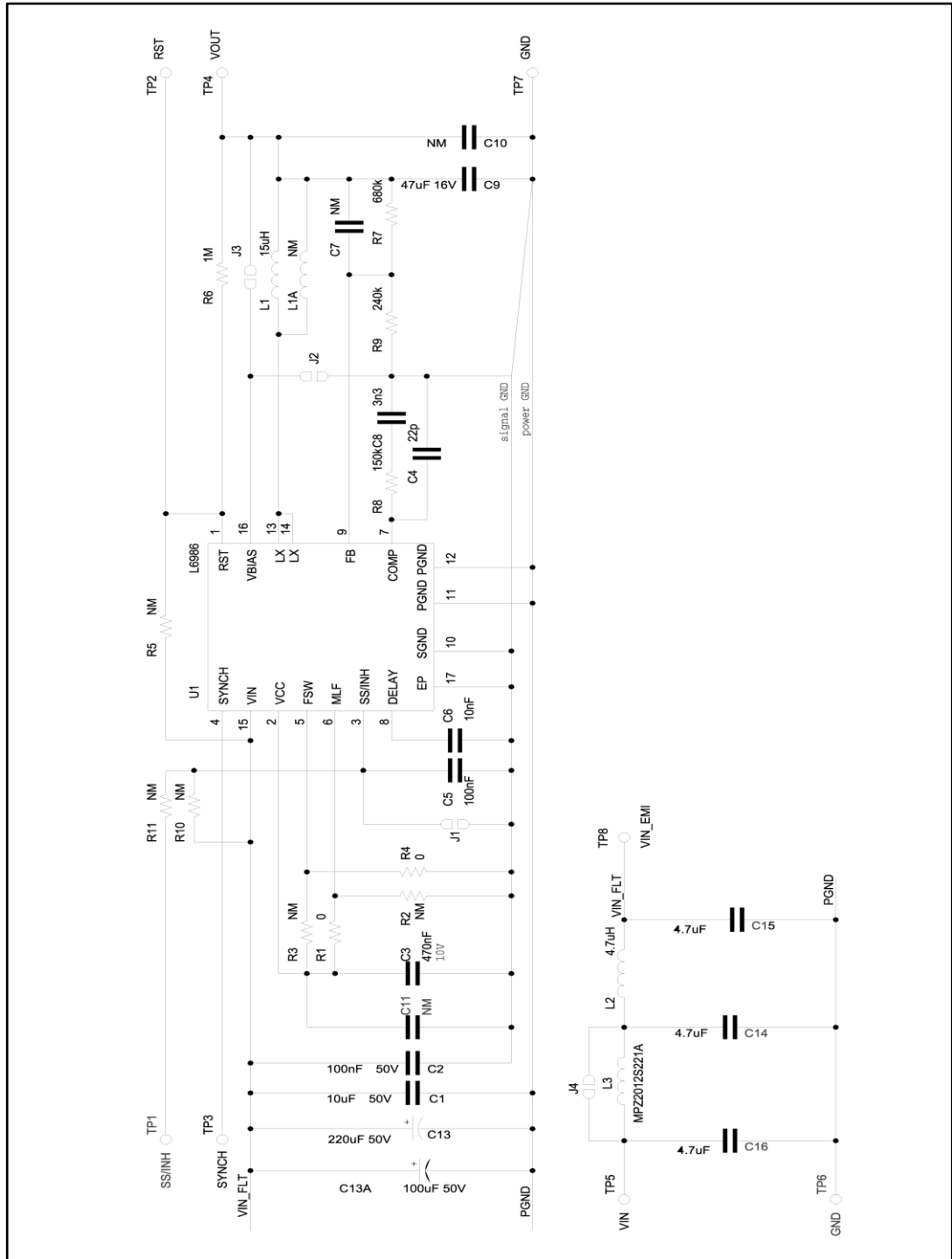
- 30 μA I_{Q} at light load (LCM $V_{\text{OUT}} = 3.3 \text{ V}$)
- 5 μA $I_{\text{Q-SHTDWN}}$
- Adjustable f_{SW} (250 kHz - 2 MHz)
- Output voltage adjustable from 0.85 V to V_{IN}
- Embedded output voltage supervisor
- Synchronization
- Adjustable soft-start time
- Internal current limiting
- Overvoltage protection
- Output voltage sequencing
- Peak current mode architecture
- $R_{\text{DS(on) HS}} = 180 \text{ m}\Omega$, $R_{\text{DS(on) LS}} = 110 \text{ m}\Omega$
- Thermal shutdown

Description

The STEVAL-ISA156V1 is a product evaluation board based on ST's L6986, a 38 V, 2 A synchronous step-down switching regulator with 30 μA quiescent current. It can be used for 12 V and 24 V buses, programmable logic controllers (PLCs), decentralized intelligent nodes & sensors and low noise applications (LNM).

1 Schematic diagram

Figure 1: STEVAL-ISA156V1 circuit schematic



2 Revision history

Table 1: Document revision history

| Date | Revision | Changes |
|-------------|----------|-----------------|
| 18-Jul-2014 | 1 | Initial release |