

3.5 A step-down switching regulator based on the L4973

Data brief

Features

- Input voltage range: 8 V to 55 V
- Output voltage: 5.1 V \pm 3% (line, load and thermal)
- Output ripple: 51 mV
- Output current range: 1 mA to 3.5 A
- Max output ripple current: 30%
- Current limit: 4.5 A
- Switching frequency: 150 kHz
- RoHS compliant

Description

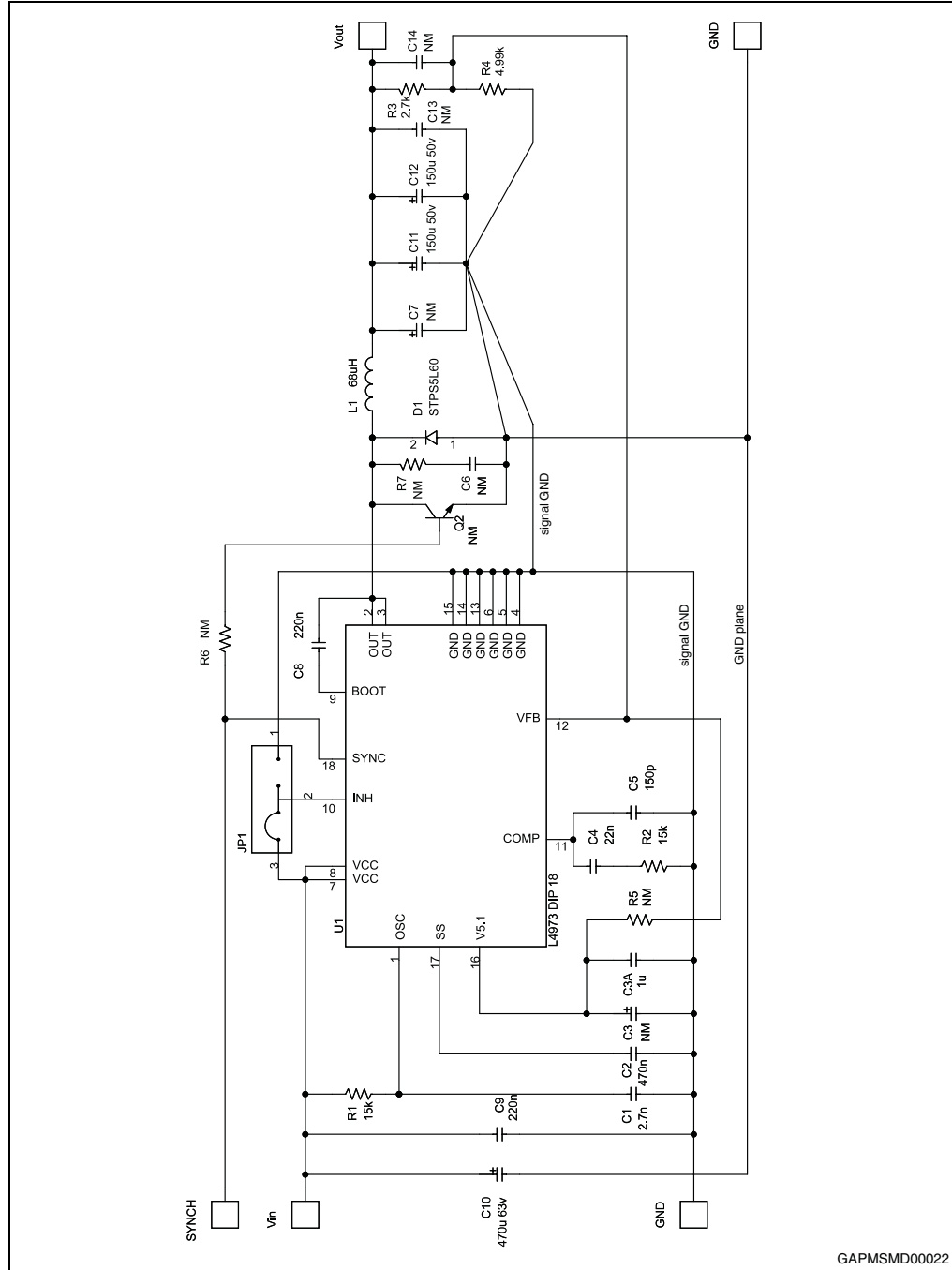
The STEVAL-ISA090V1 demonstration board provides a platform for evaluation of the L4973, a 3.5 A step-down monolithic power switching regulator operating in continuous mode.

Based on the selection of the external components, the device can operate in the entire input voltage range of $8\text{ V} < V_{\text{IN}} < 55\text{ V}$. The output voltage is limited by the voltage rating of the output capacitor, so it can be adjusted within the $3.3\text{ V} < V_{\text{OUT}} < 30\text{ V}$ range through voltage divider R_3, R_4 . The input and output capacitors are capable of sustaining the RMS current within the operating range.



1 Schematic diagram

Figure 1. STEVAL-ISA090V1 circuit schematic



GAPMSMD00022



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
01-Apr-2011	1	Initial release.

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