

## 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

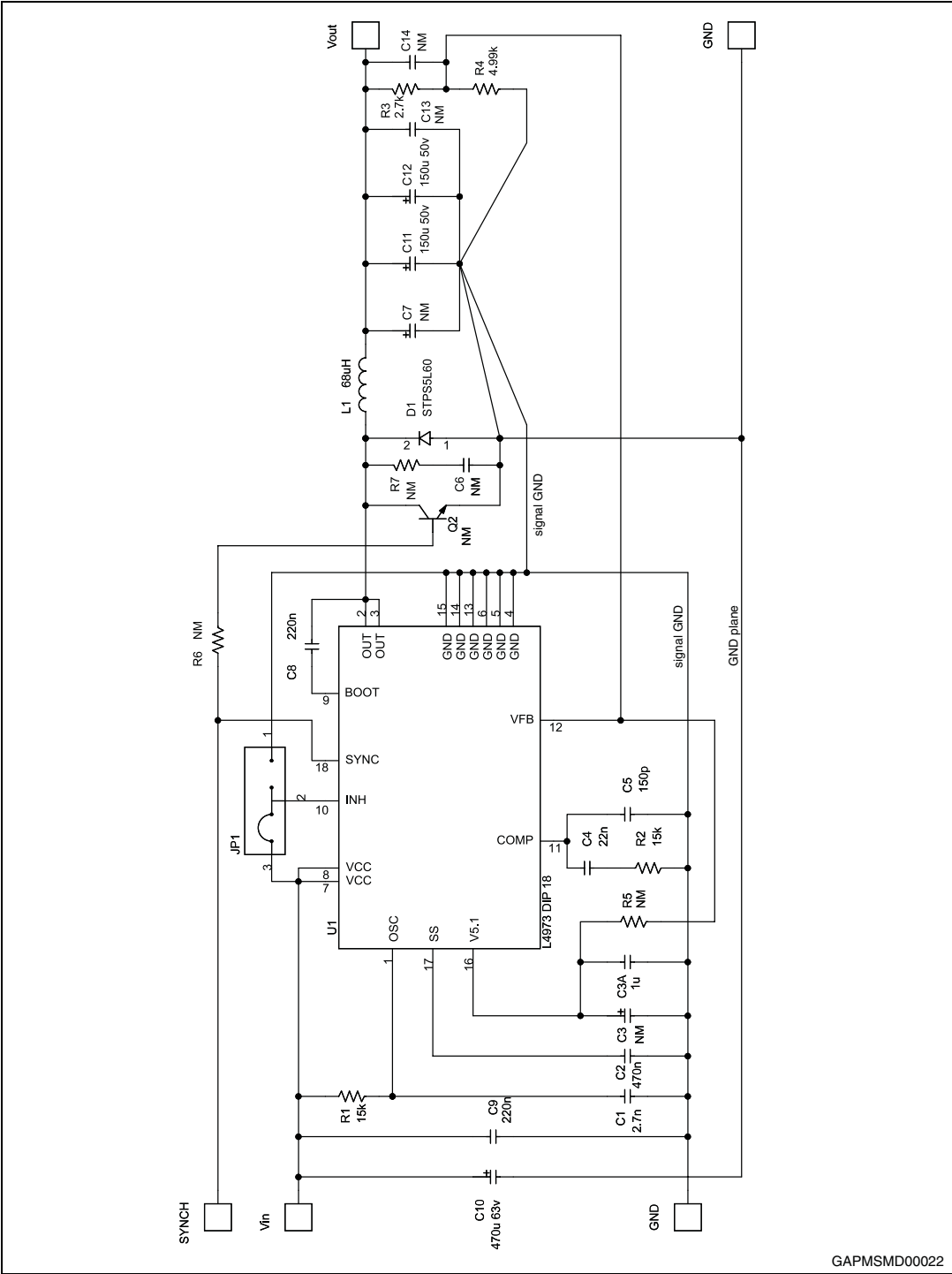
The STEVAL-ISA090V1 demonstration board provides a platform for evaluation of the L4973, a 3.5 A step-down monolithic power switching regulator operating in continuous mode.

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



## 2 Revision history

Table 1. Document revision history

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

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