



STEVAL-ISA053V2

Demonstration board for the PM6680A dual synchronous step-down controller with adjustable output voltages plus LDO

Data Brief

Features

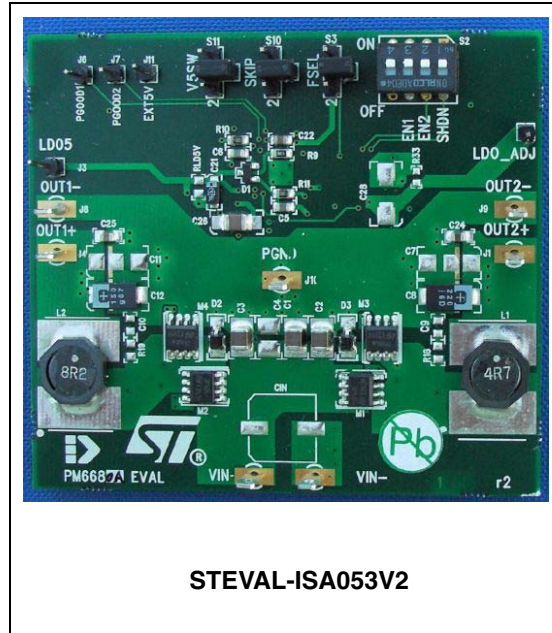
- Constant on-time control allows very fast load transients
- 6 V to 36 V input voltage range
- 5 V auxiliary output voltage
- Adjustable switching outputs
- Lossless current sensing
- Negative current limit
- Soft-start internally fixed at 2.8 ms
- Soft-end for output discharge
- 200 kHz / 300 kHz, 300 kHz / 400 kHz, 400 kHz / 500 kHz (OUT1 / OUT2 selectable switching frequency)
- Selectable pulse skip and no-audible skip modes at light loads
- Independent power good signals

Description

The PM6680A is a dual step-down controller with adjustable output voltages. This demonstration board is designed to test the performance of the PM6680A by employing a typical application circuit which allows testing of all the PM6680A device functions. The kit features two switching sections, with (typically) 3.3 V and 1.8 V outputs, from a 6 V to 36 V input voltage.

The typical operating switching frequency of the two switching sections is 200 kHz / 300 kHz, respectively. Each switching section delivers more than 2.5 A of output current.

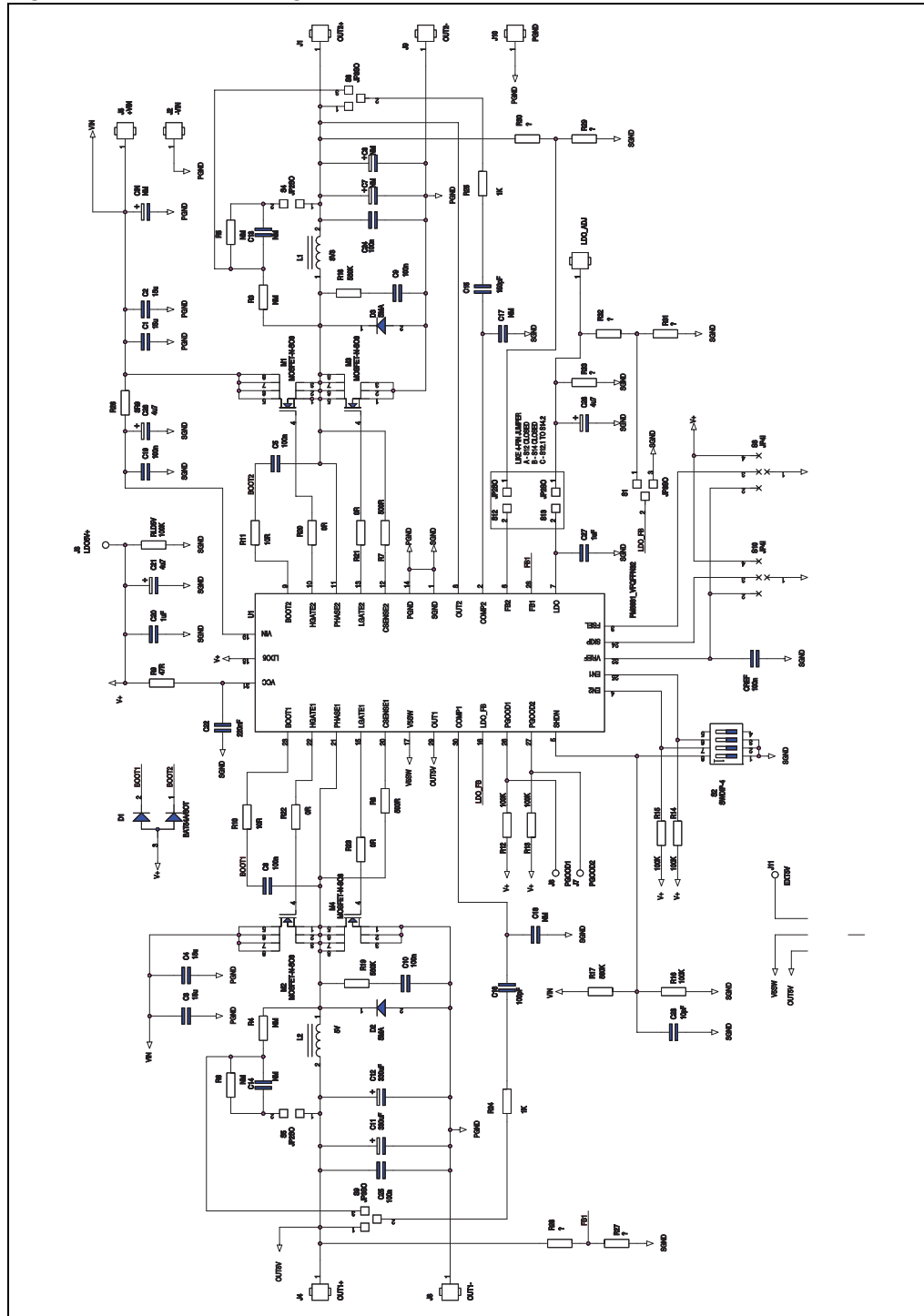
Moreover, an internal linear regulator can provide 5 V @ 100 mA peak current.



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1 Circuit schematic

Figure 1. Schematic diagram



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
06-June-2008	1	Initial release.

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