

The schematic diagram illustrates the ISL85003 buck converter circuit. The input is a 12VDC source (Rail 4) connected to the VIN pin (pin 10). The output is a 0.85V@3A source (Rail 5) connected to the PG pin (pin 2). The ISL85003 IC is configured with various components including resistors (R35, R36, R38, R39, R40, R41, R42), capacitors (C32, C33, C34, C35, C36, C37, C38, C39, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53), and an inductor (L4). The output voltage is regulated to 0.85V at 3A. The circuit is labeled with 'Rail 4' and 'Rail 5'.

Key components and their values:

- Input: 12VDC (Rail 4)
- Output: 0.85V@3A (Rail 5)
- IC: ISL85003
- Resistors: R35 (OPEN), R36 (0), R38 (OPEN), R39 (OPEN), R40 (100k), R41 (0), R42 (100k)
- Capacitors: C32 (10uF), C33 (10uF), C34 (100uF), C35 (100uF), C36 (100uF), C37 (100uF), C38 (22uF), C39 (1uF), C41 (0.1uF), C42 (1000uF), C43 (1000uF), C44 (1000uF), C45 (470uF), C46 (22uF), C47 (22uF), C48 (1uF), C49 (0.1uF), C50 (0.1uF), C51 (56pF), C52 (OPEN), C53 (OPEN)
- Inductor: L4 (2.2uH)

The circuit is configured to regulate the output voltage to 0.85V at 3A. The output is connected to the PG pin (pin 2) and the PG_Rail 5 output.

Additional notes:

- The output voltage is 0.85V@3A.
- The output is connected to the PG pin (pin 2) and the PG_Rail 5 output.
- The output is connected to the PG pin (pin 2) and the PG_Rail 5 output.

If custom compensation is desired, remove the ground connection on the COMP pin to enable external compensation.

Programmable Soft Start is available in the ISL85003A
(without synchronization)

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