

23V/6A Sync. Step-Down Converter Evaluation Board

Parameters Subject to Change Without Notice

FEATURES

- 4V to 23V operating input range
6A output current
- Up to 95% efficiency
- High efficiency at light load
- 650kHz frequency
- Fixed 3.3V LDO output supplies 200mA
- Input under voltage lockout
- Power good indicator
- Output discharge function
- Output Over/Under Voltage Protection
- Output short protection
- Thermal protection
- Available in QFN3X3-20 package

APPLICATIONS

- Distributed Power Systems
- Networking Systems
- FPGA, DSP, ASIC Power Supplies
- Notebook Computers
- Green Electronics/ Appliances

DESCRIPTION

The JW[®]5069B is a monolithic buck switching regulator based on I2 architecture for fast transient response. Operating with an input range of 4V~23V, JW5069B delivers 6A of continuous output current with two integrated N-Channel MOSFETs. The internal synchronous power switches provide high efficiency without the use of an external Schottky diode. At light loads, the regulator operates in low frequency to maintain high efficiency and low output ripples.

JW5069B guarantees robustness with output short protection, thermal protection, current run-away protection, and input under voltage lockout.

JW5069B is available in QFN3X3-20 package, which provide a compact solution with minimal external components.

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Value	Unit
Input Voltage	VIN	4~23	V
Output Voltage	VOUT	3.35	V
Output Current	IOUT	0~6	A

EVALUATION BOARD AND TYPICAL PERFORMANCE

PRINTED CIRCUIT BOARD LAYOUT

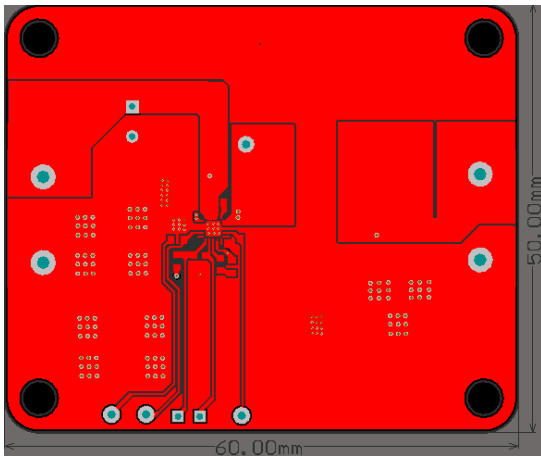


Figure1—Top Layer

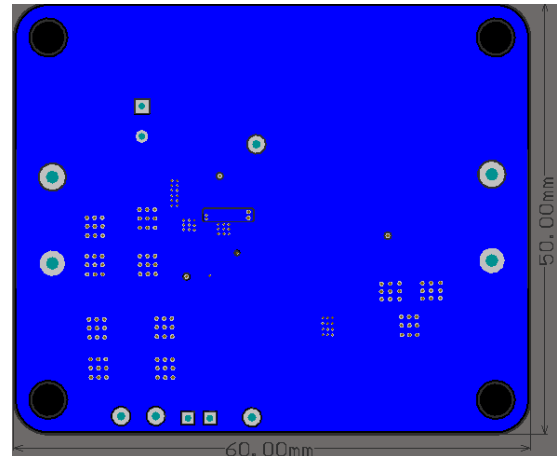


Figure2—Bottom Layer

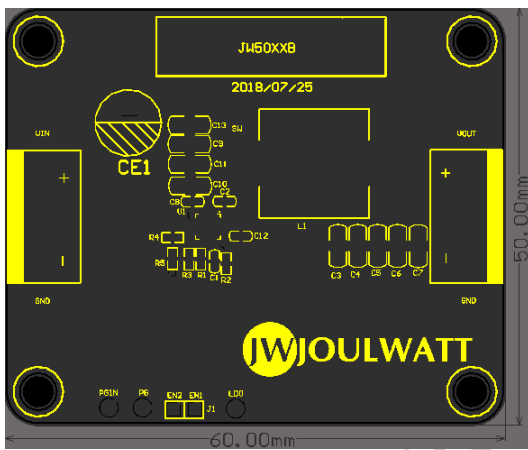


Figure3—Top Silk Layer

QUICK START GUIDE

1. Connect the positive terminal and negative terminal of the load to Vout and GND of EVB, respectively.
2. Connect a power supply between VIN and GND with the supply in “OFF” state. Set the output voltage of the power supply to 4V~23V.
3. Turn on the power supply and the evaluation board starts operating in normal condition.
4. For more information, please refer to the datasheet of JW5069B.

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