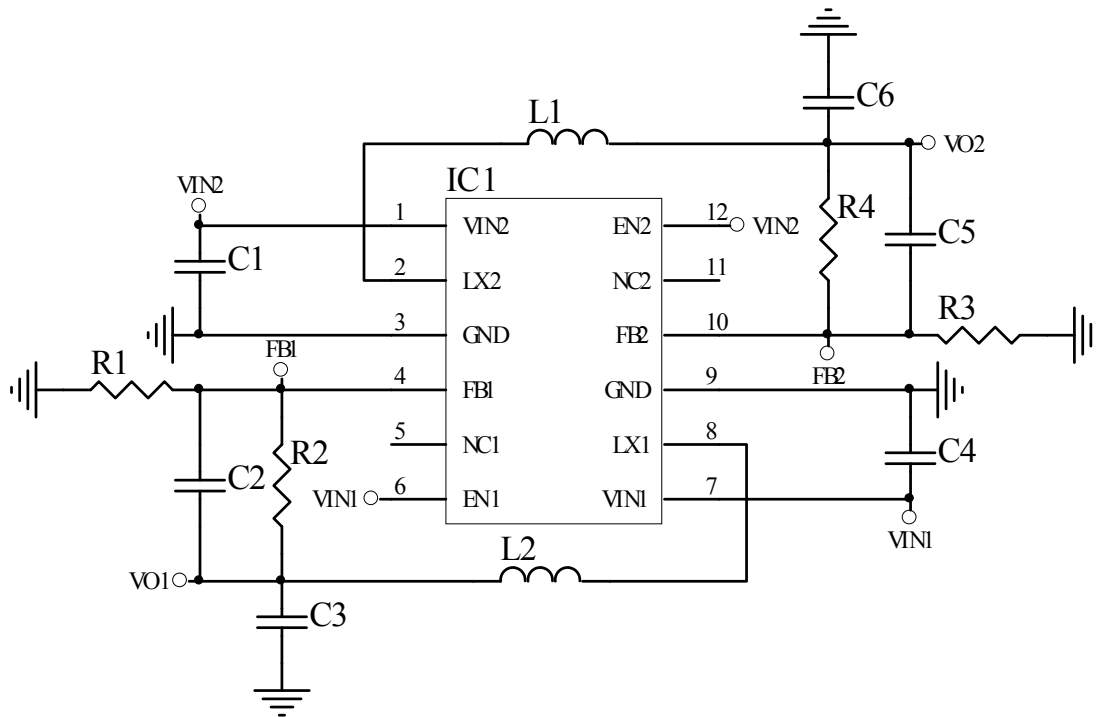


3. Key Features

- Efficiency up to 96%
- 40 μ A (typ) Quiescent Current
- Output Current: Up to 1A per Channel
- Internal Synchronous Rectifier
- 1.5MHz Switching Frequency
- Soft-Start
- Under-Voltage Lockout
- Short Circuit Protection
- Thermal Shutdown
- Small 12LWDFN3 \times 3 Package
- Pb-Free Package and RoHS Compliant

4. EV Board Schematic

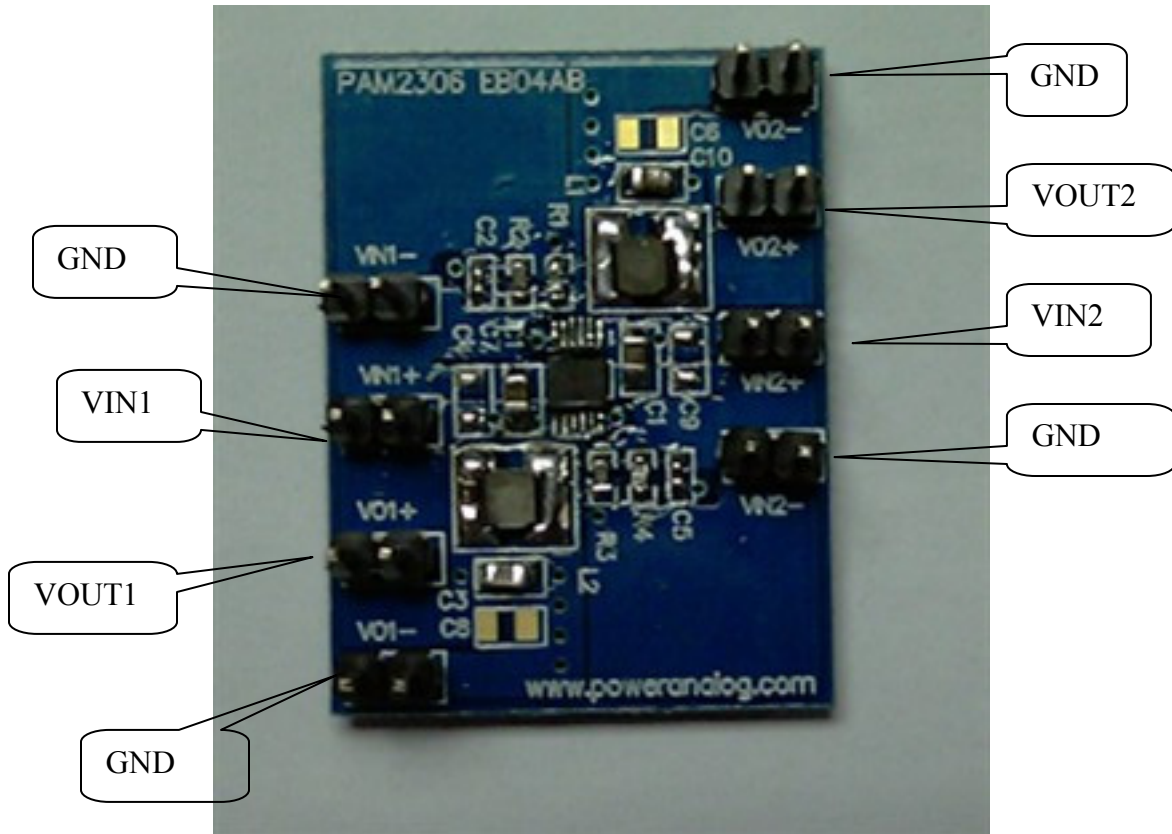


5. EVB PAM2306 EB04AB Description

PAM2306 EB04AB is an evaluation board for the PAM2306, a DC/DC converter. The board is targeted to be used in providing a simple and convenient evaluation environment for the PAM2306. Requires parts, power supply jacks etc. on the board, which makes it easy to be evaluated.

6. EV Board View

Top View



7. Resistor Select for Output Voltage Setting

$$V_{OUT} = (1 + R1/R2) \times V_{REF} \quad (V_{REF} = 0.6V)$$

Vo	R1	R2	L
1.2V	200k	200k	2.2μH
1.5V	150k	100k	2.2μH
1.8V	200k	100k	2.2μH
2.5V	380k	120k	4.7μH
3.3V	680k	150k	4.7μH

8. External Components Selection

Input & output Capacitors

- (1) For lower output ripple, low ESR is required.
- (2) Low leakage current needed, 10uF, X5R/X7R ceramic recommend

Feed forward capacitor

- (1) Lower the output ripple
- (2) Low leakage current needed, 20-100pF, X5R/X7R ceramic recommend

Output Voltage programmer resistors

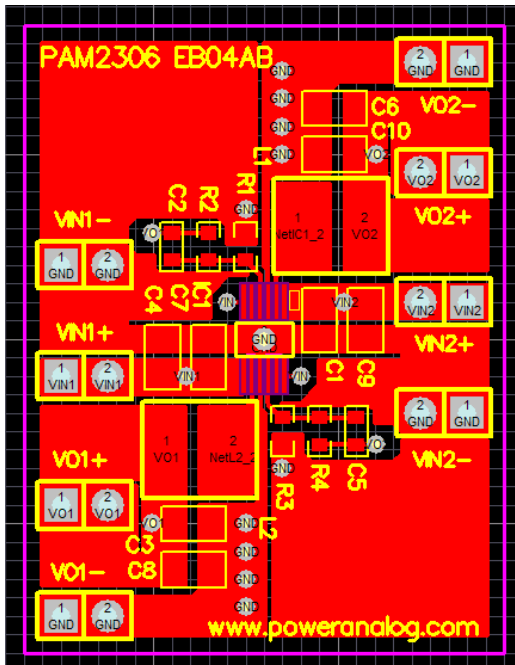
- (1) For programmer output voltage
- (2) For accurate output voltage, 1% tolerance is required.

Inductor

- (1) Low DCR for good efficiency
- (2) Inductance Decrease Current must higher than the output current

9. PCB Layout Example

Top Layer



Bottom Layer

