

# Enpirion Inc.

## EN5367QI – 6 Amp Synchronous Buck DC-DC Converter with Integrated Inductor

**Manufacturer Part Number:** EN5367QI

**Packaging:** 5.5mm x 10mm x 3mm QFN Package

### Product Highlights:

- High Efficiency
- Superior Noise & Ripple Performance
- Small Solution Size, Simple Layout, Easy Design
- Outstanding Power Density

The EN5367QI is a Power System on a Chip (PowerSoCTM) DC to DC converter with an integrated inductor, PWM controller, MOSFETs and compensation to provide the smallest solution size in a 5.5x10x3mm 54 pin QFN module. It offers high efficiency, excellent line and load regulation over temperature and up to the full 6A load range. The EN5367QI is specifically designed to meet the precise voltage and fast transient requirements of high-performance, low-power processor, DSP, FPGA, memory boards and system level applications in distributed power architecture. The EN5367QI also features switching frequency synchronization with an external clock, programmable soft-start as well as thermal shutdown, over-current and short circuit protection. The device's advanced circuit techniques, ultra high switching frequency, and proprietary integrated inductor technology deliver high-quality, ultra compact, non-isolated DC-DC conversion.

The Enpirion integrated inductor solution significantly helps to reduce noise. The complete power converter solution enhances productivity by offering greatly simplified board design, layout and manufacturing requirements. All Enpirion products are RoHS compliant and lead-free manufacturing environment compatible.

### Features

- High Efficiency (Up to 93%)
- Excellent Ripple and EMI Performance
- Up to 6A Continuous Operating Current
- Input Voltage Range (2.5V to 5.5V)
- Frequency Synchronization (External Clock)
- Programmable Soft-Start
- Output Enable Pin and Power OK
- Thermal Shutdown, Over-Current, Short Circuit, and Under-Voltage Protection
- RoHS Compliant, MSL Level 3, 260°C Reflow