

38V 5A Synchronous Buck Converter

Features

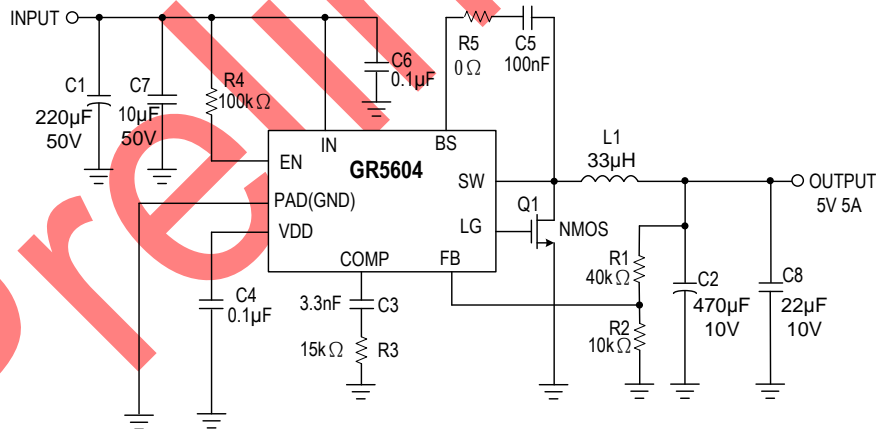
- Wide 8V to 38V Operating Input Range
- Integrated 90mΩ high side Power MOSFET Switches
- Output Adjustable from VFB(1V) to 20V
- Up to 95% Efficiency
- Internal Soft-Start
- Stable with Low ESR Ceramic Output Capacitors
- Fixed 160KHz Frequency
- Cycle-by-Cycle Over Current Protection
- Input Under/Over Voltage Lockout

Description

The GR5604 is a monolithic synchronous buck regulator. The device integrates internal high side and external low side power MOSFETs, and provides 5A of continuous load current over a wide input voltage of 8V to 38V. Current mode control provides fast transient response and cycle-by-cycle current limit.

An internal soft-start prevents inrush current at turn-on. This device, available in SOP8L-EP (Exposed pad) package, provides a very compact solution with minimal external components.

Application Circuit



$$V_{OUT} = V_{FB} \times (1 + R1/R2), \quad V_{FB} = 1.00V, \quad R2 \text{ suggest } 10k \sim 30k\Omega$$