

**Description**

The IT7802 is a low-input voltage and high-output current synchronous-buck PWM converter and integrates with all required active components. Its' operating input voltage ranges from 2.5V to 6V and output voltage ranges from VIN down to 0.8V. The IT7802 operates at a fixed switching frequency of 1.0MHz. In addition, it provides internal soft-start to reduce inrush-current, current-limit and thermal shutdown, preventing IC from being damaged and improving design reliability. Open-drain power good monitors the output voltage.

**Features**

- High Efficiency up to 95%
- 2.5V to 6V Input Voltage Range
- 2A Output Current
- 220µA Low Quiescent Current (Active Mode)
- Shutdown Current: 7µA
- 1.0MHz Constant Frequency Operation
- 0.8V to VIN Adjustable Output Voltage
- Current Mode Operation
- Power Good Function Monitoring Output Voltage
- Internal Soft-Start
- Thermal Shutdown
- Current-Limit and Short-Circuit Protection
- SOP 8L Package
- RoHS Compliant (100% Green Available)

**Applications**

- ASIC/DSP/µP/FPGA Core and I/O Voltages
- Networking and Telecommunications
- TV
- Set-Top Boxes
- Cellular Base Stations

**Typical Applications**

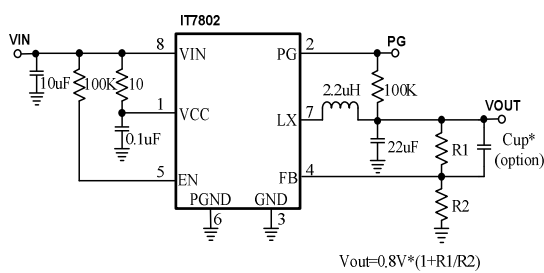


Figure 1. Typical Application Circuit

