

FEATURES

- Ultra low I_q : 1uA
- High Efficiency: Up to 96%
- 1.5MHz Constant Frequency Operation
- 1.3A Output Current
- No Schottky Diode Required
- 2.6V to 7V Input Voltage Range
- Low Dropout Operation: 100% Duty Cycle
- PFM Mode for High Efficiency in Light Load
- Slope Compensated Current Mode Control for Excellent Line and Load Transient Response
- Short Circuit Protection
- Thermal Fault Protection
- inrush Current Limit and Soft Start
- < 1uA Shutdown Current
- SOT23-5 package

GENERAL DESCRIPTION

The TCS4131 is a constant frequency, current mode step-down converter. The device integrates a main switch and a synchronous rectifier for high efficiency without an external Schottky diode. It is ideal for powering portable equipment that runs from a single cell Lithium-Ion (Li+) battery. The output voltage can be regulated as low as 1.13V. This device offers two operation modes, PWM control and PFM Mode switching control, which allows a high efficiency over the wider range of the load.

The TCS4131 is offered in a low profile 5-pin, SOT package, and is available in an adjustable version.

APPLICATIONS

- Wearable
- IOT
- Energy Harvest
- Battery powered devices

TYPICAL APPLICATION

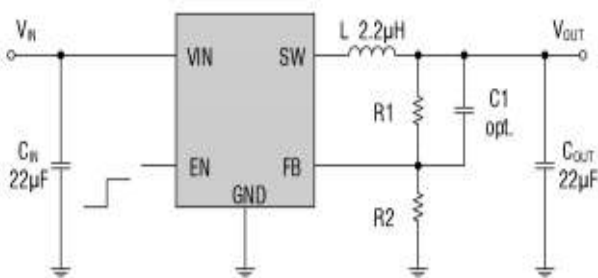


Figure 1. Basic Application Circuit

