

Synchronous Step-Down DC-DC

CC5161D

The CC5161D is a constant band, 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 0.6V. The CC5161D can also run at 100% duty cycle for low dropout operation, extending battery life in portable system. 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.

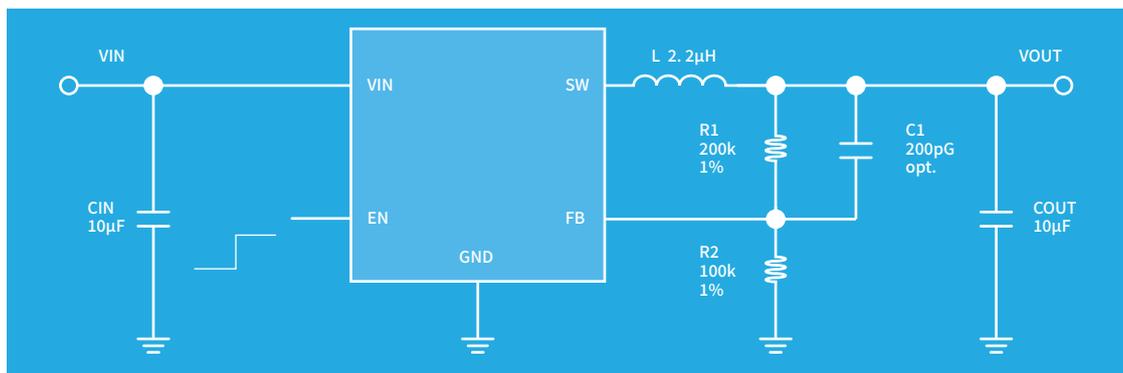


The CC5161D is offered in a low profile 6-pin, DFN package, and is available in an adjustable version.

Technical advantages

- » High efficiency: up to 96%
- » 1.5MHz constant band operation
- » 1A output current
- » No schottky diode required
- » 2V to 6V input voltage range
- » Output voltage as low as 0.6V
- » PFM mode for high efficiency in light load
- » 100% duty cycle in dropout operation
- » Low quiescent current: 10µA
- » Slope compensated current mode control for excellent line and load transient response
- » DFN-6: 1.5x1.5x0.55 (mm) package

Typical Application diagram



Product Specifications

Performance Index

Input Supply Voltage	-0.3V~ 6.5V
EN, FB Voltages	-0.3V to (VIN+0.3V)
SW Voltage	-0.3V to (VIN+0.3V)
Power Dissipation	0.4W
ESD HBM(Human Body Mode)	2kV
ESD MM(Machine Mode)	200V
Reliability and certification	Compliant with RoHS requirements
Operating&Storage	-40 ~ +85°C
Package	DFN-6: 1.5x1.5x0.55 (mm)