1.1MHz, 650mA SYNCHRONOUS DC-DC BUCK CONVERTER AP3406

Description

The AP3406 is a 1.1MHz fixed frequency, current mode, PWM synchronous buck (step-down) DC-DC converter, capable of driving a 650mA load with high efficiency, excellent line and load regulation. The device integrates a main switch and a synchronous switch without an external Schottky diode. It is ideal for powering portable equipment that runs from a single Li-ion battery.

A standard series of inductors are available from several different manufacturers optimized for use with the AP3406. This feature greatly simplifies the design of switch-mode power supplies.

This IC is available in TSOT-23-5 and SOT-23-5 packages.

Features

- High Efficiency: up to 95%
- Output Current: 650mA
- Input Voltage Range: 2.5V to 5.5V
- Fixed 1.1MHz Frequency
- Current Mode Control
- 100% Duty Cycle in Dropout
- Built-in Short Circuit Protection
- Built-in Thermal Shutdown Function
- Built-in Current Limit Function
- Shutdown Current: <1μA

Applications

- GPS
- WiFi Card
- Portable Media Player
- Digital Still and Video Cameras

Parametric Table

Input Voltage Range (V)		2.5 to 5.5
Maximum Output Current (Min) (mA)		650
Feedback Voltage (V)		0.6
Oscillator Frequency (MHz)		1.1
Efficiency @200mA (%)	V_{IN}=4.2V, V_{OUT}=3.3V	95
	V_{IN}=3.6V, V_{OUT}=1.8V	92

Benefits

- High Efficiency
- High Output Current
- Easy to Use

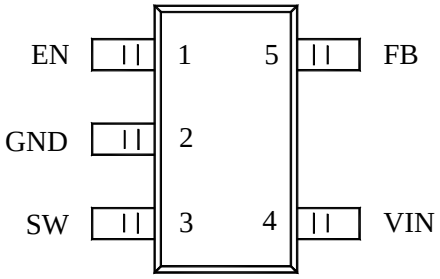
Additional Available Materials

- Samples
- Preliminary Datasheet
- Demo Board
- Demo Board Manual
- Application Note
- ESD Report

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Pin Configuration

TSOT-23-5/SOT-23-5



Ordering Information Example

Package	Temperature Range	Part Number	Marking ID	Packing Type
		Green	Green	
TSOT-23-5	-40 to 85°C	AP3406KT-ADJTRG1	L1B	Tape & Reel
SOT-23-5	-40 to 85°C	AP3406K-ADJTRG1	FBC	Tape & Reel

Detailed information please refer to the relevant datasheet.

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