**AP3406** 



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

### **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 Voltag	2.5 to 5.5	
Maximum (Min) (mA)	650	
Feedback V	0.6	
Oscillator F	1.1	
Efficiency @200mA (%)	V <sub>IN</sub> =4.2V, V <sub>OUT</sub> =3.3V	95
	V <sub>IN</sub> =3.6V, V <sub>OUT</sub> =1.8V	92

#### **Benefits**

- High Efficiency
- High Output Current
- Easy to Use

#### **Additional Available Materials**

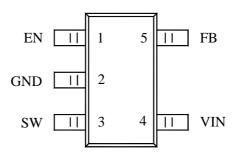
- Samples
- Preliminary Datasheet
- Demo Board
- Demo Board Manual
- Application Note
- ESD Report



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# **Pin Configuration**

#### TSOT-23-5/SOT-23-5



# **Ordering Information Example**

Package	Temperature	Part Number	Marking ID	Packing Type
	Range	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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