

## Description

The TCS2184B is a 1.0uA supply current and fast response low dropout voltage regulator which designed for applications requiring low quiescent current, low dropout voltage and high power supply ripple rejection. It guarantees delivery of 300mA output current, and supports preset output voltage versions range include 1.1V, 1.2V, 1.3V, 1.5V, 1.7V, 1.8V, 1.9V, 2.0V, 2.3V, 2.5V, 2.6V, 2.7V, 2.8V, 2.9V, 3.0V, 3.3V, 3.6V.

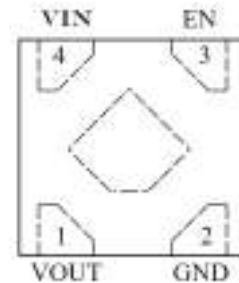
The TCS2184B features a precise  $\pm 2\%$  output regulation over temperature, load and line variations, also the TCS2184B integrates many functions. The function of thermal shutdown and over current limit protect the device against thermal and current over-loads. Based on its low quiescent current consumption and its less than 0.1uA (typical) shutdown mode current, Besides with high power supply rejection ratio make the device holds well for low input voltages typically encountered in battery operation systems. The regulator is stable with small ceramic capacitor (typical 1.0uF).

## Feature

- ◆ Input voltage range: 2.3V~5.5V
- ◆ 1.0uA(typical) Low quiescent current
- ◆ Output current up to 300mA
- ◆  $\pm 2.0\%$  Initial voltage reference accuracy
- ◆ Low dropout voltage: 370mV@300mA
- ◆ Low shutdown current: 1uA (typical)
- ◆ High PSRR: 78 dB at 1KHz
- ◆ Fast transient response over line and load transient
- ◆ Low inrush current during soft start
- ◆ Build in internal soft start
- ◆ Over current protection
- ◆ Short circuit protection
- ◆ Over temperature protection
- ◆ Stable with 1 $\mu$ F minimum ceramic output capacitor
- ◆ Green Product RoHS Compliant and Halogen Free

## Applications

- ◆ Smartphones and Tablets
- ◆ Portable&Battery-Powered Applications
- ◆ Ultra Low Power Micro-Controller
- ◆ Real time clock backup power
- ◆ Micro-Controller Power Supply
- ◆ Electronic sensors



Package Type : DFN1\*1-4L

## Application Circuit

