



# Synchronous Buck-Boost Controller with I2C interface

## 1 Descriptions

SC8706 is a synchronous buck-boost controller, which supports buck mode, boost mode and buck-boost mode. SC8706 supports wide output range from 3V to 20.8V with 8mV resolution.

Through I2C interface, user can program output voltage, current limits, switching frequency and other parameters flexibly.

SC8706 integrates 10-bit ADC is to monitor input/output voltage and current. Full protection is supported including input over/under voltage protection, output over/under voltage protectio, MOSFETs over-current protection. over-temperature protection.

SC8706 is available in a 4mm x 4mm QFN-28 Package.

## 3 Applications

- USB Hub
- Power Banks
- Industrial Equipment

## 2 Features

- High efficiency Buck-Boost conversion
- Wide input range: 3.5V to 24V, 29V sustainable
- output voltage range: 3V to 20.8V with 8 mV resolution, comply with USB PD 3.0 standards
- I2C interface
- Switching frequency: 400kHz/600kHz/800kHz/1.2MHz
- Integrated IOUT/IIN pin for current monitor
- Integrated 10-bit high accuracy ADC
- Protection including UVP, OVP, OCP, OTP
- QFN 4x4-28 Package

## 4 Device Information

ORDER NUMBER	PACKAGE	BODY SIZE
SC8706QDER	28 pin QFN	4mm x 4mm x 0.75mm