

General Description

The SY5002 is a low quiescent bias current and low dropout CMOS general purpose voltage regulator with output voltages between 0.8 V and 5.0 V. It is capable of delivering up to 300 mA, and the SY5002 can control the output via on/off.

SY5002 has an automatic discharge function to quickly discharge VOUT when EN is deactivated. SY5002 feature Over-current protection, Thermal Shutdown function and Auto-discharge.

The SY5002 is offered in the DFN1X1-4/SOT23-5 package.

Features

- Low dropout voltage
- Quiescent bias current when EN enabled: 1.5uA
- Quiescent bias current when EN is deactivated: 1.0uA
- Input voltage range: 1.5~5.5V
- Output voltage range: 0.8 ~ 5.0 V
- High output voltage accuracy: $\pm 1.0\%$ ($1.8 \leq V_{OUT}$)
- Output current: 300mA (MAX)
- Auto-discharge
- Over-current protection
- Thermal Shutdown available in two different packages: the ultra-compact package DFN1X1-4 and the SOT23-5 package

Applications

- ◆ wearable devices
- ◆ IoT devices
- ◆ portable applications

Typical Application Circuit

