BP8501CH

Low Standby Power BUCK CV Converter

Description

The BP8501CH is an ultra-low standby power non-isolated buck converter for constant output voltage application. The device is suitable for 85Vac~265Vac universal input non-isolated auxiliary power supply.

The BP8501CH integrates a 650V high voltage power MOSFET, current sense resistor and flywheel diode. With the output voltage and current control technique, it can get excellent CV regulation.

The BP8501CH utilizes PWM & PFM multiple mode control, and powering VCC by output voltage, which contribute to very low standby power, high efficiency, and minimized audible noise.

The BP8501CH is available in SOP-8 package.

Features

- Standby power <20mW
- Fixed 3.3V or 5V output voltage
- Support direct 3.3V output
- Minimized audible noise
- Internal 650V high voltage power MOSFET
- Integrated HV startup and power supply circuits
- Frequency jitter for low EMI
- Integrated soft startup function

Protection Function

- Over load protection
- Output short protection
- Over temperature protection
- Cycle by cycle Current limitation

Applications

- Auxiliary power applications

Typical Application

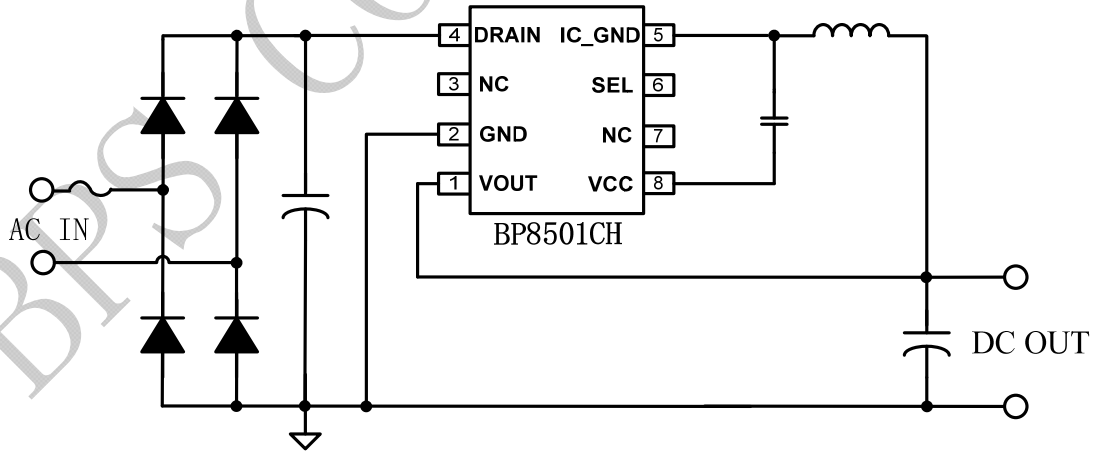
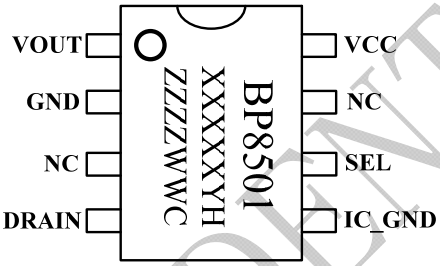


Figure 1. Typical application circuit for BP8501CH

Ordering Information

Part Number	Package	Operating Temperature	Package Method	Marking
BP8501CH	SOP-8	-40 ℃ to 105 ℃	Tape 4,000pcs/reel	BP8501 XXXXXYH ZZZZWWC

Pin Configuration and Marking Information



XXXXXY: lot code
ZZZZ: Sign
WW: Week

Figure 2. Pin configuration

Pin Definition

Pin No.	Name	Description
1	VOUT	Output voltage pin
2	GND	Ground of output
3,7	NC	No connection
4	DRAIN	Drain of the integrated HV MOSFET
5	IC_GND	Ground of IC
6	SEL	Output voltage selection pin. To VCC: Vout= 3.3V; To GND Vout= 5V
8	VCC	Power supply pin

Disclaimer

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