

### Description

The BP3182EB is a PSR (Primary Side Regulation) constant current LED driver with high current accuracy used for low PF two-winding Flyback circuit. Along with Boost pre-converter, an application scenario of two-stage isolated flicker-free light output is available.

The BP3182EB detects output voltage and demagnetization signal without auxiliary winding, while keeping excellent OVP accuracy.

The BP3182EB adopts advanced PSR technology without secondary side feedback circuit and loop compensation capacitor to provide excellent constant output current regulation with extreme low system cost and tiny size. Integrated with internal MOSFET, system cost is further reduced and easy for PCB layout.

The BP3182EB works in BCM (Boundary Conduction Mode) mode, which can help to reduce switching loss and improve EMC performance.

BP3182EB adopts BPSOP-10 package.



BPSOP-10 Package

### Features

- HV JFET inside to deliver fast start-up
- Internal 650V MOSFET
- High accuracy of current reference
- Low operating current
- High accuracy of OVP voltage reference
- Good load regulation
- Boundary conduction mode
- VCC UVLO
- Cycle-by-cycle current limitation
- Integrated protections
  - Output over voltage protection
  - Output short circuit protection
  - Thermal regulation
  - Inductor and output diode short circuit protection

### Applications

- LED panel light
- LED downlight

### Typical Application

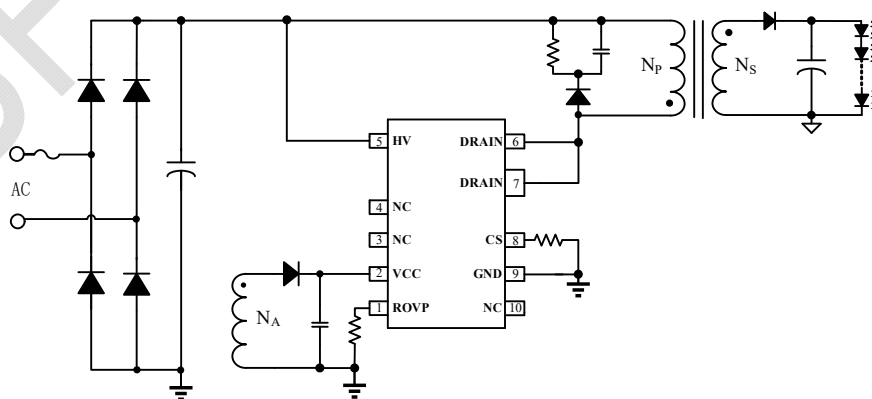


Figure 1 BP3182EB Typical Application

### Ordering Information

Part Number	Package	Package Method	Marking
BP3182EB	BPSOP-10	Tape 4,000/Reel	BP3182E XXXXXYZ XXYYWWB

### Pin Configuration and Marking Information

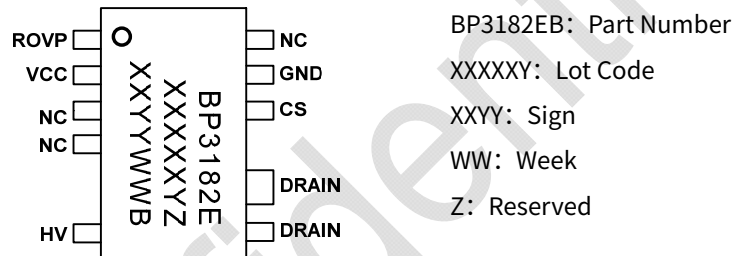


Figure 2 Pin Configuration

### Pin Definition

Pin No.	Name	Description
1	ROVP	OVP voltage setting
2	VCC	Power supply for IC
3	NC	Not connected
4	NC	Not connected
5	HV	High voltage startup, VCC power supply and input voltage detection
6	DRAIN	DRAIN of internal MOSFET
7	DRAIN	DRAIN of internal MOSFET
8	CS	Primary side current sensing, connected with current sensing resistor
9	GND	IC Ground
10	NC	Not connected

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