

Non-Synchronous PWM Boost Converter



General Description

The FP6287 is a boost topology switching regulator for wide operating voltage applications. Its built-in 20 mΩ power MOSFET makes this regulator highly power efficient. The internal compensation network minimizes external component counts, and the non-inverting input of error amplifier connects to a 0.6V precision reference voltage. The FP6287 has internal soft start and programmable over current protection set by external resistor.

The FP6287 is available in the small footprint SOP-8L(EP) package to fit in space-saving PCB layout for miscellaneous application fields.

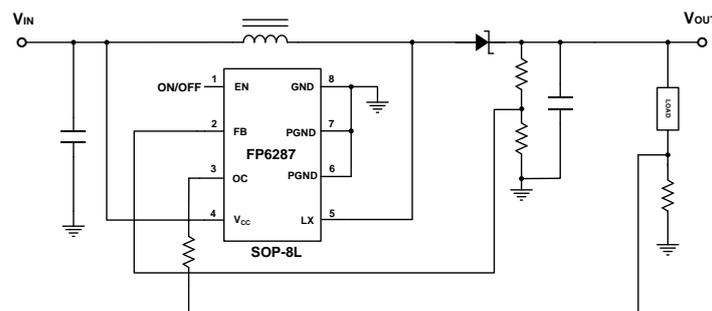
Features

- Wide Supply Voltage Operating Range: 2.4 to 5.5V
- Precision Feedback Reference Voltage: 0.6V (±2%)
- Shutdown Current: <1μA
- Internal Fixed PWM frequency: 550KHz
- Internal Soft Start Function :7ms (SS)
- Over Current Protection Function (OCP)
- Over Voltage Protection
- Package: SOP-8L(EP)
- Duty Cycle: PWM/PFM Switching Control Circuit (15%~90%)

Applications

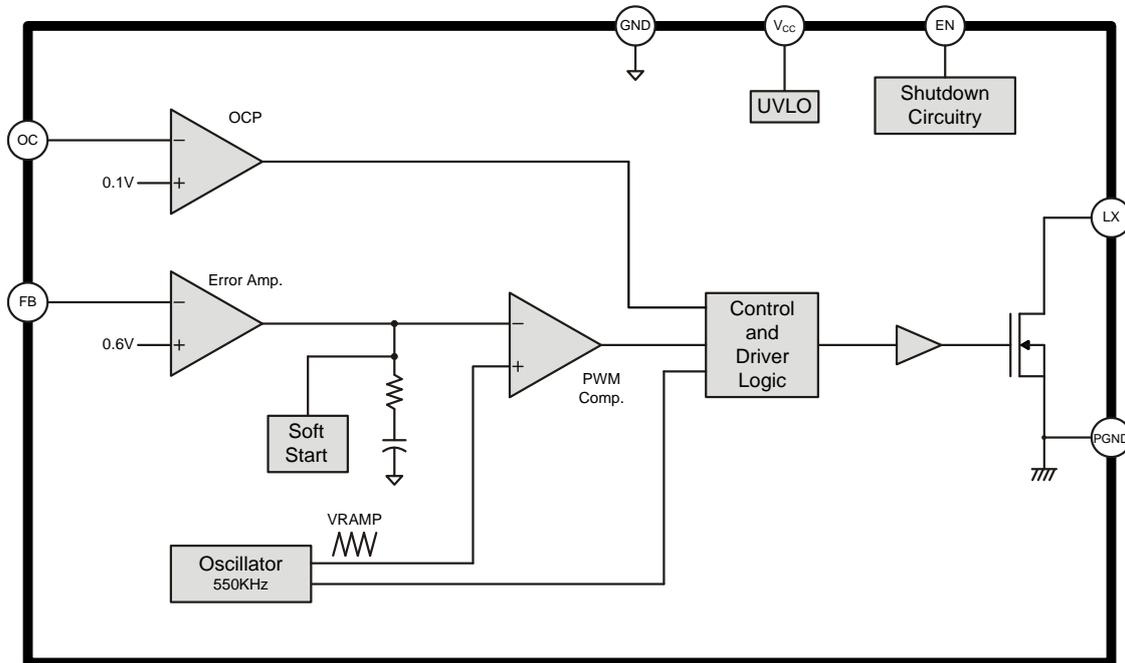
- Chargers
- LCD Displays
- Digital Cameras
- Handheld Devices
- Portable Products

Typical Application Circuit



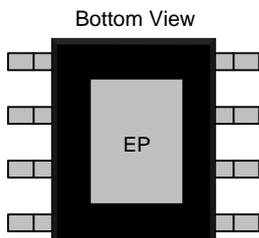
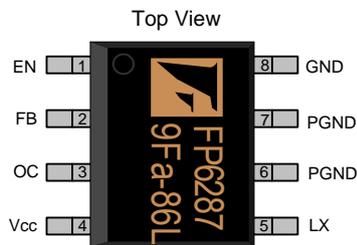
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Function Block Diagram



Pin Descriptions

SOP-8L(EP)



| Name | No. | I / O | Description |
|------|-----|-------|--------------------------------------|
| EN | 1 | I | Enable Control (Active High) |
| FB | 2 | I | Error Amplifier Inverting Input |
| OC | 3 | I | Adjustable Output Current Protection |
| Vcc | 4 | P | IC Power Supply |
| LX | 5 | O | Power Switch Output |
| PGND | 6 | P | IC Power Ground |
| PGND | 7 | P | IC Power Ground |
| GND | 8 | P | IC Ground |
| EP | 9 | P | Exposed PAD. Must connect to LX |

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