

# MP1584EN-LF-Z SOIC-8 switch regulator chip



**Produktkode:** 843aa  
**Tilgjengelighet:** 25

**Pris:** kr. 35,00

## Short Description

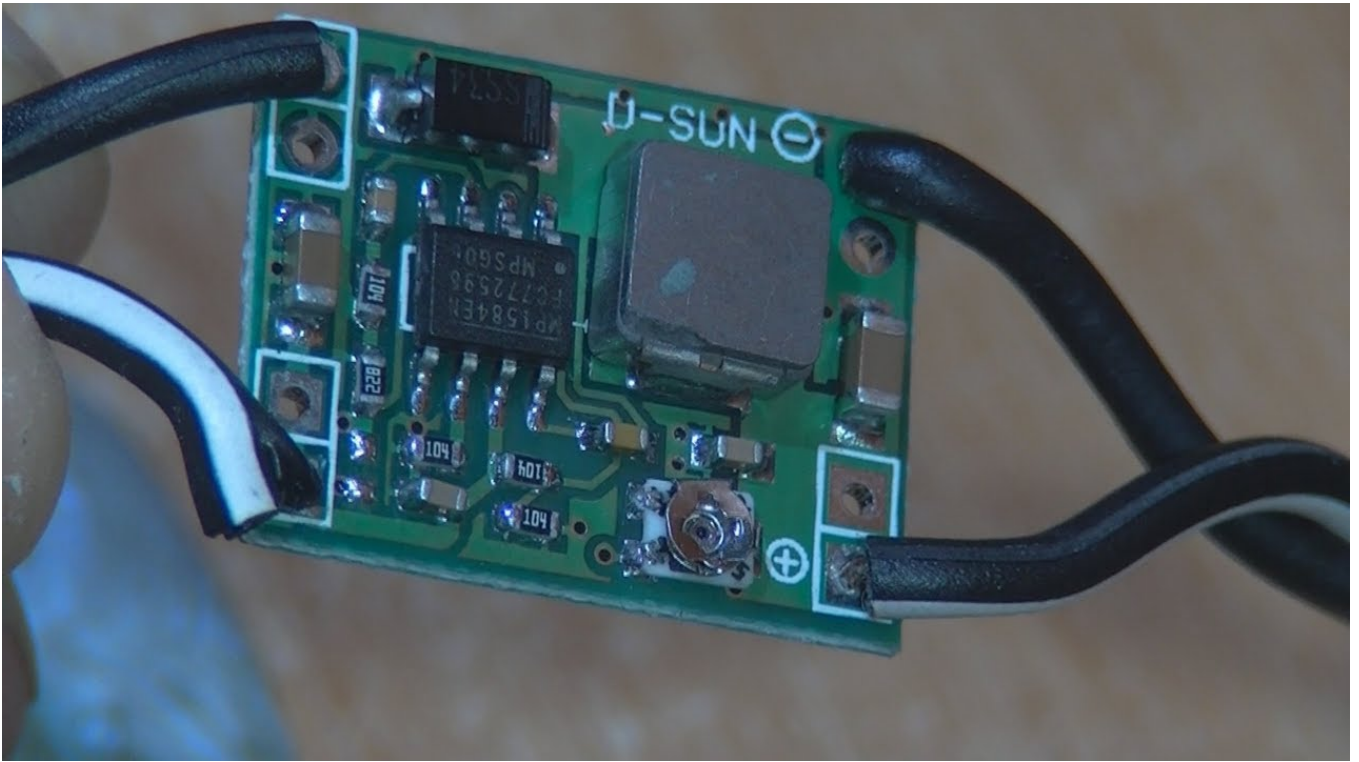
MP1584EN-LF-Z SOIC-8 switch regulator chip 3A 1.5MHz 28V

## Beskrivelse



8 Terminals 8-Pin DC DC Voltage Regulator SWITCHING REGULATOR 1 Outputs  
100kHz~1.5MHz Tape & Reel (TR) 8-SOIC (0.154, 3.90mm Width) Exposed Pad

MP1584EN is a high frequency step-down converter with an integrated internal high-side high voltage power MOSFET. This article mainly converts pinout, datasheet, specifications, applications and other details about MP1584EN.

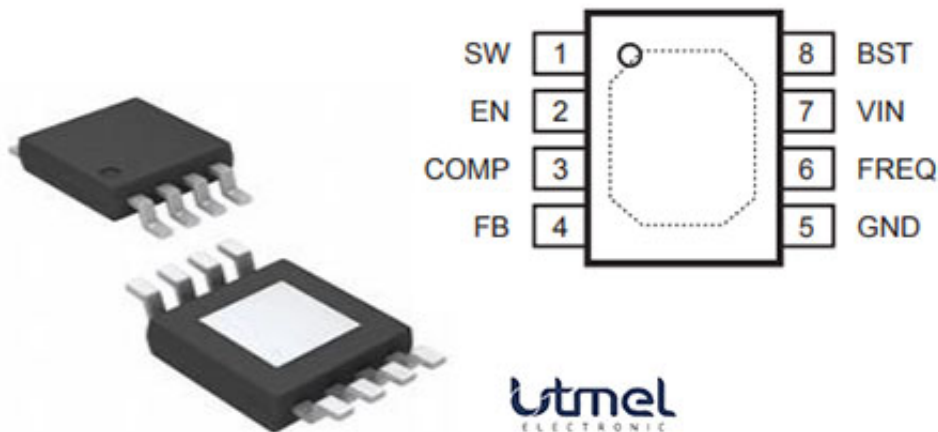


## Buck 3A DC Converter Step Down Module

### Catalog

- [MP1584EN Pinout](#)
- [MP1584EN Description](#)
- [Specifications](#)
- [MP1584EN CAD Model](#)
- [MP1584EN Block Diagram](#)
- [MP1584EN Features](#)
- [MP1584EN Application Circuit](#)
- [MP1584EN Applications](#)
- [MP1584EN vs LT8610](#)
- [MP1584EN Dimension Information](#)
- [MP1584EN Manufacturer](#)
- [Datasheet PDF](#)

## MP1584EN Pinout



### MP1584EN Pinout

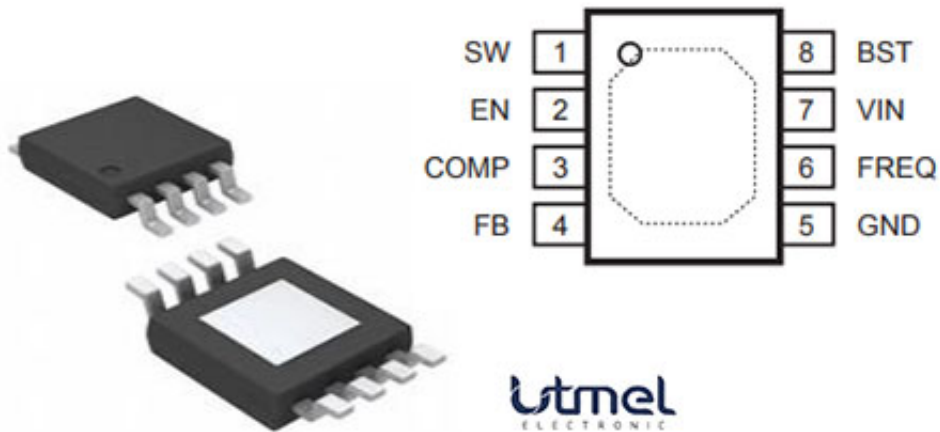
SOIC Pin #	Name	Description
1	SW	Switch Node. This is the output from the high-side switch. A low forward drop Schottky diode to ground is required. The diode must be close to the SW pins to reduce switching spikes.
2	EN	Enable Input. Pulling this pin below the specified threshold shuts the chip down. Pulling it up above the specified threshold or leaving it floating enables the chip.
3	COMP	Compensation. This node is the output of the error amplifier. Control loop frequency compensation is applied to this pin.
4	FB	Feedback. This is the input to the error amplifier. The output voltage is set by a resistive divider connected between the output and GND which scales down $V_{OUT}$ equal to the internal +0.8V reference.
5	GND Exposed Pad	Ground. It should be connected as close as possible to the output capacitor to shorten the high current switch paths. Connect exposed pad to GND plane for optimal thermal performance.
6	FREQ	Switching Frequency Program Input. Connect a resistor from this pin to ground to set the switching frequency.
7	VIN	Input Supply. This supplies power to all the internal control circuitry, both BS regulators and the high-side switch. A decoupling capacitor to ground must be placed close to this pin to minimize switching spikes.
8	BST	Bootstrap. This is the positive power supply for the internal floating high-side MOSFET driver. Connect a bypass capacitor between this pin and SW pin.

### MP1584EN Description

The **MP1584EN** is a high-frequency step-down [converter](#) with an integrated internal high-side high voltage power MOSFET. It provides 3A output with current mode control for fast loop response and easy compensation. The wide 4.5V to

28V input range accommodates a variety of step-down applications, including those in an automotive input environment. A 100 $\mu$ A operational quiescent current allows use in battery-powered applications.

## Pinout



## Product Gallery

