

# 1A Synchronous Step-Up PWM Converter



## General Description

The FP6295 is a Synchronous boost DC-DC converter. Its PWM circuitry with built-in 0.2Ω power MOSFET makes this converter highly power efficiently. High switching frequency allows faster loop response and easy filtering with a low noise output. The non-inverting input its error amplifier is connected to an internal 1.24V precision reference voltage. Current mode control and external compensation network make it easy and flexible to stabilize the system.

The FP6295 is available in the MSOP-8L (EP) package. Combined with low ESR capacitors, it reduced PCB space for step-up applications.

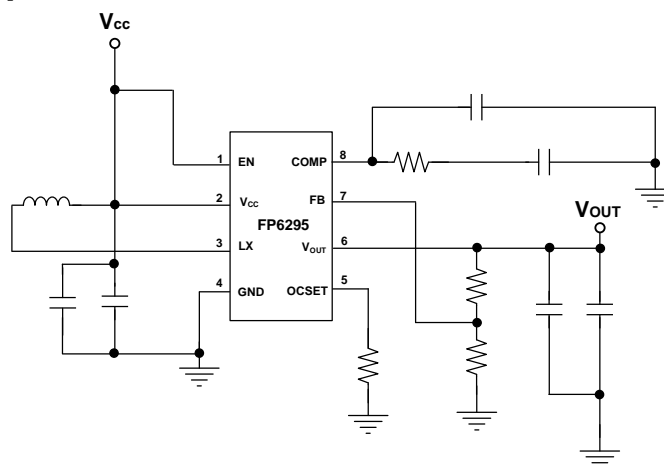
## Features

- Adjustable Output from  $V_{CC}$  to 5V
- Internal Fixed PWM Frequency: 1.2MHz
- Precision Feedback Reference Voltage: 1.24V
- Internal 0.2Ω, 2A, 5V Power MOSFET
- Shutdown Current : 0.1μA
- Current Limite ,Enable Function
- Package: MSOP-8L (EP)

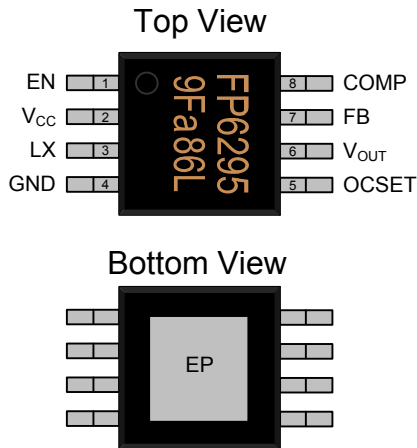
## Applications

- Chargers
- Digital Cameras
- Handheld Devices
- Portable Products

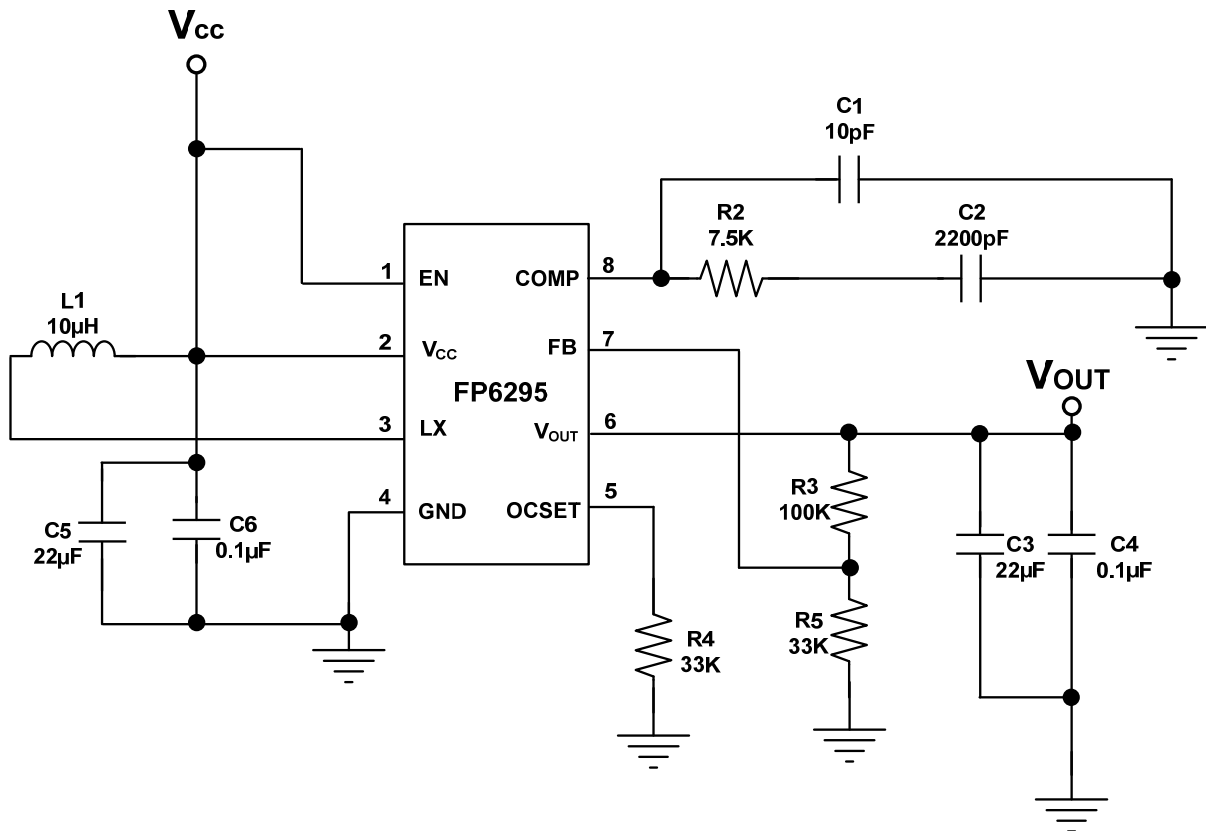
## Typical Application Circuit



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**MSOP-8L**


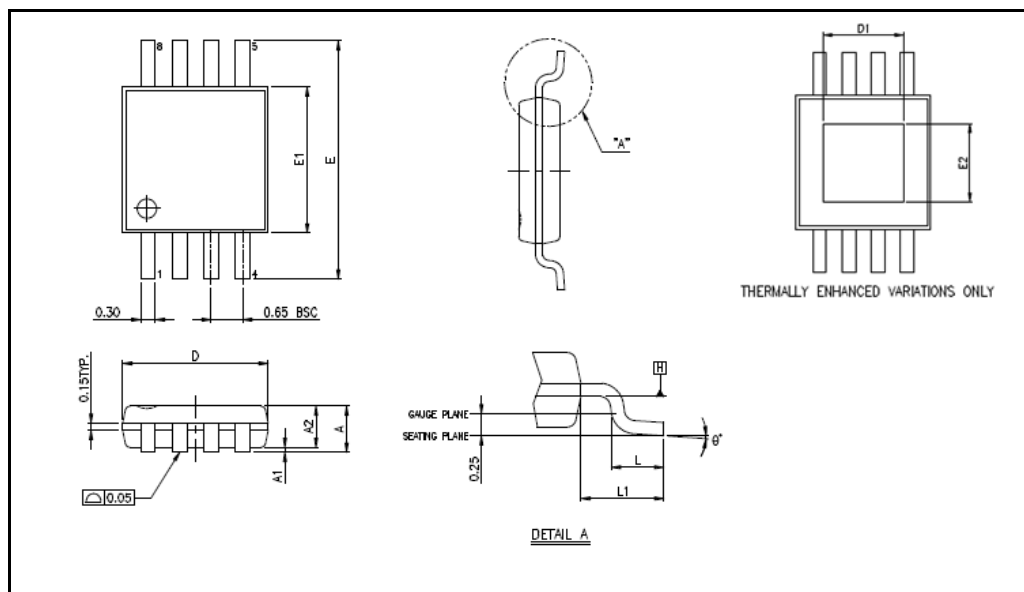
Name	No.	I / O	Description
EN	1	O	Enable Control
V <sub>CC</sub>	2	I	Supply Voltage
LX	3	I	Switch Output
GND	4	P	IC Ground
OCSET	5	O	Set Switch Output Over Current
V <sub>OUT</sub>	6	O	Output Voltage
FB	7	O	Feedback
COMP	8	I	Error Amplifier Compensation Output
EP	9	P	Exposed PAD. Must connect to GND

**Application Circuit**


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## Package Outline

### MSOP-8L (EP)



Unit: mm

Symbols	Min. (mm)	Max. (mm)
A		1.100
A1	0.000	0.150
A2	0.750	0.950
D	3.000 BSC	
E	4.900 BSC	
E1	3.000 BSC	
L	0.400	0.800
L1	0.950 REF	
$\theta^\circ$	$0^\circ$	$8^\circ$

MSOP-8L (EP) continued

Symbols	Min. (mm)	Max. (mm)
E2	1.555 REF	
D1	1.600 REF	

#### Note:

1. Package dimensions are in compliance with JEDEC outline: MO-187 AA.
2. Dimension "D" does not include molding flash, protrusions or gate burrs.
3. Dimension "E1" does not include inter-lead flash or protrusions.

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