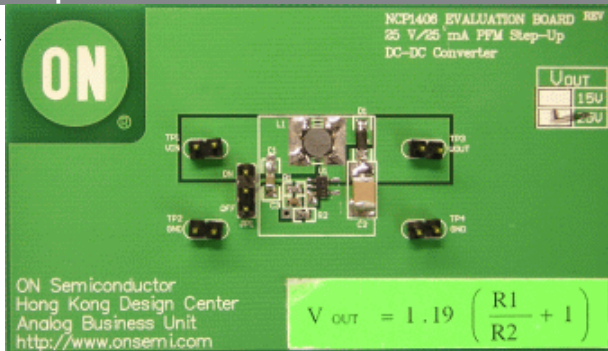




## NCP1406V15GEVB: Monolithic Micropower PFM Step-Up DC-DC Converter Evaluation Board

### Evaluation Board Description

The NCP1406 is a monolithic micropower PFM step-up DC-DC converter. This device is designed to boost single lithium or two cells AA/AAA battery voltage up to 25 V (with internal MOSFET) output for handheld applications. Target applications include OLED Power, White LED Drivers, and LCD Bias. In addition to standard boost converter topologies, this device can be configured for voltage-inverting and step-down applications. This device is available in space-saving thin SOT23-5 (TSOP-5) package. With its small footprint, the device is also ideal for generating a boosted voltage from a 3.3 V or 5.0 V power rail.



There are 2 versions of the demo board that have been preconfigured to generate a voltage of 25V or 15V.

### Features and Applications

#### Features

- 85% Efficiency at  $V_{OUT} = 25\text{ V}$ ,  $I_{OUT} = 25\text{ mA}$ ,  $V_{IN} = 5.0\text{ V}$
- Low Operating Current of 15  $\mu\text{A}$  (Not Switching)
- Low Shutdown Current of 0.3  $\mu\text{A}$
- Low Startup Voltage of 1.8 V Typical at 0 mA
- Output Voltage up to 25 V with Built-in 26 V MOSFET Switch
- PFM Switching Frequency up to 1.0 MHz
- Chip Enable
- Output Voltage Soft-Start
- Feedback Pin Open/Short Circuit Protection
- Input Under-voltage Lockout
- Thermal Shutdown
- Low Profile and Minimum External Parts

### Evaluation Board Information

Evaluation Board	Status	Compliance	Short Description	Parts Used	Action
NCP1406V15GEVB	Active	Pb-free	Monolithic Micropower PFM Step-Up DC-DC Converter Evaluation Board	NCP1406SNT1G	

### Technical Documents

Type	Document Title	Document ID/Size	Rev
Eval Board: BOM	NCP1406V15GEVB Bill of Materials ROHS Compliant	NCP1406V15GEVB_BOM_ROHS.PDF - 67.0 KB	0
Eval Board: Gerber	NCP1406V15GEVB Gerber Layout Files (Zip Format)	NCP1406V15GEVB_GERBER.ZIP - 45.0 KB	1
Eval Board: Schematic	NCP1406V15GEVB Schematic	NCP1406V15GEVB_SCHEMATIC.PDF - 28.0 KB	1
Eval Board: Test Procedure	NCP1406V15GEVB Test Procedure	NCP1406V15GEVB_TEST_PROCEDURE.PDF - 42.0 KB	1