

## Product Overview

### NCP1403: Boost Converter, PFM, DC-DC, 15 V, 50 mA

For complete documentation, see the data sheet.



The NCP1403 is a monolithic PFM step-up DC-DC converter. This device is designed to boost a single Lithium or two cell AA/AAA battery voltage up to 15 V (with internal MOSFET) output for handheld applications. A pull-up Chip Enable feature is included to extend battery operating life. The device can also be configured in step-down and voltage-inverting configurations. This device is available in space-saving TSOP-5 package.

### Features

- 82% Efficiency at  $V_{OUT} = 15\text{ V}$ ,  $I_{OUT} = 50\text{ mA}$ ,  $V_{IN} = 5.0\text{ V}$
  - 78% Efficiency at  $V_{OUT} = 15\text{ V}$ ,  $I_{OUT} = 30\text{ mA}$ ,  $V_{IN} = 3.6\text{ V}$
  - Low Operating Current of  $19\text{ }\mu\text{A}$  (No Switching)
  - Low Shutdown Current of  $0.3\text{ }\mu\text{A}$
  - Low Start-up Voltage of  $1.3\text{ V}$  Typical at  $0\text{ mA}$
  - Output Voltage up to  $15\text{ V}$  with Built-in  $16\text{ V}$  MOSFET Switch
  - PFM Switching Frequency up to  $300\text{ kHz}$
  - Chip Enable
  - Low Profile and Minimum External Parts
  - Micro Miniature TSOP-5 Package
- For more features, see the data sheet

### Applications

- LCD Bias
- Personal Digital Assistants (PDA)
- Digital Still Camera
- Hand-held Games
- Hand-held Instrument

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	$V_{CC}$ Min (V)	$V_{CC}$ Max (V)	$V_o$ Typ (V)	$I_o$ Typ (A)	Efficiency (%)	$f_{sw}$ Typ (kHz)	Package Type
NCP1403SNT1G	0.2667	Pb-free Halide free	Active	Step-Up		1.2	5.5	Up to 15	0.05	72		TSOP-5 / SOT-23-5

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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