



Product Overview

NCP4686: Linear Voltage Regulator, LDO, Low Voltage, 400 mA

For complete documentation, see the data sheet

Product Description

The NCP4686 is a 400mA, low voltage, high accuracy CMOS Low Drop Out Linear Voltage Regulator. Capable of operating from an input voltage as low as 1.0V, the device can generate output voltages as low as 0.7V with an output voltage accuracy of $\pm 0.8\%$. The device features an enable pin allowing the regulator to be switched to standby mode and thereby reducing supply current to less than 0.1 μ A. The NCP4686 is available in a SC88-A, SOT23-5 and the tiny 1.2x1.2mm XDFN package, and comes in output voltage steps of 100mA between 0.7V and 1.8V. It is available with or without an auto-discharge function on the output. For specific package, voltage and discharge combinations, please contact your local sales office.

Features

- Operates from an input voltage rail as low as 1V
- Enable pin to place the device in standby mode
- Stable and accurate output voltage at $\pm 0.8\%$
- Output Voltage as low as 0.7V

Benefits

- Maximises battery life in portable applications
- Reduces I_q to less than 1 μ A
- Reduces the need for calibration

Applications

- FPGA power supply
- Low power μ processor power supply

End Products

- Battery powered products: meters, toys, power tools
- Networking and communication equipment
- STB, AV receivers

Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V_o (V)	I_o Typ (A)	V_i Max (V)	V_{DO} Typ (V)	I_q Typ (mA)	PSRR (dB)	Noise (μ V _{rms})	Package Type
NCP4686DSN08T1G	Pb-free Halide free	Active	Single	Positive	0.8	0.4	4	0.4	0.045	60	30	SOT-23-5
NCP4686DSN10T1G	Pb-free Halide free	Active	Single	Positive	1	0.4	4	0.32	0.045	60	30	SOT-23-5
NCP4686DSN12T1G	Pb-free Halide free	Active	Single	Positive	1.2	0.4	4	0.28	0.045	60	30	SOT-23-5
NCP4686DSN18T1G	Pb-free Halide free	Active	Single	Positive	1.8	0.4	4	0.22	0.045	60	30	SOT-23-5

For more information please contact your local sales support at www.onsemi.com

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