



Product Overview

NCP4587: Linear Voltage Regulator, LDO, 150 mA, with Auto Low Power Mode

For complete documentation, see the data sheet

Product Description

The NCP4587 is a CMOS 150mA LDO which switches to a low power mode under light current loads. The device automatically switches back to a fast response mode as the output load increases above 3mA or can be placed in permanent fast mode through a mode select pin. The family is available in a variety of packages: SC70-5 (SC88A), SOT23-5 and an ultra thin (0.4mm) small 1.2x1.2 mm XDFN. Voltage options are available between 0.8V and 4.0V. Voltages can be available in 100mV steps - contact your local sales office to request your required package, voltage output and discharge combinations.

Features

- I_q is 55uA (typical) or 1.5uA in LP mode
- Good PSRR - 70dB typical
- Very Low Dropout: 120 mV when V_o > 2.6V
- Auto Discharge, Enable high versions available
- Excellent Output Voltage accuracy: ±1%

Benefits

- Automatically switches to LP mode to save power and battery life
- Excellent noise rejection and filtering in Fast Mode
- Low Input Voltages accepted, extending battery life and reducing power dissipation
- Choose between fast shutoff or fast restart of the output voltage

Applications

- Battery powered applications
- Applications which are usually ON but not driving loads

End Products

- Blue Ray, STB, DVD players
- Instrumentation, meters, cameras

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 (μV _{rms})	Package Type
NCP4587DMX12TCG	Pb-free Halide free	Active	Single	Positive	1.2	0.15	6	0.24	0.055	70	115	XDFN-6
NCP4587DMX18TCG	Pb-free Halide free	Active	Single	Positive	1.8	0.15	6	0.19	0.055	70	115	XDFN-6
NCP4587DMX28TCG	Pb-free Halide free	Active	Single	Positive	2.8	0.15	6	0.12	0.055	70	115	XDFN-6
NCP4587DMX30TCG	Pb-free Halide free	Active	Single	Positive	3	0.15	6	0.12	0.055	70	115	XDFN-6
NCP4587DMX31TCG	Pb-free	Active	Single	Positive	3.1	0.15	6	0.12	0.055	70	115	XDFN-6
NCP4587DMX33TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.15	6	0.12	0.055	70	115	XDFN-6

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

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