



Product Overview

NCP4681: Linear Voltage Regulator, LDO, Ultra Low Iq, 150 mA

For complete documentation, see the data sheet

Product Description

The NCP4681 and NCP4684 are CMOS Linear voltage regulators with 150 mA output current capability and ultra low supply currents (1 uA typ.) The devices are easy to use and include output current protection and a fully integrated soft-start circuit to minimize inrush current and to ensure no output voltage overshoot. The NCP4681 includes an ENABLE function to reduce supply current by using a Standby mode, while the NCP4684 excludes the ENABLE pin to avoid the associated pull down current, thereby offering the lowest possible current consumption for battery powered applications in ACTIVE mode. The devices are available in the ultra small 0.8x0.8mm XDFN as well as the SC-70 and SOT23-5 packages.

Features

- Ultra Low Supply current : 1 uA typical
- Input voltage range 1.4 V to 5.25 V
- Enable pin to place device in STANDBY mode (NCP4581)
- Output voltage range: 0.8 V to 3.6 V in 100 mV increments
- Tiny 0.8 mm x 0.8 mm x 0.4 mm xDFN package
- Soft start

Benefits

- Extend the life of battery powered products
- Extends the useful life of a battery
- Reduces Iq to 0.1 uA to minimise power dissipation
- Suitable for powering low voltage controllers
- Convenient alternative to CSP packaging
- Reduces inrush current and output overshoot

Applications

- Battery powered boards
- Keyboards, touchscreens, LCD screens

End Products

- Cellphones, Digital Cameras, GPS,

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
NCP4681DMX29TCG	Pb-free Halide free	Active	Single	Positive	2.9	0.15	6	0.28	0.001	25	100	XDFN-4
NCP4681DMX33TCG	Pb-free Halide free	Active	Single	Positive	3.3	0.15	6	0.28	0.001	25	100	XDFN-4
NCP4681DMX35TCG	Pb-free Halide free	Active	Single	Positive	3.5	0.15	6	0.28	0.001	25	100	XDFN-4
NCP4681DSQ15T1G	Pb-free Halide free	Active	Single	Positive	1.5	0.15	6	0.28	0.001	25	100	SC-88A-5 / SC-70-5 / SOT-323-5
NCP4681DSQ25T1G	Pb-free Halide free	Active	Single	Positive	2.5	0.15	6	0.28	0.001	25	100	SC-88A-5 / SC-70-5 / SOT-323-5
NCP4681DSQ28T1G	Pb-free Halide free	Active	Single	Positive	2.8	0.15	6	0.28	0.001	25	100	SC-88A-5 / SC-70-5 / SOT-323-5
NCP4681DSQ33T1G	Pb-free Halide free	Active	Single	Positive	3.3	0.15	6	0.28	0.001	25	100	SC-88A-5 / SC-70-5 / SOT-323-5
NCP4681HMX35TCG	Pb-free Halide free	Active	Single	Positive	3.5	0.15	6	0.28	0.001	25	100	XDFN-4

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

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