



## Product Overview

### NCP4684: 150 mA Ultra Low Supply Current LDO Voltage Regulator

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
- 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
- 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 <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>q</sub> Typ (mA)	PSRR (dB)	Noise (μV <sub>rms</sub> )	Package Type
NCP4684EMX25TCG	Pb-free	Active	Single	Positive	2.5	0.15	6	0.28	0.001	25	100	XDFN-4
NCP4684EMX33TCG	Pb-free	Active	Single	Positive	3.3	0.15	6	0.28	0.001	25	100	XDFN-4

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Created on: 5/31/2012