

# NCP103

## LDO Regulator, 150 mA, High PSRR

### Product Overview

For complete documentation, see the data sheet.

The NCP103 is 150 mA LDO that provides the engineer with a very stable, accurate voltage with low noise suitable for space constrained, noise sensitive applications. In order to optimize performance for battery operated portable applications, the NCP103 employs the dynamic quiescent current adjustment for very low IQ consumption at no-load.

#### Features

- Operating Input Voltage Range: 1.7 V to 5.5 V
- Low Dropout: 75 mV Typical at 150 mA
- High PSRR 75 dB at 1kHz
- Thermal Shutdown and Current Limit Protections
- Very Low Quiescent Current of Typ. 50  $\mu$ A
- Available in uDFN 1.0 x 1.0 mm Package

#### Applications

- Touchscreen Controller Supply
- Wireless module
- Camera supply module
- MCU and low power FPGA supply

#### Benefits

- Well suited for battery powered applications
- Supports applications with very low Input to Output Voltage requirements
- Very well suited for space-constrained applications
- Robust design and high reliability
- Highly effective solution at light load conditions
- Very well suited for space-constrained applications

#### End Products

- Smartphone
- Tablet
- Portable device
- Wireless handset
- Battery powered device

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Output	Polarity	V <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Min (V)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>q</sub> Typ (mA)	PSRR (dB)	Noise ( $\mu$ V <sub>r</sub> ms)	Enable	PowerGood	Application	Package Type
NCP103AMX180 TCG	0.0648		Active	Single	Positive	1.8	0.15	1.7	5.5	0.12	0.05	75	60	Yes	No	Consumer	UDFN-4
NCP103AMX310 TCG	0.0648		Active	Single	Positive	3.1	0.15	1.7	5.5	0.07	0.05	75	60	Yes	No	Consumer	UDFN-4
NCP103BMX185 TBG	0.0648		Active	Single	Positive	1.85	0.15	1.7	5.5	0.06	0.05	75	60	Yes	No	Consumer	UDFN-4
NCP103BMX185 TCG			Active	Single	Positive	1.85	0.15	1.7	5.5	0.06	0.05	75	60	Yes	No	Consumer	UDFN-4
NCP103BMX333 OTCG	0.0648		Active	Single	Positive	3.3	0.15	1.7	5.5	0.065	0.05	75	60	Yes	No	Consumer	UDFN-4