

Product Overview

NCP110: LDO Regulator, 200 mA, Low Vin, Ultra-High PSRR

For complete documentation, see the data sheet.

The NCP110 is a linear regulator capable of supplying 200 mA output current from 1.1 V input voltage. The NCP110 provides wide output range from 0.6 V up to 4.0 V, very low noise and high PSRR ideal for high precision analog & Wi-Fi applications.

The device offers a unique combination of very low voltage, low noise, high PSRR and low quiescent current, made possible with an innovative new architecture. Due to low quiescent current, Low Vin and dropout voltage, the NCP110 is ideal for battery powered connected devices such as smartphones, tablets and Wireless IoT modules.

The device is designed to work with a 1 μ F input and a 1 μ F output ceramic capacitor. It is available in ultra-small 0.35P, 0.65 mm x 0.65 mm Chip Scale Package (CSP) and XDFN4 0.65P, 1 mm x 1 mm.

Features

- Low Vin 1.1 V
- Ultra Low Noise 8.8 μ Vrms
- High PSRR 95 dB at 1 kHz
- Low Quiescent current 20 μ A
- Available in Small Packages CSP4 0.65 x 0.65 mm & xDFN4 1 x 1 mm

Applications

- Battery-powered equipment
- Wireless and LAN devices
- Smartphone, Tablets
- Digital Cameras
- Portable Medical Equipment

Benefits

- Suitable for battery powered devices
- Very well suited for noise sensitive applications
- Excellent for power sensitive devices
- Ideal for battery powered applications
- Good for space constrained applications

End Products

- Smartphone
- Tablet
- Camera
- Wireless Bluetooth headphones
- Smart Watch

Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V _O (V)	I _O Typ (A)	V _I Min (V)	V _I Max (V)	V _{DO} Typ (V)	I _g Typ (mA)	PSRR (dB)	Noise (μV _{rms})	Enable	Power Good	Package Type
NCP110AFCT060T2G	Pb-free Halide free	Active	Single	Positive	0.6	0.2	1.1	5.5	0.45	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AFCT080T2G	Pb-free Halide free	Active	Single	Positive	0.8	0.2	1.1	5.5	0.27	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AFCT085T2G	Pb-free Halide free	Active	Single	Positive	0.85	0.2	1.1	5.5	0.23	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AFCT100T2G	Pb-free Halide free	Active	Single	Positive	1	0.2	1.1	5.5	0.15	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AFCT105T2G	Pb-free Halide free	Active	Single	Positive	1.05	0.2	1.1	5.5	0.137	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AFCT110T2G	Pb-free Halide free	Active	Single	Positive	1.1	0.2	1.1	5.5	0.125	$\frac{0.02}{0.02}$	95	8.8	Yes	No	WLCS P-4
NCP110AFCT120T2G	Pb-free Halide free	Active	Single	Positive	1.2	0.2	1.1	5.5	0.107	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AFCT180T2G	Pb-free Halide free	Active	Single	Positive	1.8	0.2	1.1	5.5	0.064	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AFCT280T2G	Pb-free Halide free	Active	Single	Positive	2.8	0.2	1.1	5.5	0.045	0.02	95	8.8	Yes	No	WLCS P-4
NCP110AMX060TBG	Pb-free Halide free	Active	Single	Positive	0.6	0.2	1.1	5.5	0.47	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX080TBG	Pb-free Halide free	Active	Single	Positive	0.8	0.2	1.1	5.5	0.285	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX085TBG	Pb-free Halide free	Active	Single	Positive	0.85	0.2	1.1	5.5	0.245	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX100TBG	Pb-free Halide free	Active	Single	Positive	1	0.2	1.1	5.5	0.162	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX105TBG	Pb-free Halide free	Active	Single	Positive	1.05	0.2	1.1	5.5	0.149	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX110TBG	Pb-free Halide free	Active	Single	Positive	1.1	0.2	1.1	5.5	0.11	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX120TBG	Pb-free Halide free	Active	Single	Positive	1.2	0.2	1.1	5.5	0.119	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX180TBG	Pb-free Halide free	Active	Single	Positive	1.8	0.2	1.1	5.5	0.74	0.02	95	8.8	Yes	No	XDFN-4
NCP110AMX280TBG	Pb-free Halide free	Active	Single	Positive	2.8	0.2	1.1	5.5	0.058	0.02	95	8.8	Yes	No	XDFN-4

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

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