

Product Overview

NCP110: LDO Regulator, Low V_{IN} , Low Noise and High PSRR, 200 mA

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 V_{IN} 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 V_{IN} 1.1 V
- Ultra Low Noise 8.8 μ V_{rms}
- 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

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

Applications

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

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

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

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