

Product Overview

NCV8187: 1.2A LDO Regulator, Low Dropout Voltage, Low Noise with Power Good Output

For complete documentation, see the data sheet.

The NCV8187 is a 1.2 A LDO Regulator with low quiescent current consumption (typ. 30 μ A over the full temperature range), low dropout voltage, low output noise and very good PSRR. The regulator incorporates several protection features such as Thermal Shutdown, Soft Start, Current Limiting and also Power Good Output signal for easy MCU interfacing.

Features

- Low V_{in} 1.5 V
- Ultra Low Noise 15 μ Vrms
- High PSRR 75 dB at 1 kHz

- Low V_{out} from 0.8 V
- Power Good Signal
- Available in DFN6 2x2 mm and DFN8 3x3mm packages

- 150C operating Junction temperature

Applications

- RF, PLL, VCO and Clock Power Supplies
- Image Sensor Power Supply
- Point of Load

- Communication Systems and Infotainment

Benefits

- Ideal for 1.8V rails from DCDC
- Very well suited for noise sensitive applications
- High input ripple rejection that is excellent for power sensitive devices
- Suitable for low voltage applications
- Perfect for rail monitoring and/or sequencing
- Improved thermal resistance with wettable flank (pin edge plating)
- Enables higher power capability with extended temperatures

End Products

- RF Transceivers
- Camera module
- Internet Connection Sharing (ICS) Gateway Server Applications
- MQB Modular Architectures

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Output	Polarity	V _O (V)	I _{O Typ} (A)	V _{I Min} (V)	V _{I Max} (V)	V _{DO Typ} (V)	I _{q Typ} (mA)	PSR R (dB)	Noise (μV _{rms})	Enable	Power Good	Application	Package Type
NCV8187ADT180RKG		AEC Qualified PPAP Capable Pb-free Halide free	NEW	Single	Positive	1.8	1.2	1.5	5.5	0.2	0.03	75	15	Yes	Yes	Automotive	DPA K-5
NCV8187ADT330RKG		AEC Qualified PPAP Capable Pb-free Halide free	NEW	Single	Positive	3.3	1.2	1.5	5.5	0.15	0.03	75	15	Yes	Yes	Automotive	DPA K-5
NCV8187ADTADJRKG		AEC Qualified PPAP Capable Pb-free Halide free	NEW	Single	Positive	ADJ	1.2	1.5	5.5		0.03	75	15	Yes	Yes	Automotive	DPA K-5
NCV8187AML120TAG	0.21	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1.2	1.5	5.5	0.325	0.03	75	15	Yes	Yes	Automotive	DFN W-6
NCV8187AML180TAG	0.21	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	1.2	1.5	5.5	0.2	0.03	75	15	Yes	Yes	Automotive	DFN W-6
NCV8187AMLE120TCG	0.21	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1.2	1.5	5.5	0.325	0.03	75	15	Yes	Yes	Automotive	DFN W-8
NCV8187AMLE180TCG	0.21	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	1.2	1.5	5.5	0.2	0.03	75	15	Yes	Yes	Automotive	DFN W-8
NCV8187AMLE280TCG	0.21	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	1.2	1.5	5.5	0.17	0.03	75	15	Yes	Yes	Automotive	DFN W-8
NCV8187AMLE330TCG	0.21	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	1.2	1.5	5.5	0.15	0.03	75	15	Yes	Yes	Automotive	DFN W-8
NCV8187AMLEADJTCG	0.21	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	ADJ	1.2	1.5	5.5		0.03	75	15	Yes	Yes	Automotive	DFN W-8
NCV8187AMN120TAG	0.22	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1.2	1.5	5.5	0.325	0.03	75	15	Yes	Yes	Automotive	DFN-6

NCV8187AMN180TAG	0.22	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	1.2	1.5	5.5	0.2	0.03	75	15	Yes	Yes	Automotive	DFN-6
NCV8187AMT110TAG	0.235	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.1	1.2	1.5	5.5	0.4	0.03	75	15	Yes	Yes	Automotive	WDF N-6
NCV8187AMT120TAG	0.235	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.2	1.2	1.5	5.5	0.325	0.03	75	15	Yes	Yes	Automotive	WDF N-6
NCV8187AMT180TAG	0.235	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	1.2	1.5	5.5	0.2	0.03	75	15	Yes	Yes	Automotive	WDF N-6
NCV8187AMT330TAG	0.235	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	1.2	1.5	5.5	0.15	0.03	75	15	Yes	Yes	Automotive	WDF N-6
NCV8187AMTW080TAG	0.17	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	0.8	1.2	1.5	5.5	0.7	0.03	75	15	Yes	Yes	Automotive	WDF NW-6
NCV8187AMTW090TAG	0.17	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	0.9	1.2	1.5	5.5	0.6	0.03	75	15	Yes	Yes	Automotive	WDF NW-6
NCV8187AMTW110TAG	0.25	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.1	1.2	1.5	5.5	0.4	0.03	75	15	Yes	Yes	Automotive	WDF NW-6
NCV8187AMTWADJTAG	0.17	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	ADJ	1.2	1.5	5.5		0.03	75	15	Yes	Yes	Automotive	WDF NW-6

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

Created on: 10/21/2021