

NCV59749

LDO Regulator, 3 A, Ultra-Low Dropout, High PSRR, Low Noise

Product Overview

For complete documentation, see the data sheet.

NCV59749 is 3 A ultra-low dropout (LDO) voltage regulator, capable of providing an output current in excess of 3 A with a dropout voltage of 120 mV typ. at full load current. Output voltage is adjustable down to 0.8 V. Internal protection features consist of thermal shutdown and output current limiting protection. Additional features include user-programmable Soft-Start and Power-Good. NCV59749 is available in 5x5 QFN20 package.

Similar Products:

	NCV59744	NCV59748	NCV59749
Output Current (A)	3.0	1.5	3.0
Noise (µVRMS)	64.8	90	90
Dropout Voltage (V)	0.115	0.060	0.120
Wettable Flank	No	Yes	No

Features

- 120mV Typ. Dropout at the full 3A load
 - 0.8V to 3.6V Output Voltage Range
 - 0.8V to 5.5V Input Voltage Range
 - 25uVrms of Output Noise
 - Very Fast Transient Response
 - Output Current in Excess of 3.0 A
 - Fast Transient Response
 - Programmable Soft-Start
 - Open Drain Power Good Output
 - Stable with Any Type of Output Capacitor
- For more features, see the data sheet

Applications

- Automotive
- Networking and Telecommunications
- Industrial
- Voltage Regulation for Low Voltage, High Current FPGA, DSP power rails
- Computing and Peripherals


Benefits

- Able to operate with very small Vin - Vout voltage headroom
- Very suitable for low output voltage operation
- Excellent solution for low input voltage applications
- Ideal for Noise Sensitive Applications
- Very Suitable choice for Voltage Regulation in High-Speed Digital Applications

End Products

- Automotive Equipment
- Cellular Infrastructure Equipment
- FPGA, DSP and Logic Power Supplies
- Camera & Vision Systems
- Ultrasound Imaging

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)	PSRR (dB)	Noise (μV _{rms})	Enable	PowerGood	Application	Package Type
NCV59749MNA DJTBG	0.5474		Active	Single	Positive	Adj	3	0.8	5.5	0.12	1.2	75	20	Yes	Yes	Automotive	QFN-20