

Product Overview

NCV8505: LDO Regulator, 400 mA

For complete documentation, see the data sheet.

The NCV8505 is a family of precision micropower voltage regulators with 400mA output current capability. The family has output voltage options for adjustable, 2.5 V, 3.3 V and 5.0 V that are accurate within $\pm 2.0\%$. Maximum dropout voltage reaches 0.6 V at full load. Low quiescent current is a feature drawing less than 1.0 μA with ENABLE = 0 V. This part is ideal for any and all battery operated microprocessor equipment. Microprocessor control logic includes an active RESET (with DELAY). The active RESET circuit operates correctly at an output voltage as low as 1.0 V. The RESET function is activated during the power up sequence or during normal operation if the output voltage drops below the regulation limits. The regulator is protected against reverse battery, short circuit, and thermal overload conditions. The device can withstand load dump transients making it suitable for use in automotive environments.

Features

- Adjustable, 2.5V, 3.3V, 5.0V +/-2% Output Voltage / 400mA Output Current
- Enable
- Reset with Adjustable Delay
- Integrated protections: +60V Peak Transient Voltage-15V Reverse Voltage Short Circuit Protection Thermal Overload Protection
- AEC Qualified and PPAP Capable

Benefits

- Tight regulation limits
- Low $<1\mu\text{A}$ Sleep Current allowing low standby battery drain
- MPU control - design flexibility
- Limit number of external components: Robust load dump tolerance Reverse battery protection Self protection Self protection

Applications

- Powertrain
- Body and Chassis

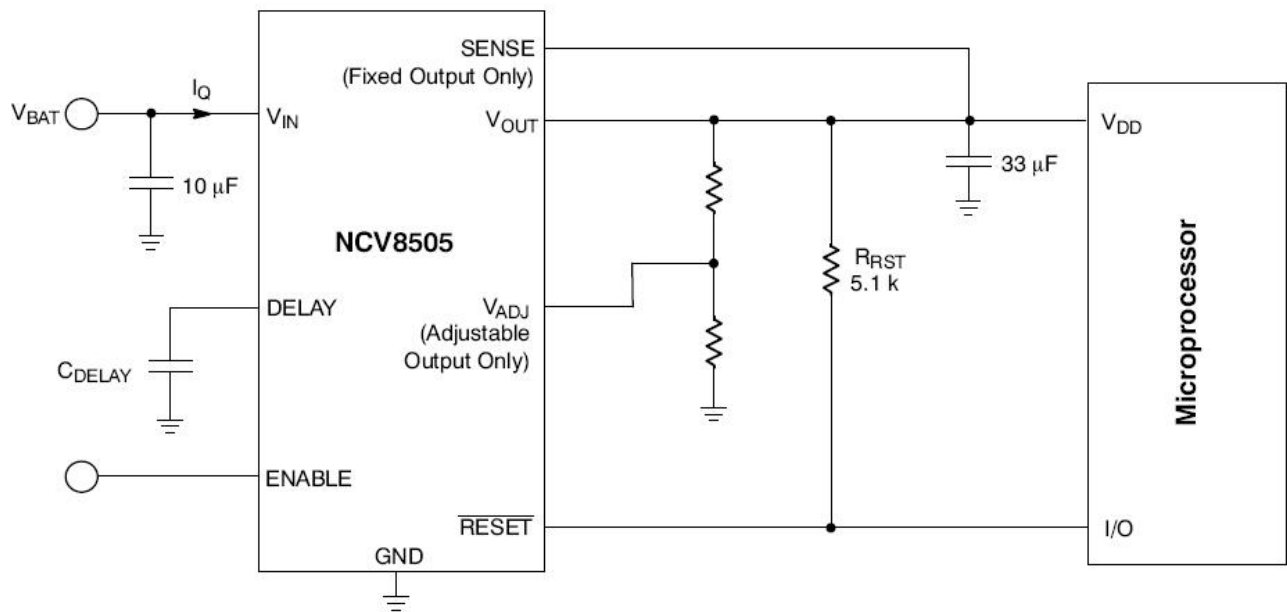
End Products

- Automotive

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	Package Type
NCV8505D2T33R4G	0.9866	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.4	-15	45	0.4	0.2			Yes	No	D ² PAK-7
NCV8505D2T50R4G	0.9866	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.4	-15	45	0.4	0.2			Yes	No	D ² PAK-7

Application Diagram



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

Created on: 6/4/2020