

NCV7750

4 Channel Low-Side Relay Driver

Product Overview

For complete documentation, see the data sheet.

The NCV7750 is an automotive four channel low side driver providing drive capability up to 600 mA per channel. Output control is via a SPI port and offers convenient reporting of faults for open load (or short to ground), over load, and over temperature conditions. Additionally, parallel control of the outputs is addressable via the INx pins. A dedicated limp home mode pin (LHI) enables OUT1 thru OUT4. Each output driver is protected for over load current and includes an output clamp for inductive loads. The NCV7750 is available in a SSOP24 fused lead package.

Features

- Power Up without Open Circuit Detection
- Low Quiescent Current
- 16 bit SPI control
- Limp Home Functionality
- 3.3V and 5V compatible Digital Input Supply Range
- Fault Reporting of Open Load, Over Load, and Over Temperature
- Power On Reset
- Uniform output structure of all outputs on one side of the package.
- AEC-Q100 Qualified
- 4 Channels

For more features, see the data sheet

Benefits

- Allows for power up without LED load illumination.
- Meets stringent automotive module quiescent current requirements.
- Able to report errors and is capable of daisy chain connections.
- Automotive system feature allowing the vehicle to maintain operation with a defective microprocessor.
- Suitable for both 3.3V and 5V microprocessor interfaces.
- The microprocessor and report unusual activity for troubleshooting and system integrity purposes.
- Maintains a smooth system power up and power down.
- Simplifies printed circuit board layouts.
- Automotive requirement maintains site and change control.

Applications

- Relay Driver
- LED Driver.
- Stepper Motor Driver

End Products

- Automotive Body Control Unit
- Automotive Engine Control Unit

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Number of Drivers	V _{CC} Max (V)	V _{BRIGSS} Max (V)	V _{BRDSS} Max (V)	I _D Max (A)	r _{DS(on)} Max (Ω)	T _J Max (°C)	Package Type
NCV7750DPR2G	0.8625		Active	8	5.5		36	1	2.2Ω	150	SSOP-24

Application Diagram

