Product Overview

NCV7754: Octal Low-side Relay Driver, Eight Channel

For complete documentation, see the data sheet.

The NCV7754 is an automotive eight channel low-side driver providing drive capability up to 500 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 (in pairs) via the INx pins.
A dedicated limp-home mode pin (LHI) enables OUT1-OUT4 while disabling OUT5-OUT8.
Each output driver is protected for over load current and includes an output clamp for inductive loads.
The NCV7754 is available in a SSOP-24 fused lead package.

Features

- 8 Channels
- 500 mA Low-Side Drivers
- 1.6 ohm Max Rdson
- 16 bit SPI Control
- Frame Error Detection
- Daisy Chain Capable
- Parallel Input Pins
- Power-up without open circuit detection active
- 3.3V and 5V compatible Digital Input Supply Range
- Fault Reporting

For more features, see the data sheet

Benefits

- Integration of multiple drivers.
- Ideal for driving automotive relays
- Improved resistance
- Standard microprocessor communication
- Eliminates false communication commands
- Able to design-in multiple driver ICs with one master microprocessor
- Enable PWM operation
- Eliminates unwanted illumination of LED loads during power-up
- Communication possible with 3.3V and 5V microprocessor interface
- Faults distiguishable between open load, over load, and over temperature

Applications

- Automotive Engine Control Unit
- Relay Driver
- LED Driver
- Stepper Motor Driver
- Automotive Body Control Unit

End Products

- Automobile

Part Electrical Specifications

Product	Pricing ($/Unit)	Compliance	Status	Number of Drivers	V_{CC} Max (V)	$V_{(BR)GSS}$ Max (V)	$V_{(BR)DSS}$ Max (V)	I_D Max (A)	$r_{DS(on)}$ Max (Ω)	T_j Max (°C)	Package Type
NCV7754DPR2G		AEC Qualified PPAP Capable Pb-free Halide free	Active	8	5.5	5.5	36	0.95	1.6	150	SSOP-24

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

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