

## Product Overview

### NCV7721: Motor Driver, Double Half-Bridge with Direct Control

For complete documentation, see the data sheet.

The NCV7721 is a fully protected Dual Half-Bridge Driver designed specifically for automotive and industrial motion control applications. The two half-bridge drivers have independent control. This allows for high side, low side, and H-Bridge control. H-Bridge control provides forward, reverse, brake, and high impedance states. The drivers are controlled via logic level inputs.

#### Features

- Ultra Low Quiescent Current in Sleep Mode
- Power Supply Voltage Operation Down to 5 V
- 2 High-Side and 2 Low-Side Drivers Connected as Half-Bridges
- Internal Free-Wheeling Diodes
- 0.5 A Continuous (1 A peak) Current
- $R_{DS(on)} = 0.8$  ohms (typ)
- Compliance with 5 V and 3.3 V systems
- Overvoltage and Undervoltage Lockout
- Fault Reporting
- Current Limit

For more features, see the data sheet

#### Benefits

- Meets low current requirements in automotive modules to prevent battery drain.
- Operation is maintained during automotive cranking.
- Capable of running 1 motors
- Protects the device from excessive voltages when driving inductive loads
- Ideal for running automotive side-view mirrors
- Keeps internal power dissipation low
- Interfaces well with most automotive microprocessors
- Prevents spurious drive at low voltage and device protection at high voltages
- Pinpoints system errors
- Device protection

#### Applications

- Automotive
- Industrial Motion Control

#### End Products

- DC Motor Management

#### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	$V_M$ Min (V)	$V_M$ Max (V)	$V_{CC}$ Min (V)	$V_{CC}$ Max (V)	$I_O$ Min (A)	$I_O$ Peak Max (A)	Control Type	Current Sense	Package Type
NCV7721D2R2G	0.9333	AEC Qualified PPAP Capable Pb-free Halide free	Active	5.5	40	3.15	5.5	1.1	5	Parallel	Fully Integrated	SOIC-14

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