

Product Overview

NCV7544: Four Channel Half-Bridge MOSFET Pre-Driver for Motor Control Application

For complete documentation, see the data sheet.

The NCV7544 programmable four channel half-bridge MOSFET pre-driver is one of a family of FLEXMOS automotive grade products for driving logic-level NMOS FETs. The product is controllable by a combination of serial SPI and CMOS-compatible parallel inputs. The pre-driver offers advanced control and protection of the MOSFET. The device and application diagnostic data is communicated via SPI.

Features

- 4 Half-bridge Pre-drivers
- Integrated charge pump
- Open Load Protection
- Over Load Protection
- Programmable Slew Rate Control
- QFN Packaging

Applications

- Seat Motor Actuators
- Door Lock Actuators
- Trunk Lift Actuators
- Sunroof Actuators
- Window Lift Actuators

Benefits

- Controls up to three motors in parallel or two motors independently
- N-Channel MOSFET can be used for high side stage and switch reverse battery protection
- Detection of unconnected loads
- External MOSFET and load protection
- Flexibility in controlling the MOSFET for switching loss and improved EMC Performance
- Small board footprint and good thermal performance

End Products

- Brushed DC Motor Control for Automotive Market

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Power Switch	Number of Outputs	Topology	Isolation Type	V _{in} Max (V)	V _{CC} Max (V)	Drive Source /Sink Typ (mA)	Rise Time (ns)	Fall Time (ns)	t _o Max (ns)	Package Type
NCV7544MWTXG	2	AEC Qualified PPAP Capable Pb-free Halide free	Active	MOSFET	8		Junction Isolation	18	5.5					QFN-32

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

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