

## NCV7544

# FLEXMOS™ Four Channel Half-Bridge MOSFET Pre-Driver for Motor Control Application

## Product Overview

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

### 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

### Applications

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

### End Products

- Brushed DC Motor Control for Automotive Market

Product	Pricing (\$/Unit)	Compliance	Status	Power Switch	Number of Outputs	Topology	Isolation Type	V <sub>in</sub> Max (V)	V <sub>cc</sub> Max (V)	Rise Time (ns)	Fall Time (ns)	Drive Source Current Typ (A)	Drive Sink Current Typ (A)	Turn On Prop. Delay Typ (ns)	Turn Off Prop. Delay Typ (ns)	Delay Matching	Packaging Type
NCV7544MWTXG	1.5		Active	MOSFET	8	Half-Bridge	Junction Isolation	18	5.5								QFN-32