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## **100V High Side/Low Side N-Channel High Speed MOSFET Driver**

MILPITAS, CA – June 12, 2008 – Linear Technology Corporation announces the LTC4446, a high frequency, high input supply voltage (100V) MOSFET driver designed to drive upper and lower N-Channel power MOSFETs in a 2-transistor forward converter. This driver, combined with power MOSFETs and one of Linear Technology's DC/DC controllers form a complete high efficiency 2-transistor forward converter or can be configured as a fast acting high voltage DC switch.

This powerful driver can source up to 2.5A with a 1.2 Ohm pull-down impedance for driving the top MOSFET and can source 3A with a 0.55 Ohm pull-down impedance for the synchronous MOSFET, making it ideal for driving high gate capacitance, high current MOSFETs. The LTC4446 can also drive multiple MOSFETs in parallel for higher current applications. The fast 8ns rise time, 5ns fall time of the top MOSFET, and 6ns rise time, 3ns fall time of the bottom MOSFET when driving a 1,000 pF load minimize switching losses.

The LTC4446 is configured for two supply-independent inputs. The high-side input logic signal is internally level-shifted to the bootstrap supply, which may function at up to 114V above ground. Furthermore, this part drives both upper and lower MOSFET gates over a range of 7.2V to 13.5V.


The LTC4446EMS8 and LTC4446IMS8 are offered in a thermally enhanced MSOP-8 package with prices starting at \$1.69 for 1000-piece quantities.

**Photo Caption:** 100V High Side/Low Side MOSFET Driver**Summary of Features: LTC4446**

- High Side/Low Side N-Channel MOSFET Driver
- 100V Maximum Supply Voltage
- Ideal for 2-Transistor Forward Converters
- High Voltage Switch Applications
- High Drive Current – 3A Source, 0.55Ohm Sink
- 7.2V to 13.5V Gate Drive Voltage
- Top Gate-8ns Rise, 5ns Fall Times when Driving 1,000 pF
- Bottom Gate-6ns Rise, 3ns Fall Times when Driving 1,000 pF
- Undervoltage Lockout for Gate Drive Voltage
- Thermally Enhanced MSOP-8 Package

**About Linear Technology**

Linear Technology Corporation, a manufacturer of high performance linear integrated circuits, was founded in 1981, became a public company in 1986 and joined the S&P 500 index of major public companies in 2000. Linear Technology products include high performance amplifiers, comparators, voltage references, monolithic filters, linear regulators, DC-DC converters, battery chargers, data converters, communications interface circuits, RF signal conditioning circuits, uModule<sup>™</sup> products, and many other analog functions. Applications for Linear Technology's high performance circuits include telecommunications, cellular telephones, networking products such as optical switches, notebook and desktop computers, computer peripherals, video/multimedia, industrial instrumentation, security monitoring devices, high-end consumer products such as digital cameras and MP3 players, complex medical devices, automotive electronics, factory automation, process control, and military and space systems. For more information, visit [www.linear.com](http://www.linear.com).

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