



Supply Protection Controller Guards Against Overvoltage, Undervoltage & Reverse Polarity Faults

MILPITAS, CA – September 13, 2010 – Linear Technology Corporation introduces the [LTC4365](#), an overvoltage (OV), undervoltage (UV) and reverse protection controller, with a -40V to 60V protection range, for applications that require windowed supply protection. The LTC4365 provides two comparator inputs to configure the OV and UV set points within the normal operating range of 2.5V to 34V using an external resistive divider. A gate pin controls a dual N-channel MOSFET to ensure only voltages within the OV and UV window are passed to the output. Reverse supply protection circuits automatically isolate the load from negative input voltages. In addition to providing transient protection to 60V, the LTC4365 also blocks 50Hz and 60Hz AC power. No TVS or input capacitor is required for most applications, providing a low component count solution for compact designs. The LTC4365 is targeted for portable instrumentation, industrial automation and automotive applications where accurate overvoltage, undervoltage and reverse protection is required to protect loads from faulty supply connections.

The LTC4365 consumes only 125uA in normal operation, and has a shutdown pin for enabling and disabling the external MOSFETs, and for providing a low current shutdown state of 10uA. A fault output indicates gate status. Using the shutdown pin, two LTC4365's can be configured in a novel application to select between two power supplies. If reverse protection is not needed, only a single external MOSFET is required.

Specified over the full commercial, industrial and automotive temperature ranges, the LTC4365 is offered in 8-pin (3mm x 2mm) DFN and TSOT-23 packages. The DC1555 demo board, featuring the LTC4365, is available at www.linear.com or via a local sales office. All devices are available now in production quantities, priced starting at \$1.49 each in 1,000-piece quantities. For more information, visit www.linear.com/4365.


Photo Caption: Adjustable Overvoltage, Undervoltage & Reverse Supply Protection Controller

Summary of Features: LTC4365

- Wide Operating Voltage Range: 2.5V to 34V
- Protects Against Transients to 60V
- Reverse Supply Protection to -40V
- Controls Dual N-Channel MOSFET
- Blocks 50Hz & 60Hz AC Power
- No Input Capacitor or TVS Required for Most Applications
- Adjustable Undervoltage and Overvoltage Protection Range
- Low Operating Current: 125uA
- Low Shutdown Current: 10uA
- Fault Status Output
- Compact 8-Lead, 3mm x 2mm DFN & TSOT-23 (ThinSOT™) Packages

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® 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.

LT, LTC, LTM, uModule and  are registered trademarks and ThinSOT is a trademark of Linear Technology Corp. All other trademarks are the property of their respective owners.

Press Contacts:

North America / Worldwide

John Hamburger, Director Marketing
Communications
jhamburger@linear.com
Tel 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager
ddickinson@linear.com
408-432-1900 ext 2233

UK & Nordic

Alan Timmins
alan@ezwire.com
Tel: +44-1-252-629937