



Dual Ideal Diode Controller Replaces Two Schottky Diodes to Provide Efficient Power Supply ORing & Supply Holdup in High Power Applications

MILPITAS, CA – June 14, 2012 – Linear Technology introduces the [LTC4353](#), a 0V to 18V dual ideal diode controller that replaces two high power Schottky diodes, enabling low loss ORing of multiple power sources with minimal disturbance to supply voltages. The LTC4353 regulates the forward voltage drop across external N-channel MOSFETs to ensure smooth current transfer between supplies in diode-OR applications. In low voltage systems, a slow handoff between controllers results in a voltage droop during supply switchover. The fast <1μs turn-on time of the LTC4353 ensures smooth switchover from one path to the other without oscillation. In the event the input supply fails or is shorted, a fast turn-off minimizes reverse current. In addition to redundant power supply ORing, the LTC4353 makes an excellent diode replacement in supply holdup applications where momentary collapse of supply voltage is isolated from the load.

The LTC4353 provides individual enable inputs that can be used to ensure priority to the main supply when supply voltages are within a MOSFET body diode drop of each other. With both enable inputs pulled low, the LTC4353 consumes just 75μA per supply. Individual status outputs indicate whether the MOSFETs are on or off. The controller operates with supplies from 2.9V to 18V, and offers additional flexibility to control voltages down to 0V by applying an external supply.

The LTC4353 is the only dual low voltage ideal diode controller available on the market, offering significant space savings compared to competing solutions. The LTC4353 is offered in both 16-Lead MSOP and 4mm x 3mm DFN packages and is specified over the commercial and industrial temperature ranges. Pricing starts at \$3.45 each in 1,000 piece quantities. For more information, visit www.linear.com/product/LTC4353


Photo Caption: Fast Turn-On Dual Ideal Diode Controller

Summary of Features: LTC4353

- Low Loss Replacement for Schottky Power Diodes in Multiple Power Supply or Supply Holdup Applications
- Controls External N-Channel MOSFETs for High Current Capability
- 0V to 18V Supply ORing or Holdup
- 1 μ s Turn-On & Turn-Off Time
- Enable Inputs
- MOSFET On-Status Outputs
- Available in 16-Pin MSOP & DFN (4mm x 3mm) Packages

About Linear Technology

Linear Technology Corporation, a member of the S&P 500, has been designing, manufacturing and marketing a broad line of high performance analog integrated circuits for major companies worldwide for three decades. The Company's products provide an essential bridge between our analog world and the digital electronics in communications, networking, industrial, automotive, computer, medical, instrumentation, consumer, and military and aerospace systems. Linear Technology produces power management, data conversion, signal conditioning, RF and interface ICs, μ Module[®] subsystems, and wireless sensor network products. For more information, visit www.linear.com

LT, LTC, LTM, μ Module and  are registered trademarks 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
Tel: 408-432-1900 ext 2233

UK & Nordic

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