



News Release | [www.linear.com](http://www.linear.com)

## **Dual Hot Swap Controller with Flexible Current Limit Rides Through Load Surges without System Interruption**

MILPITAS, CA – November 6, 2012 – Linear Technology Corporation introduces the [LTC4226](#), a dual Hot Swap™ controller, enabling safe board insertion into live 4.5V to 44V backplanes. The LTC4226 controls external N-channel MOSFETs to gently power up the board, avoiding sparks, connector damage and system glitches. Each supply is equipped with an electronic circuit breaker, and a higher current limit with three selectable levels. Picking the appropriate level allows the board to ride through noisy or brief load surges above the circuit breaker threshold without engaging the current limit and disturbing the output. A dual rate fault timer protects the MOSFET and system from long or damaging overcurrents. The LTC4226 offers a compact and rugged solution for hot plugging two supplies, either when they are well regulated (5V, 12V, 24V) or vary widely, as in battery-powered systems.

The LTC4226 ON pins implement an external adjustable UVLO while also sensing a fully seated connector. An integrated charge pump provides gate drive for standard N-channel MOSFETs, with internal 12V clamps protecting their gate oxide. Fault outputs indicate a circuit breaker timeout, but can also be pulled low to switch off the MOSFET. Wire-ORing multiple fault outputs turns off every LTC4226 when any one has an overcurrent fault. In single supply applications, the two Hot Swap channels are tied either in parallel for higher currents with smaller MOSFETs or in series for a bidirectional circuit breaker.

The LTC4226 is available in two options: the LTC4226-1 latches off after an overcurrent fault while the LTC4226-2 automatically retries after a 500ms delay. Specified over the full commercial and industrial temperature ranges, the LTC4226 is offered in compact 16-pin MSOP and 3mm x 3mm QFN packages. Pricing begins at \$3.10 each for 1,000-piece quantities and the device is now available in production quantities. Evaluation circuit boards are available online or from your local Linear sales office. For more information, visit [www.linear.com/product/LTC4226](http://www.linear.com/product/LTC4226).


**Photo Caption:** Wide Range Dual Hot Swap™ Controller with Circuit Breaker & Selectable Current Limit

### Summary of Features: LTC4226

- Enables Safe Board Insertion into Powered Backplane
- Selectable Current Limit & Dual-Rate Timer Accommodate Load Surges
- 100ns Fast Response Limits Peak Fault Current
- Wide Operating Range: 4.5V to 44V
- Optional Auto-Retry or Latchoff after Overcurrent Fault
- High Side Drive for External N-Channel MOSFET
- Allows Parallel Power Paths for High Current Applications
- Bidirectional Current Limiter/Circuit Breaker Applications
- Apple FireWire/IEEE 1394 Applications
- 16-Pin MSOP & 3mm x 3mm QFN 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, µModule® subsystems, and wireless sensor network products. For more information, visit [www.linear.com](http://www.linear.com)

 , LT, LTC, LTM, Linear Technology, the Linear logo and µModule and are registered trademarks and Hot Swap 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](mailto:jhamburger@linear.com)  
Tel: 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager  
[ddickinson@linear.com](mailto:ddickinson@linear.com)  
Tel: 408-432-1900 ext 2233

##### UK & Nordic

Alan Timmins  
[alan@ezwire.com](mailto:alan@ezwire.com)  
Tel: +44-1-252-629937