



Low Voltage Hot Swap Controller with Adjustable Current Limit

MILPITAS, CA – February 12, 2008 – Linear Technology Corporation introduces the LTC4218 Hot Swap™ Controller for protecting boards with load supply voltages ranging from 2.9V to 26.5V. When a board is plugged into a backplane, large inrush currents can create a glitch on the load supply causing other boards on the bus to malfunction. The LTC4218 enables safe board insertion and removal from a live backplane, using an external N-channel pass MOSFET in the power path to limit the inrush current during power up. An adjustable current limit allows users to vary the current limit threshold under various loading conditions, such as disk drive spin-up to normal operation. The wide operating voltage and adjustable current limit differentiate the LTC4218 from other low-voltage Hot Swap Controllers on the market today.

The LTC4218 features are tailored for use in RAID, server, telecom (i.e., ATCA, AMC, uTCA) and industrial applications. The load current is monitored using the voltage sensed across a current sense register and adjusting the MOSFET's gate-to-source voltage accordingly. A separate I_{SET} pin allows users to adjust the 5% accurate (15mV) current limit threshold during startup and normal operation as needed. Meanwhile, current foldback and powergood circuitry ensure that the switch is protected from excessive load current and indicate whether a powergood condition is maintained. The LTC4218 also features current monitor and fault outputs, 2% accurate overvoltage and undervoltage protection, and an adjustable current limit timer. A dedicated 12V version (LTC4218-12) is also available, which contains preset 12V specific thresholds.

The LTC4218 has a variety of ordering options. Commercial ("C") and industrial ("I") versions support operating temperature ranges, from 0°C to 70°C and -40°C to 85°C respectively. The LTC4218 is available in a 16-lead SSOP, while the LTC4218-12 is available in a 16-lead 5mm x 3mm DFN, both of which are RoHS compliant. The devices are priced starting at \$2.65 each in 1,000 piece quantities and are now available. Please visit www.linear.com for more product selection and information.

Photo Caption: Adjustable Low Voltage Hot Swap Controller**Summary of Features: LTC4218**

- Wide Operating Voltage Range: 2.9V to 26.5V
- Adjustable 5%, Accurate (15mV) Current Limit
- Current Monitor Output
- Adjustable Current Limit Timer Before Fault
- Powergood & Fault Outputs
- Adjustable Inrush Current Control
- 2% Accurate Undervoltage & Overvoltage Protection
- Available in 16-Lead SSOP & 16-Lead 5mm x 3mm DFN 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™ 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.

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