



Hot Swap Controller Allows I²C Monitoring of Board-Level Operation

MILPITAS, CA – May 20, 2010 – Linear Technology Corporation introduces the [LTC[®]4280](#), a 2.9V to 15V Hot Swap[™] controller that features an onboard 8-bit ADC and I²C compatible interface. Integrated digital power monitoring enables sophisticated platform management in high-availability systems, measuring card voltages and currents, as well as recording past and present fault conditions. In such systems, careful monitoring of the health and integrity of the power distribution network is crucial. Information in the ADC registers can be queried via the I²C bus and then used to determine if a card is actually using its allocated power or operating abnormally. The LTC4280 allows an irregular card to be flagged for service before it fails, thereby improving system reliability.

The LTC4280 is suitable for a wide range of applications, including redundant supply 12V systems subject to line transients when supplies switch over. Board supply voltages and inrush current are ramped up at an adjustable rate. The LTC4280 has an adjustable circuit breaker filter time and a 26mV current limit to accommodate a wide variety of input line and output line transients. Undervoltage and overvoltage thresholds are also independently adjustable. The controller disconnects the load if it remains in current limit beyond the time-out delay specified and can be configured to latch off or auto-retry following the event. The LTC4280 has additional features to interrupt the host when a fault has occurred, notify when output power is good, detect insertion of a board and turn off the pass transistor if an external supply monitor fails to indicate power good within a timeout period.


The LTC4280 is offered in commercial and industrial versions, supporting operating temperature ranges from 0°C to 70°C and -40°C to 85°C, respectively. The LTC4280 is available in a RoHS-compliant 24-pin 4mm x 5mm QFN package. Pricing starts at \$3.95 each in 1,000 piece quantities and is now available in production quantities. The LTC4280 complements Linear Technology's LTC4260 and LTC4261, positive and negative high voltage Hot Swap[™] controllers that also feature onboard ADCs and I²C interfaces. Please visit www.linear.com/pr/4280 for more product selection and information.

Photo Caption: Hot Swap Controller with Current & Voltage Monitoring**Summary of Features: LTC4280**

- Allows Safe Insertion into Live Backplane
- 8-Bit ADC Monitors Current & Voltage
- I²C/SMBus Interface
- Wide Operating Voltage Range: 2.9V to 15V
- Adjustable Overcurrent Filter Time
- High Side Drive for External N-Channel MOSFET
- No External Gate Capacitor Required
- Input Overvoltage/Undervoltage Protection
- Optional Latchoff or Auto-Retry After Faults
- Alerts Host After Faults
- Inrush Current Limit with Foldback
- Available in 24-Pin (4mm x 5mm) QFN 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.

LT, LTC, LTM, uModule 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
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