



Stand-Alone Lead Acid Battery Balancing IC Works with up to Four 12V Batteries in Series

MILPITAS, CA – January 27, 2015 – Linear Technology Corporation announces the [LTC3305](#), a single IC, stand-alone multicell battery balancer for 12V lead acid batteries. Balancing works by absorbing charge from higher voltage batteries and transferring that charge to lower voltage batteries so that all are charged equally. Charge is transferred using a lower capacity battery that is sequentially connected across the batteries in the stack. Not only does this battery transfer charge, but the energy in the transfer battery adds to the total energy in the stack, thus increasing capacity. Included on the chip is sequencing, drive circuitry for high voltage external NFETs, voltage monitoring and protection. The LTC3305 is designed for stand-alone operation and does not require a microprocessor or other control circuitry. With the LTC3305, one battery in the stack can be replaced and quickly balanced to the remaining batteries. The LTC3305 is ideal for applications such as telecom backup systems, home battery-powered backup systems, electric vehicles and industrial lighting systems.

The LTC3305 employs an auxiliary battery storage cell to transfer charge to or from each individual battery in the stack. A mode pin provides two operating modes: timer mode and continuous mode. In timer mode, once the balancing operation is completed, the LTC3305 goes into a low power state for a programmed time and then periodically rebalances the batteries. In continuous mode, the balancing operation continues even after the batteries are balanced to their programmed termination voltage. Further, additional devices can be stacked to balance higher voltage series battery packs.

The LTC3305 is offered in a thermally enhanced low profile (0.75mm) 38-lead TSSOP package. The E and I grades are specified with operating junction temperature range of -40°C to 125°C . Devices are available from stock and 1,000-piece pricing starts at \$6.95. For more information, visit www.linear.com/product/LTC3305

Photo Caption: Stand-Alone Multicell Lead Acid Battery Balancer

Summary of Features: LTC3305

- Single IC Balances up to Four 12V Lead Acid Batteries in Series
- All NFET Design
- Stackable to Balance Higher Voltage Series Battery Packs
- Stand-Alone Operation Requires No External μ P or Control Circuitry
- Balancing Current Limited by External PTC Thermistor
- Continuous Mode & Timer Mode
- Programmable UV & OV Fault Thresholds
- Programmable Termination Time & Termination Voltage
- Thermally Enhanced 38-Lead TSSOP Package

The USA list pricing shown is for budgetary use only. International prices may differ due to local duties, taxes, fees and exchange rates.

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 over 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, Linear Technology, the Linear logo and μ Module 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