



## 5.4A, 36V $\mu$ Module Buck-Boost Regulator

MILPITAS, CA – September 8, 2015 – Linear Technology Corporation introduces the [LTM8054](#), a 36V<sub>IN</sub> (40V<sub>max</sub>) 5.4A  $\mu$ Module<sup>®</sup> (micromodule) regulator in small 11.25mm x 15mm x 3.42mm BGA package. The LTM8054 regulates an output voltage equal to, greater or less than the input voltage. This enables a regulated output voltage even if either or both input and output voltages vary greatly as the device seamlessly transitions between buck and boost functions. The device includes the inductor, DC/DC regulator, MOSFETs and the supporting components. The LTM8054 regulates an output voltage between 1.2V and 36V, from 5V to 36V input supply in three operating modes of buck (step-down), boost (step-up) and buck-boost ( $V_{IN}$  approximates  $V_{OUT}$ ).

The LTM8054 includes a 4-switch buck-boost topology to maximize efficiency: 92% 24V<sub>IN</sub>, 12V<sub>OUT</sub> (buck) and 94% 36V<sub>IN</sub>, 24V<sub>OUT</sub>. Transition between the modes of operation is automatic, making the LTM8054 a simple and compact DC/DC regulator solution for a wide range of applications such as industrial controls, automotive, solar and high power battery-supplied systems.

The LTM8054 has input and output current limit and monitoring functions. This is ideal for applications that require constant current operation, such as LED drives, battery chargers, fan control and thermoelectric cooling controllers. Moreover, the device enables load sharing operation from various input sources. The switching frequency is adjustable by an external single resistor from 100kHz to 800kHz and it can be synchronized to an external clock from 200kHz to 700kHz.

The LTM8054 operates from –40°C to 125°C and –55°C to 125°C. 1,000-piece pricing starts at \$15.95 each. For more information, visit [www.linear.com/product/LTM8054](http://www.linear.com/product/LTM8054).


**Photo Caption:** 36V Buck-Boost  $\mu$ Module Regulator**Summary of Features: LTM8054**

- Complete Buck-Boost Switch Mode Power Supply
- Wide Input Voltage Range: 5V to 36V
- Wide Output Voltage Range: 1.2V to 36V
- 12V/1.8A Output from 6V<sub>IN</sub>
- 12V/3.4A Output from 12V<sub>IN</sub>
- 12V/5.4A Output from 24V<sub>IN</sub>
- Adjustable Input & Output Average Current Limits
- Input & Output Current Monitors
- Parallelable for Increased Output Current
- 11.25mm × 15mm × 3.42mm BGA 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,  $\mu$ Module<sup>®</sup> subsystems, and wireless sensor network products. For more information, visit [www.linear.com](http://www.linear.com)

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**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)

**UK & Nordic**

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

Tel: 408-432-1900 ext 2233