



# Microbonds

## **LINEAR TECHNOLOGY and MICROBONDS ANNOUNCE QUALIFICATION OF X-WIRE™ TECHNOLOGY**

July 18, 2008 (Milpitas, USA and Toronto, Canada)— **Linear Technology Corporation** (NASDAQ:LLTC) and **Microbonds Inc.** (a private Canadian corporation) have announced successful qualification of Microbonds X-Wire™ insulated wire bonding technology to enable design flexibility for Linear Technology's advanced IC packages.

The increasing global demand for electronics is driving the need for greater performance capabilities of advanced integrated circuits to be squeezed into smaller geometries and shrinking form factors. Microbonds' X-Wire™ insulated bonding wire technology is a nano-scale material breakthrough that addresses many of the difficult interconnect challenges arising from increasingly complex single and 3D stacked die packaging designs.

Over a period of 2 years, Linear Technology performed a comprehensive set of manufacturability and reliability testing using X-Wire™ on high voltage applications with a gold-based coated bonding wire. X-Wire™ passed all test criteria, meeting industry standards including JEDEC J-STD-020C MSL Level 1 and JESD22-A reliability standards. X-Wire™ also successfully achieved Linear Technology's stringent internal electrical and functional test requirements.

Linear Technology is targeting X-Wire™ to be used on a number of product lines to increase capability and shorten product and development and package design cycle time, while using the existing low cost assembly infrastructure. "X-Wire Technology will enable us to pack more chip functionality into standard packages permitting bonding wires to now touch and cross in 3D space, without risk of

electrical failure. This allows us the flexibility to connect chips in ways that were not possible before”, said Greg Peck, Director of Engineering at Linear Technology.

**About Linear Technology**

Linear Technology Corporation designs, manufactures and markets a broad line of standard high performance integrated circuits. Applications for the Company's products include telecommunications, cellular telephones, networking products, notebook and desktop computers, video/multimedia, industrial instrumentation, automotive electronics, factory automation, process control and military and space systems. The Company's principal product categories include amplifiers, battery management, data converters, high frequency, interface, voltage regulators and voltage references. For more information, see <http://www.linear.com>

**About Microbonds Inc.**

Microbonds Inc. is a pioneer in the development and licensing of insulated bonding wire technology for semiconductor packaging and devices. Founded in 1999, the company's approach is proven through testing with major IC companies and alliances with the industry supply chain. For more information, see <http://www.microbonds.com>

Microbonds , X-Wire and X-Wire Technology are trademarks of Microbonds, Inc.

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