



**Microbonds**

## **NxGEN Electronics Selects and Qualifies X-Wire™ Technology for Use in Microelectronic Manufacturing Services**

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**NxGEN Electronics**, **Tanaka Denshi Kogyo K.K.** and **Microbonds Inc.** (all privately held companies) are pleased to announce that NxGEN Electronics, Inc. has qualified Tanaka X-Wire™ insulated wire bonding technology and now offers this novel interconnect approach to its customers.

The continuous pace of advances in IC design is pushing the limits of current packaging technologies as the industry continues to decrease geometries and costs while increasing functionality and interconnect densities. NxGEN Electronics, Inc. is an industry leader in microelectronic research & development, manufacturing services, and electronic products. NxGEN Electronics implements advanced microelectronic assembly technologies, for example, using fine-pitch wire bonding, interconnecting IC chips in close proximity using small diameter bonding wire. With traditional assembly technology there is a risk that interconnection wires can touch and electrically cause a short circuit as more wires are incorporated into smaller geometries. Using Tanaka X-Wire™ insulated bonding wires allows NxGEN Electronics to connect more complex layouts in dense arrangements using more flexible wiring routing than previous design rules permitted.

The breakthrough comes from a nano-scale insulation coating that is applied to bare bonding wires, called X-Wire™ technology, invented by Microbonds Inc (Toronto, Canada). NxGEN Electronics performed testing on various devices assembled using 25µm X-Wire™ gold-based bonding wires produced by Tanaka Denshi Kogyo K.K. (Saga, Japan), a volume production licensee of the X-Wire™ Technology. The X-Wire™ devices passed specific customer electrical performance test criteria and manufacturing capability tests.

"X-Wire™ provides us with the flexibility to develop even more powerful solutions to our customer demands for smaller, lighter, more complex design layouts without the risk of short circuits. The flexibility provided by insulated bonding wire enables us to shorten the new package design cycle and assemble complex devices which couldn't be considered before. X-Wire™ fits into the existing assembly infrastructure, requiring no capital cost outlay which is an important economic factor for us.", said Sam Sadri, VP of Sales of NxGEN Electronics, Inc..

#### **About NxGEN Electronics Electronics, Inc.**

NxGEN Electronics, Inc. is an expert interconnect solutions provider and developer of sophisticated electronic products. NxGEN Electronics' expertise and services drive product developments from concept all the way to fully developed, turn-key products. The company's capabilities include design and layout services, modeling, prototype development, testing, a large range of fabrication methods and assembly. NxGEN Electronics is an innovative leader in custom packaging solutions, with focus on developing the next generation of smaller, lighter power consumption electronic products and sensors. . <http://www.nxgenelectronics.com>

#### **About Tanaka**

Tanaka Kikinzoku is a global provider of precious metal materials, such as bonding wires and targets that support the production of semiconductor devices from wafer to assembly processing. Based in Tokyo, Japan, the company has been in business for over 100 years. Its products play a vital role in the industrial fields, such as energy conservation, environmental control, health care, electric and electronics, automobile, telecommunication and semiconductors. For more information, please visit: <http://www.tanaka-precious.com>

#### **About Microbonds Inc.**

Microbonds Inc. is a pioneer in the development 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>

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

#### **For More Information on This Press Release:**

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