

## **Unique MEMS-Based Tracking Tag from Bluechiip and STMicroelectronics Steps Up to High-Volume Production**

**Melbourne, Australia, Geneva, Switzerland, 07 Aug 2014** -Australian technology company, Bluechiip Limited (ASX:BCT) and STMicroelectronics (NYSE: STM), a global semiconductor leader serving customers across the spectrum of electronics applications, the world's top MEMS (Micro-Electro-Mechanical Systems) manufacturer and the leading supplier of MEMS for devices in consumer and mobile applications<sup>1</sup>, today announced the transition to high-volume production for their jointly developed, unique MEMS-based tracking tags with the ability to meet demand in excess of 1 million tags a year.

The Bluechiip tag is an ultra-high-integrity, all-mechanical tracking chip that, unlike an electronic tag, is impervious to extreme high and low temperatures, gamma radiation, moisture, and other harsh conditions that would compromise traditional identification or tracking solutions such as labels, barcodes, or RFID technologies. This new chip uses MEMS resonator technology and contains no electronics whatsoever. Each chip is individually preprogrammed during manufacture with a unique identification, a process that makes it tamper proof, as well.

"The commitment and support of ST has enabled Bluechiip to achieve this commercial breakthrough. ST is a valued partner of Bluechiip and has played a key role in facilitating the Bluechiip tag to be adopted in more universal applications," said Dr Jason Chaffey, Managing Director and CEO of Bluechiip.

The Bluechiip tag has been successfully adopted by customers in Australia, China, Italy, and the USA, mainly in applications of biobanking and other biomedical related fields such as pathology, clinical trials, and bio-repositories. Bluechiip has also built up a global distribution network covering 10 countries and all major biomedical and healthcare centers around the world to effectively address the market.

Anton Hofmeister, General Manager of ST's Fluidic MEMS Division said, "Passing all of the certifications and approvals for the unique Bluechiip tag is an important milestone and demonstrates ST's flexibility, process expertise, and customer focus in the ramp to mass production. ST's MEMS technical leadership and partner-driven approach accelerates innovation and helps us and our partners expand quickly into new markets."

The biomedical application of the Bluechiip tag is a strategic move by ST to target the use of Motion MEMS technology into the next high-growth area. ST has pioneered and led the application of MEMS in mobile devices, gaming, automotive, navigation, healthcare, wellness, and the coming wave of wearables. The new "tracking" market addressed by the

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<sup>1</sup> Source: IHS Consumer and Mobile MEMS Market Tracker H1 2013

Bluechiip tag demonstrates the pervasiveness of MEMS technology and its adaptability into new innovative solutions.

Although the Bluechiip tracking technology was initially developed for applications in the healthcare and biomedical industries, its extreme robustness, ability to track temperature, and resistance to tampering is ideally suited for other high-value applications in food, vaccines, security, defense, aerospace, and aviation.

### **About Bluechiip**

Bluechiip Limited has developed a wireless tracking technology, which represents a generational change from current methods such as labels, barcodes and RFID (Radio Frequency Identification). The Bluechiip tag is based on MEMS technology and contains no electronics. The tag can either be embedded or manufactured into products, such as vials or medical consumables. In addition to functioning in extreme temperatures, the Bluechiip tag can survive autoclaving, gamma irradiation sterilization, humidification, centrifuging, cryogenic storage and frosting. In addition, a unique feature of the Bluechiip tag is its ability to sense temperature, which is wirelessly read by the Bluechiip Matchbox reader. The Bluechiip® technology has other applications in healthcare. Several other key markets outside of healthcare include cold-chain logistics/supply chain, security/defence, industrial/manufacturing and aerospace/aviation.

Further information is available at [www.bluechiip.com](http://www.bluechiip.com)

### **About STMicroelectronics**

ST is a global leader in the semiconductor market serving customers across the spectrum of sense and power and automotive products and embedded processing solutions. From energy management and savings to trust and data security, from healthcare and wellness to smart consumer devices, in the home, car and office, at work and at play, ST is found everywhere microelectronics make a positive and innovative contribution to people's life. By getting more from technology to get more from life, ST stands for life.augmented.

In 2013, the Company's net revenues were \$8.08 billion. Further information on ST can be found at [www.st.com](http://www.st.com).

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