



Press Release

Geometrics announces a Technology License and Development Agreement with Texas Instruments

New MFAM™ initiative to develop revolutionary miniature atomic magnetometer sensors
October 30, 2014

SAN JOSE, CA, October 30, 2014 – Geometrics today announced a Technology License and Development Agreement with Texas Instruments, a significant step in Geometrics efforts to develop miniature atomic magnetometer sensors. Atomic magnetometers are sensitive to extremely small magnetic field changes and are now used primarily in military and geophysical exploration applications. By measuring the Earth's magnetic field to 1 part per billion, the sensors can detect the presence or motion of ferrous objects or materials at great distances.

Existing sensors are bulky and consume as much as 20 Watts (W) of power. Future Geometrics products using the sensors under development will consume less than 2W and be a fraction of existing products' size and weight.

The smaller size and lower power consumption allows magnetometers to be deployed in large arrays, or from small platforms, such as Unmanned Aerial Vehicles (UAVs) or drones. This will offer the opportunity for real-time monitoring of the location and characteristics of objects, providing better information for use in the security, military, geophysical, and medical fields. Specific applications include Unexploded Ordnance (UXO) detection, underwater pipe and cable locating, vehicle detection, perimeter monitoring and intrusion detection, and medical imaging for the heart and brain.

This seeds of this technology came from the National Institute of Standards and Technology (NIST), following the successful DARPA Chip Scale Atomic Clock program. Sandia National Laboratories contributed to the early work, and Department of Defense Strategic Environmental Research and Development Program (SERDP) has contributed significant funding towards the development of this technology.

Dr. John Kitching, Leader of the Atomic Devices and Instrumentation and of NIST and early pioneer of chip-scale atomic technologies, said, "Miniature, low-power instruments based on precision atomic spectroscopy enable extremely high performance while being simultaneously amenable to low-cost mass-production. Compact atomic magnetometers in particular are poised to greatly impact a variety of important applications including geophysical surveying, remote monitoring of ships and vehicles and possibly even neuroscience and healthcare."

Dr. Mark Prouty, President of Geometrics said, "This Agreement is a significant boost to our efforts to bring highly sensitive magnetometer technology to much larger volumes, lower cost and expanded market sectors. This opens up an enormous range of possible applications."

About Geometrics

Geometrics is the world leader in commercial atomic magnetometers. Geometrics magnetometers are used in archaeology, geological surveys, seabed mapping, underground utility location and unexploded ordnance detection. Learn more at www.geometrics.com

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