October 31, 2012

Trimble Introduces ThingMagic Mercury6e-Micro RFID Reader Module

Small, Powerful, Flexible UHF RFID Module Expands Embedded RFID Opportunities

SUNNYVALE, Calif., Oct. 31, 2012 /PRNewswire/ -- Trimble (NASDAQ: TRMB) introduced today its next-generation UHF RFID reader module, designed to be embedded into a wide variety of handheld, portable and stationary devices. The exceptionally small size and powerful performance of the Mercury6e-Micro (M6e-Micro) yields increased efficiency, reduced development costs and time-to-market advantages for RFID applications. Only 46 mm long and 26 mm wide, the M6e-Micro offers two antenna ports and supports the ability to transmit up to +30 dBm (1 Watt) of power for the most demanding applications.

"The opportunity to embed high-performance, low cost RFID technology into many different types of products and solutions is driving innovation throughout commercial, industrial and consumer markets. The M6e-Micro module represents a significant step in supporting this innovation," said Tom Grant, general manager of Trimble's ThingMagic Division. "The introduction of the M6e-Micro demonstrates our continued commitment to removing the barriers to adoption so that more organizations can take advantage of RFID technology for their mission-critical applications."

Small, Powerful and Precise

The M6e-Micro can be embedded into handheld and portable devices to add RFID to everyday products such as printers and mobile computers. It can also be used to create small RFID readers and add-on accessories for existing and emerging solutions where using auto-identification technology can automate workflows or deliver new services.

The read distance of the M6e-Micro is limited only by the size and quality of the antenna selected to operate with the module. With the same antennas typically used in low-profile handheld readers, the M6e-Micro delivers up to two times the read distance of other RFID modules used in mobile applications. The M6e-Micro can read tags at a rate of up to 700 tags per second - more than 4 times the advertised read rate of comparable products on the market. Power can also be throttled down to support applications that demand precision such as tag writing.

Efficient, Flexible and Cost-effective

When transmitting, the M6e-Micro draws less current than is typical for a high-performance UHF RFID module. The module is able to consume as little as 0.025 Watts while remaining ready to react quickly to commands. Support for voltages ranging between 3.3 V and 5 V makes this module compatible with a wide variety of solution architectures, and its built-in voltage regulation allows it to be run directly off battery power. Further performance optimization results in battery power savings over modules that need to transmit longer to read the same number of tags.

Customers can choose from two mounting options - vertically combining the module with low-profile connectors or soldered to a motherboard, requiring no cabling. The solder-down option supports high-volume production and reduces component and assembly costs for original equipment manufacturers.

These form factor and performance advantages allow customers to add optimized and standards-compliant RFID technology to a great number of devices and solutions, delivering cost savings and time-to-market advantages over alternative methods of embedding RFID.

Key Features and Capabilities:

- Small size: 46 mm L x 26 mm W x 4.0 mm H (1.6 in L x 1.0 in W x 0.16 in H)
- Support for the EPCglobal Gen2 (ISO 18000-6C) protocol (IP-X and ISO 18000-6B optional)
- Support for two monostatic RF antennas through U.FL connector or solder-down board-edge connections
- Separate read and write levels, command adjustable from -5 dBm to +30 dBm in 0.5 dB steps
- -70 dBm receive sensitivity
- 28 solder-down board-edge connections or Molex low profile connector, providing access to DC power, communication, and GPIO signals
- UART and USB 2.0 control/data interfaces
- Two 3.3V bidirectional ports configurable as input (sensor) ports or output (indicator) ports
- North America, EU and PRC regions are supported with a single SKU

High-performance capabilities and application-specific features include:

- A 'fast search' mode for reading tags affixed to fast-moving objects
- The ability to rapidly adapt to changing tag populations
- The ability to obtain 128 bytes of data with every tag read
- Support for the full cool-Log™ command set for IDS SL900A sensor tags

A Commitment to Ease-of-Use

With a goal of driving the barriers for deploying RFID technology as low as possible, the development tools available with the M6e-Micro include a newly designed Web interface with intuitive configuration and management screens, new performance tuning settings, and enhanced tag data access and displays. Also available is the recently redesigned ThingMagic Universal Reader Assistant utility used to initialize readers and perform common tasks such as selecting application specific performance settings.

Applications to control the M6e-Micro module and derivative products can be written using the ThingMagic MercuryAPI. The MercuryAPI supports Java, .NET and C programming environments. The MercuryAPI Software Development Kit (SDK) contains sample applications and source code to help developers get started demonstrating and developing functionality.

Pricing and Availability

The M6e-Micro is expected to be available in November of 2012. For information on pricing and volume discounts, please contact ThingMagic sales at: sales@thingmagic.com or +1-866-833-4069. International dialers call +1-617-499-4090.

About Trimble's ThingMagic Division

Trimble's ThingMagic Division is a leading provider of UHF RFID reader engines, development platforms and design services for a wide range of applications. ThingMagic develops products for demanding high-volume applications and provides consulting and design services to create solutions for challenging applications. ThingMagic's customers include some of the world's largest industrial automation firms, manufacturers, automotive companies, retailers, and consumer companies. Located in Cambridge, Massachusetts, the ThingMagic business was founded in 2000 by a group of visionary PhD graduates from Massachusetts Institute of Technology's Media Lab. ThingMagic is "The Engine in RFID™".

For more information, visit: www.thingmagic.com.

About Trimble

Trimble applies technology to make field and mobile workers in businesses and government significantly more productive. Solutions are focused on applications requiring position or location—including surveying, construction, agriculture, fleet and asset management, public safety and mapping. In addition to utilizing positioning technologies, such as GPS, lasers and optics, Trimble solutions may include software content specific to the needs of the user. Wireless technologies are utilized to deliver the solution to the user and to ensure a tight coupling of the field and the back office. Founded in 1978, Trimble is headquartered in Sunnyvale, Calif.

For more information, visit: www.trimble.com.

GTRMB

SOURCE Trimble