



## RFaxis 2.4GHz ZigBee/ISM RFeIC™ Enables Wireless Structural Health Monitoring System

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IRVINE, CA--(Marketwire - Jun 27, 2011) - RFaxis, Inc., a fabless semiconductor company which focuses on innovative, next-generation RF solutions for the wireless connectivity and cellular mobility markets, announced today that its RFX2401 single-chip/single-die RF Front-End Integrated Circuits (RFeIC™) for 2.4GHz ZigBee/ISM applications has been selected by Resensys LLC for their revolutionary wireless structural health monitor system that measures in real time load, temperature, vibration and mechanical shift for civil and mechanical structures. This wireless sensor is enabled by the RFaxis RFX2401 RFeIC™ and the Texas Instruments (TI) CC2530 2.4GHz System-on-Chip (SoC) for IEEE 802.15.4 ZigBee/ISM.

Mehdi Kalantari, Resensys CEO and founder, stated, "Our wireless structural health monitoring system can prevent the catastrophic structural failure of critical public infrastructures by sensing and providing early detection of adverse strains, cracks and deformations in such infrastructures. The sensor itself requires a high-reliability radio frequency (RF) communications link to work properly. By using the RFaxis RFX2401 RFeIC™ and the TI CC2530 SoC with our patent-pending sensor solution, we were able to create a reliable, robust and cost effective solution. At Resensys, we are proud to deliver this compact, lightweight, self-adhesive and self-powered sensor technology to the structural market. Our experience using RFaxis products in our sensors has been very successful because the RFX2401 is a robust, yet easy-to-implement RF Front-End solution."

"The Resensys structural monitor is a cutting-edge application of ZigBee/ISM wireless sensor networks for ensuring the safety and reliability of civil and mechanical infrastructures," said Mike Neshat, chairman and CEO of RFaxis. "We commend Resensys for their innovation, and we are pleased that Resensys has selected our RFX2401 RFeIC™ to serve as their system's RF Front-End."

The RFaxis RFX2401 is a fully integrated, single-chip/single-die RFeIC™ that incorporates all RF Front-End functionality needed for 2.4GHz IEEE 802.15.4 ZigBee/ISM applications. The RFX2401 comes complete with a power amplifier (PA), low noise amplifier (LNA), transmit and receive switching, matching network, harmonic filter, power detector, and CMOS control logic all integrated onto a single silicon die and delivered in an ultra compact 3x3mm 16-lead QFN package.

### **About RFaxis, Inc.**

Incorporated in January 2008, RFaxis, Inc. is an Irvine, California-based company specializing in the design and development of RF semiconductor and antenna solutions for connectivity and mobility applications. With its patent pending technologies, the company leads the way in next-generation



wireless solutions designed for the multibillion dollar Bluetooth, WLAN, 802.11n/MIMO, ZigBee/ISM, WiMAX, wireless video streaming, and cellular mobile handset markets. Leveraging pure CMOS and BiCMOS technology in conjunction with its own innovative approach and technology, RFaxis is home to the world's first RF Front-End Integrated Circuit (RFeIC™). For more information, visit [www.rfaxis.com](http://www.rfaxis.com) or call 949-336-1360, or email [info@rfaxis.com](mailto:info@rfaxis.com).

### **About Resensys**

The Resensys mission is to protect infrastructure systems against structural failure by providing a cost effective and scalable solution for the real time monitoring of such structures. According to the U.S. Department of Transportation, of the 601,027 operational bridges in the U.S., 12% are structurally deficient. The worldwide magnitude of aging infrastructures is significantly larger. Resensys has completed the R&D phase of its product, a structural health monitoring system based on its patent-pending Active RF Test (ART) technology. The Resensys solution for protecting infrastructure systems against structural failure is based upon wireless / battery-less ART sensors, and remote monitoring and structural diagnostics software. Currently, their solution is being deployed on major highway bridges in Maryland. The Resensys solution addresses the tremendous need for cost effective, real time monitoring systems for aging infrastructures; in particular highway bridges. In addition to bridges, the Resensys solution can be implemented for airframes, pipelines, drilling platforms, railroad tracks, dams, buildings etc. Resensys is currently part of the Technology Innovation Program (TAP), the technology incubator for the University of Maryland at College Park, MD. For more information, visit [www.resensys.com](http://www.resensys.com) or email [info@resensys.com](mailto:info@resensys.com).