WiSpry WS1041 Delivers the Widest Range of Antenna Aperture Tuning Performance Available

High Voltage Handling Enables RF Designers Flexibility to Build the Circuit Their Customers Need

Irvine, Calif. — February 25, 2014 — WiSpry, Inc., the leader in high-performance tunable radio frequency (RF) semiconductor products for the wireless industry, today announced the WS1041 tunable RF quad capacitor array, with voltage handling up to 80V for aperture tuning applications requiring the highest Q and linear performance. The WS1041 contains four capacitors that can be configured in series or shunt, enabling RF designers to address every antenna aperture tuning circuit configuration. The four independent capacitors on-chip allow a parallel combination for higher capacitance, or a series connection for higher voltage handling. For more technical information, visit http://www.wispry.com

Compared with antenna impedance tuning, antenna aperture tuning applications typically require a lower total capacitance combined with highly accurate control and higher voltage handling. At the same time, aperture tuning devices used for Carrier Aggregation (CA) must not generate harmonics or lower the Q of the antenna system, as this would counter the benefits achieved by tuning. The WS1041 addresses these requirements perfectly with third harmonic as low as -150dBc, which is typically 30 dB better than other solutions, and a typical Q of 150 at low band and max capacitor setting.

The new chip reduces cost, board space and design time while improving linear performance and design flexibility. The WS1041 pairs well with WiSpry’s previously announced impedance tuner, the WS1050 three-capacitor device, delivering the widest range of impedance and aperture tuning solutions available anywhere.
“Design flexibility is a significant advantage for our customers who are facing increasingly diverse, complex global networks,” said Jeff Hilbert, president and founder of WiSpry, Inc. “With the WS1041, we now offer maximum flexibility for antenna aperture tuning applications—both in terms of voltage range and functional use. This device is just one more example of WiSpry’s Tunable RF leadership, and is one of many new Tunable RF products scheduled for release in the coming months.”

WS1041 Technical Features and Benefits

- 6 pf of total capacitance across 4 capacitors
- Each capacitor individually tunable
- Configurable in a series or shunt mode with individual pin-out for each capacitor
- MEMS-based technology delivers ultra-low harmonics and intermodulation
- Configurable USIDs avoids addressing conflicts
- ADS simulation models available for easier, more accurate designs
- Small, industry-standard LGA package for ease of board design

About WiSpry
Headquartered in Irvine, Calif., WiSpry, Inc. provides tunable RF products that revolutionize wireless technology. The fabless RF semiconductor company utilizes microelectromechanical systems (MEMS) technology to design reconfigurable products, enabling wireless product and infrastructure manufacturers to support higher performance, next generation multi-band and multi-standard device and network architectures. Leveraging standard RF-CMOS process flows, WiSpry integrated components and modules deliver optimal flexibility and tunability without sacrificing performance. WiSpry is backed by a global group of investors specializing in innovative technology for growth markets. For more information, visit www.wispry.com.

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