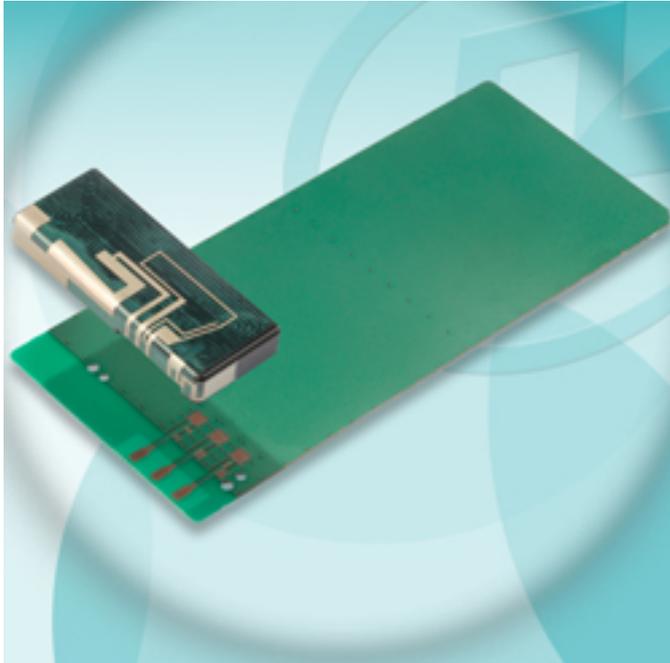


## **Pulse Electronics Introduces 3-Feed Antenna for Operator-Independent Global Roaming of LTE Mobile Devices**



San Diego, Calif. - December 7, 2011 -

Pulse Electronics Corporation introduces a new 3-feed antenna that enables operator-independent global roaming capability for LTE mobile devices. Compatible with EPCOS RF front-end module (FEM) technology, it is the only antenna that has been proven to support 16 frequency bands, including Japanese frequency bands in the 1.5 GHz range.

The Pulse Electronics 3-feed antenna optimizes performance in 700-960 MHz, 1.42-1.5 GHz, 1710-2170 MHz, and 2.3-2.7 GHz bands and supports HSPA and LTE inter-band carrier aggregation band combinations defined in 3GPP releases 9 and 10. In a simulation with an EPCOS FEM under development, it provides +2dB performance improvement at around 2 and 2.6 GHz, eases WLAN and LTE coexistence, and enables global use of a device for TDD and FDD. Because the signals from the RF front end are separated into three antenna feed points, this antenna provides the best performance on the market. It allows for seamless global LTE roaming and increased data download rates.

"Pulse Electronics' collaboration with market-leading electronic components provider EPCOS AG, a TDK group company, to co-design the RF front-end modules and the antenna resulted in a smartphone RF platform that solves RF challenges from emerging system requirements such as LTE and downlink inter-band carrier aggregation. It is the first truly operator independent RF platform that supports all possible bands globally, and is the only high-end platform that can be used to serve the majority of operators with the same hardware configuration without modifications. This technology breakthrough successfully answers the Next

## **Pulse Electronics Introduces 3-Feed Antenna for Operator-Independent Glo**

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Generation Mobile Networks (NGMN) operator alliance challenge to develop a single RF platform supporting all NGMN operator frequency bands and downlink inter-band carrier aggregation. The platform significantly enhances the economy of scale for the global smartphone ecosystem," explained Maritta Timosaari, sales and marketing director, Pulse Electronics Mobile Division.

The Pulse Electronics antenna for high-end smartphones has a compact size with maximum dimensions of 50x13x7mm<sup>3</sup>, which includes volume to integrate components like speakers, etc. The exceptional antenna performance results in improved battery life and fewer dropped calls. This unique RF platform, comprising the EPCOS FEM technology and the Pulse Electronics antenna, enhances the entire smartphone ecosystem. The benefits for network operators are easy access to multiple markets, compatibility with multiple OEM designs, and support for network operators worldwide.

The 3-feed antenna can be used as a standalone antenna or as one antenna in diversity/MIMO applications. It is 3D-fitted by using LDS manufacturing technology and is also available on flex. Ground clearance is 9mm, but it can be optimized for use with a particular RF module. Speaker integration with the frame is possible. Pulse Electronics' 3-feed antenna is based on proven antenna design and matching technology and is usable for single band or carrier aggregation mode of operation.

This antenna is RoHS compliant and comes packaged in trays. The antenna design is custom-made to customer specifications. Engineering samples based on flex and LDS technologies are available. For more information and our YouTube video check out the Pulse Electronics website at <http://www.pulseelectronics.com/Indie> [1].

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### **Links:**

[1] <http://www.pulseelectronics.com/Indie>