LNAs offer enhanced wireless receiver sensitivity

Skyworks Solutions, Inc. unveiled two new series of high performance and low power LNAs for multiple industrial, scientific, medical (ISM) bands and next generation cellular infrastructure applications. Skyworks' newest low noise amplifiers enable enhanced wireless receiver sensitivity, wider dynamic range and a high level of design flexibility. With the addition of these latest devices, Skyworks now powers solutions with continuous coverage from 30 to 3000 MHz. Various customers are already leveraging Skyworks' devices for power line monitoring and security systems, government radio networks, in-building wireless devices and cell signal boosters.

About Skyworks' New Discrete Low Power Low Noise Amplifiers
The SKY67012-396 LF (300 – 600 MHz), SKY67013-396LF (600 – 1500 MHz) and SKY67014-396LF (1500 – 3000 MHz) and SKY67015-396 LF (30 – 400 MHz) are ideal low noise amplifiers for battery powered receivers in a variety of applications including wireless metering and security, public safety radio, wireless microphones and Bluetooth headsets. The supply voltage is adjustable over a wide 1.8 to 5V range and current draw is as low as 5 mA. The LNAs are manufactured in a miniature, 2 x 2 mm restriction of hazardous substances compliant, surface mount technology package.

About Skyworks' New Highly Integrated Low Noise Amplifiers
The SKY67215-11 (400 – 700 MHz), SKY67216-11 (500 – 1200 MHz), SKY67221-11 (1600 – 2100 MHz) and SKY67226-11 (2100 – 3000 MHz) are designed for next generation wireless infrastructure applications including femto and pico cell access points micro base stations, tower mounted amplifiers, remote radio units and in-

building repeaters/cell signal boosters. These fully integrated LNAs are fully matched to 50 Ohms and require only a single, external component. The internal biasing and matching network eliminates the need for costly external components, customer tuning and greatly reduces required board space. These LNAs also greatly reduce customer design-in time and overall circuit complexity. The LNAs are manufactured in a compact, 4 x 4 mm multi-chip module based restriction of hazardous substances compliant, surface mount technology package.

Both new enhancement mode GaAs pHEMT based LNA families offer excellent return loss, very low noise figure (<1.0 db), high linearity, unconditional stability and high gain. These features enable highly efficient and cost effective signal amplification for enhanced receiver sensitivity and long battery life. In addition, all eight devices offer the designer the ability to externally adjust the supply current to optimize the amplifier linearity and power handling performance for the chosen application. For enhanced design flexibility, each LNA family utilizes a common footprint and circuit layout.

Skyworks Solutions, Inc
www.skyworksinc.com [1].

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