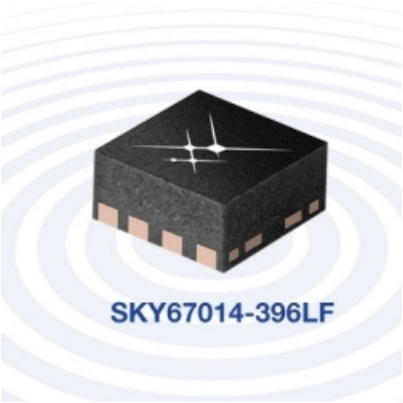
High Performance Low Power LNAs Address Diverse Markets



Skyworks Solutions, an innovator of high reliability analog and mixed signal semiconductors, introduced the first in a series of ultra low current, general purpose low noise amplifiers (LNAs) for diverse wireless applications including satellite receiver set-top boxes, Bluetooth headsets, medically-prescribed hearing aids, advanced meter reading devices and 2.4 GHz wireless local area networks. These high performance LNAs deliver enhanced receiver sensitivity and wide dynamic ranges facilitating improved signal reception, increased design flexibility and reduced part counts.

“Skyworks is delighted to be expanding our product portfolio with solutions that deliver better performance and are cost competitive for a wide range of markets,” said David Stasey, vice president of analog components at Skyworks. “In addition, our new low noise amplifiers enable Skyworks to enter new markets – driving intense diversification beyond our proven front-end solutions for mobile devices.”

About Skyworks’ New Low Noise Amplifiers
The miniature SKY67014-396LF is an advanced gallium arsenide pseudomorphic high electron mobility transistor (pHEMT) enhancement mode process LNA with an integrated active bias and on-die stability structures enabling simple external matching and stable performance over temperature. Skyworks’ enhancement mode pHEMT process allows the device to offer excellent return loss (15 dB typical), stable gain (12 db), low noise (<1 dB) and high linearity (+18 dBm OIP3) while drawing <6 ma of bias current.

The SKY67014-396LF offers the designer the ability to externally adjust the supply current to further optimize the amplifier linearity performance for the chosen application. The supply voltage is applied to the RF-OUT/VDD pin through an RF choke inductor and through the VBIAS pin through an external resistor. The supply voltage is adjustable over a range of 1.5 to 5V. The LNA is manufactured in a compact, 2 x 2 millimeter, 8-pin dual flat no-lead, restriction of hazardous substances compliant, surface mount technology package.

The device is the first in a series of high performance, low power LNAs targeting broadband wireless applications. Additional footprint compatible LNAs for the 100 – 700 MHz and 700 – 1500 MHz bands will be launched later this year.

Pricing and Availability
Skyworks' new low noise amplifiers are currently available. For volume pricing please contact sales@skyworksinc.com [1].

Skyworks at IEEE Microwave Theory and Techniques Society (MTT-S) International Microwave Symposium (IMS) 2011
Skyworks will be exhibiting its products in booth # 1428 at MTT-S 2011, being held June 7-9 in Baltimore.

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[1] mailto:sales@skyworksinc.com