GPS LNAs offer an industry-low 0.65dB noise figure



Maxim Integrated Products announces the MAX2667/MAX2669, the newest additions to its GPS/GNSS low-noise amplifier (LNA) family. Designed using Maxim's advanced SiGe processes, these fully integrated LNAs feature an exceptionally low noise figure of 0.65dB. This improves receive sensitivity and read range over discrete or highly integrated CMOS solutions. The MAX2667/MAX2669 provide the best performance, smallest size, and lowest current consumption available in the market, making them the clear choice for smartphones, personal navigation devices (PNDs), and other battery-powered handheld devices.

The MAX2667/MAX2669 provide different linearity options to suit system requirements. For customers who wish to ensure a higher level of receive performance in the presence of signal blockers, the MAX2669 (at 4.5dBm) provides approximately 8dBm better in-band and out-of-band IIP3 than the MAX2667 (at -3.5dBm), for a mere 4.0mA extra supply current.

For power efficiency, customers can expect longer battery life in their endequipment design thanks to the MAX2667, which is optimized for a low operating supply current of 4mA (typ). When not in use, both LNAs have an optional logicenabled shutdown mode that reduces supply current to less than 1microamp.

These LNAs are offered in a space-saving, 0.4mm-pitch wafer-level package (WLP) that takes up a mere 1mm2 of board space, much less than the competition. Only requiring four external components to complete the board-level design (plus an optional resistor for logic-enabled shutdown), the MAX2667/MAX2669 enable the smallest solution footprint for today's handheld designs.

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The MAX2667/MAX2669 operate from a 1.6V to 3.3V supply. Fully specified over the -40 degrees Celsius to +85 degrees Celsius extended temperature range, they are available in an ultra-small, 0.86mm x 1.26mm, 6-pin WLP. Prices start at \$0.54 (1000-up, FOB USA). The MAX2667EVKIT and MAX2669EVKIT are also available for bench-level evaluation. Pricing for the EV kits is \$110.00 (each, FOB USA).

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