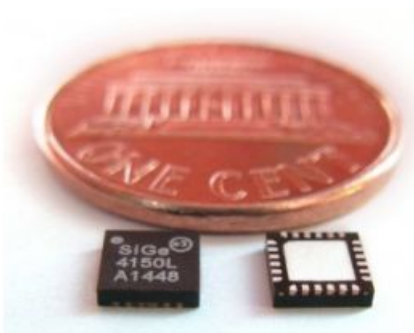


World's Smallest Dual-antenna Input GPS Receiver IC



SiGe Semiconductor (MA, USA) has released the SE4150L GPS radio receiver featuring dual-antenna input capability for next-generation GPS systems. SiGe Semiconductor specifically designed the SE4150L to address the three primary challenges associated with embedded GPS applications: small size, low power, and low price, all while raising the bar for performance.

Housed in a low profile 4x4 mm package, the SE4150L features a multi-bit output, which improves sensitivity and interference resistance for GPS solutions. This new GPS receiver offers industry-leading performance, including a system noise figure of 1.0 dB and input third-order intercept performance (IIP3) of better than 0 dBm. The SE4150L builds on the successes of SiGe Semiconductor's award-winning SE4120L and SE4110L,

and offers additional features to facilitate the implementation of an internal or external antenna architecture. The SE4150L operates over a supply range of 2.7 to 3.6 V and features a low standby current of <10µA. The device's digital I/Os and supplies have all been designed to operate from 1.6 to 3.6 V to interface with smaller geometry baseband ICs and SoCs.

The SE4150L GPS receiver simplifies dual-antenna system design because it integrates antenna sensing, switching, and a high-performance low noise amplifier (LNA). Before now, OEMs and designers had to use either an expensive switched coaxial socket or numerous discrete components to sense when an external antenna was connected. By using a single SE4150L, designers can save valuable PC board space and significantly reduce the bill of materials (BOM). The SE4150L automatically responds to the connection of an external antenna and interfaces directly to the GPS baseband processor to provide a complete GPS radio receiver system.

The global personal navigation device (PND) market is expected to grow from 35 million units in 2007 to more than 100 million in 2010. While SiGe Semiconductor is primarily targeting this market with the new SE4150L GPS receiver IC, it will also serve other applications where high performance and low power consumption combined with internal and external antenna capabilities are required.

The SE4150L is sampling now to lead customers and will be widely available for sampling beginning in July 2008. To support design-in activity, SiGe offers the SE4150L-EK1 evaluation board and user guide and can provide on-site applications assistance to customers for the design and integration of a complete GPS system.