Atmel Launches Low-power RF Transceiver for Consumer Applications

Atmel Corporation today announced a new RF transceiver to support the high-volume consumer markets in the 2.4GHz ISM (Industrial, Scientific and Medical) band. The Atmel AT86RF232 transceiver includes all the necessary features to support the latest wireless applications in the consumer segment including excellent RF performance, lower power consumption, high-link budget and antenna diversity. The new devices also support ZigBee RF4CE, a specification designed to control a wide range of wireless consumer products including remote controls for home entertainment devices, human interface devices such as mice and keyboards, and 3D glasses.

Applications in the high-volume portable consumer segment, including key fobs, remote controls for toys and game consoles, require very low-power transceivers to extend the overall battery life of the device. The Atmel AT86RF232 transceiver offers 50 percent lower power than the competition. The Atmel transceiver supports automatic antenna diversity to improve RF performance and link reliability. Additionally, the transceiver includes onboard AES encryption for secure wireless end-to-end communication.

“With the growing high-volume consumer segment, manufacturers are looking for transceivers with low power, high RF performance and enhanced security at an attractive price-point to ensure a top-notch user experience,” said Magnus Pedersen, product marketing director for microcontroller wireless solutions at Atmel Corporation. “The Atmel AT86RF232 transceiver addresses all these issues with the lowest power, antenna diversity, larger link budget and robust RF performance for this cost-sensitive market. This new device will enable a consumer to have a richer wireless experience for all the latest consumer applications.”

The new Atmel transceiver offers a voltage range of 1.8V to 3.6V, -100dBm in sensitivity and an output power of 3dBm for extended battery life in various applications. The device also offers a receiver current consumption of 11.8mA, transceiver current consumption of 13.8mA, antenna diversity and AES encryption. All these features are important to offer a robust wireless transceiver for high-volume consumer applications.

The Atmel AT86RF232 transceiver is available with the REB232ED-EK evaluation kit which includes two AT86RF232 radio evaluation boards, combined with an Atmel ATXmega256A3 microcontroller. These boards come with free downloadable evaluation software on the Atmel website at: www.atmel.com/AT86RF232. These evaluation boards and transceiver are also ideal for designers moving towards ZigBee RF4CE and ZigBee Remote Control profiles.

Pricing, Availability and Photo

The Atmel AT86RF232 transceiver is available now. Pricing starts at USD $1.60 for 10,000-piece quantities. To purchase the REB232ED-EK evaluation kit, which includes two AT86RF232 radio evaluation boards and an Atmel ATXmega256A3 microcontroller, please visit the atmel.com store at http://store.atmel.com [1].

Links:
[1] http://store.atmel.com