Search:

Parametric Search

Products

Applications

News

About Us

Careers

Email Us Your
Technical Questions

TOSHIBA LAUNCHES NEW SINGLE-CHIP RF/IF RECEIVERS FOR SHORT-RANGE, LOW-POWER WIRELESS APPLICATIONS

Low-Cost, High-Sensitivity Devices Combine AM or AM/FM Comparators, RF Amplifier and Local x8 Circuit in a Small Package

SAN JOSE , Calif., April 21, 2003 -- Toshiba America Electronic Components, Inc. (TAEC)* today announced it has broadened its wireless product lineup with the introduction of a pair of new radio frequency (RF)/ intermediate frequency (IF) receivers that operate at 240 megahertz (MHz) to 450MHz and provide high-sensitivity with low-power consumption. TA31275FN is an RF/IF detector integrated circuit (IC) for AM/FM radio while TA31273FN is an RF/IF detector IC for AM radio only. Both low-cost monolithic devices incorporate an RF amplifier, a two-level comparator and a local x8 circuit. They are targeted at a wide range of short-range, low-power wireless applications, including remote keyless entry systems, tire pressure monitoring systems, telemetry and RF metering.

"Wireless products are becoming a pervasive part of consumers' lives. The burgeoning list of wireless products ranges from remote locks, security systems, tire pressure monitoring systems and gate openers to wireless keyboards, mice, telemetry and light switches," said Farhad Mafie, vice president of the ASSP Business Unit at TAEC. "As manufacturers rush to bring new devices to market, they face constant pressure to provide high-performance products at lower cost. Toshiba's new low-power, low-cost data communication devices give customers a head-start on adding short-range wireless functionality to a host of existing and new applications without expensive re-wiring."

"We believe our new TA31273FN and TA31275FN receivers provide the right blend of low-cost, high-sensitivity, low-power consumption and essential features. We are pleased

that we have already achieved design wins in the automotive segment for remote keyless entry and tire pressure monitoring applications," said Abdul Aslami, business development manager in the ASSP Business Unit at TAEC.

Pricing and Availability

Samples of TA21273FN and TA31275FN are currently available in both sample and volume production quantities. Each device is priced at $0.99 per piece in 10,000-piece quantities.

Specification Summary

Part Numbers	TA31273FN RF/IF Receiver for AM Radio TA31275FN RF/IF Receiver for AM/FM Radio
RF Frequency	240MHz to 450MHz (when multiplication is used) 100MHz to 450MHz (without multiplication)
Mixer Frequency	240MHz to 450MHz
IF Frequency	10.7MHz
Current Dissipation at Battery Saving Mode	0 to 5 microamperes (typical)
Current Consumption	TA31273FN: 6.8 milliamperes (mA) when local oscillator is not operated TA31275FN: Frequency-shift-keying (FSK) using x8 multiple circuit: 5.8mA FSK without x8 multiple circuit: 3.4mA Amplitude-shift-keying (ASK) using x8 multiple circuit: 5.4mA ASK without x8 multiple circuit: 3.0mA

Power Supply Voltage	TA31273FN: 3.0 volts (V) to 5.5V TA31275FN: 2.4V to 5.5V
Built-in AM and FM	TA31273FN: AM demodulation only TA31275FN: AM and FM comparator
Built-in Functionality	RF amplifier 2-level comparator Local x8 multiple circuit
Package	TA31273FN: 20-pin SSOP (0.65mm pitch) TA31275FN: 24-pin SSOP (0.65mm pitch)

***About TAEC**

Combining quality and flexibility with design engineering expertise, TAEC brings a breadth of advanced, next-generation technologies to its customers. This broad offering includes semiconductors, flash memory-based storage solutions, optical communication devices, displays and rechargeable batteries for the computing, wireless, networking, automotive and digital consumer markets.

TAEC is an independent operating company owned by Toshiba America, Inc., a subsidiary of Toshiba, the third largest semiconductor company worldwide in terms of global sales for the year 2002 according to Gartner/ Dataquest's Worldwide Semiconductor Market Share Ranking. Toshiba is a world leader in high-technology products with more than 300 major subsidiaries and affiliates worldwide. For additional company and product information, please visit TAEC's website at chips.toshiba.com. For technical inquiries, please e-mail Tech.Questions@taec.toshiba.com.

TO-302