#### FOR IMMEDIATE RELEASE

Inquiries Information Technology R&D Center Mitsubishi Electric Corporation

https://www.MitsubishiElectric.com/ssl/contact/company /rd/form.html

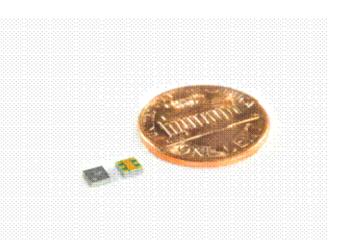
No. 2658

Media Contact Public Relations Division Mitsubishi Electric Corporation prd.gnews@nk.MitsubishiElectric.co.jp http://www.MitsubishiElectric.com/news/

# Mitsubishi Electric Develops Multi-Band Power Amplifier for Automatic Band Switching and Seamless Roaming

**Tokyo, February 7, 2012** – Mitsubishi Electric Corporation (TOKYO: 6503) announced today it has developed a 3GPP-compliant, six-band power amplifier to enable automatic band switching and seamless international roaming with a single mobile device.

The unit's power-added efficiency rating of 40% is one of the world's highest for a multi-band power amplifier, and its package is among the world's smallest at 3mm x 3mm x 1mm, which will lead to mobile devices offering longer battery life and reduced size.



Mitsubishi Electric's six-band power amplifier addresses several important needs in wireless communication. The increase in wireless traffic due to proliferating smartphones requires mobile devices increasingly to locate and switch to available frequencies when other bands are overloaded. Automatic band switching is also necessary for international roaming. In addition, the use of multiple amplifiers, each dedicated to a certain frequency band, forces mobile devices to devote more space to additional circuitry.

### Key Features

- 1) Six-band functionality in a conventionally sized package
  - Broadband circuitry is compatible with six 3GPP-compliant frequency bands between 1.7GHz and 2.0GHz.
  - Circuit parameters are optimized without adding circuit elements.

• Package measures 3mm x 3mm x1mm, making it one of the world's smallest multi-band power amplifiers.

## 2) Top-level power-added efficiency for a multi-band power amplifier

- 40% power-added efficiency rating is among the world's highest.
- High-level rating achieved by using the Quantance qBoost<sup>TM</sup> ultra-fast, low noise, envelope tracking power supply.

###

qBoost is a trademark of Quantance in the USA and 3GPP is a trademark of European Telecommunications Standards Institute.

## About Mitsubishi Electric

With over 90 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. The company recorded consolidated group sales of 3,645.3 billion yen (US\$ 43.9 billion\*) in the fiscal year ended March 31, 2011. For more information visit http://www.MitsubishiElectric.com

\*At an exchange rate of 83 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2011