

Freescale Semiconductor breaks the size barrier for GSM/GPRS front end modules

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Power amplifier module shrinks board space by over 40 percent versus current generation

Handset manufacturers can now offer cost-effective, feature-rich phones to consumers in a short amount of time thanks to an advanced, front-end power amplifier module from Freescale Semiconductor, Inc. The MMM6015 power amplifier module reduces the amount of board space needed by more than 40 percent versus the current generation.

The MMM6015 design innovation integrates the power amplification, power control, low-pass filtering and antenna switching functions while enhancing the battery life of the handset. Targeted for a wide variety of next generation GSM/GPRS phones, the MMM6015 is a front-end power amplifier module for quad-, tri- and dual-band GSM handset applications across the 850, 900, 1800 and 1900 MHz bands. This module is designed to meet reduction requirements of hazardous materials in consumer electronics.

The MMM6015 eases factory constraints and reduces manufacturers' time-to-market due to the integration of the low pass harmonic filters and transmit and receive switches in this small module (6mm x 8mm, height: 1.15 mm nominal). The module's anti-saturation technology is engineered to prevent switching transients when the battery voltage sags from a low battery. The module also incorporates low band current limiting to prevent battery collapse under extreme conditions. Both features enhance available handset battery life.

“This module provides high reliability, quality and flexibility during the handset manufacturing process,” stated Kent Heath, director of cellular operations, Radio Products Division. “Simultaneously, it shrinks board space for our customers and ultimately provides a very cost effective solution.”

Pricing and Availability

The MMM6015 can be incorporated into a cellular platform or designed in as a stand alone component. Samples are available now with production targeted for second quarter 2005. The MMM6015 suggested resale price is \$4.50 at 10K quantities.

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