Overview
Freescale’s first 2.5G release, the i.250-20 Innovative Convergence™ platform is a comprehensive, silicon-to-software solution for 2.5G technology, designed to enable rapid time to market with smart, GSM/GPRS wireless products. Working in concert with Freescale, Esmertec is providing Java™ software technology specifically designed to extract maximum computing performance and services delivery capabilities from Freescale’s hardware.

By combining the technology and innovation behind Freescale’s powerful hardware platforms and Esmertec’s highly optimized, performance driven Jbed™ engine, handset manufacturers, operators and application developers can deliver highly adaptable and customizable mobile multimedia services at mass-market price points to consumers worldwide. Manufacturers, operators and content providers can provide their users with an exceptional multimedia experience. This enables users to tailor their mobile phones with easy to use personal set of applications and graphical “look and feel” features.

2.5G Platforms
Building on the success of the industry-leading i.250-20 platform, Freescale has introduced the i.250-21 Innovative Convergence platform to provide advanced features and applications in the GSM/GPRS arena. The i.250-20 and i.250-21 platforms can offer the lowest system part-count in the industry for best-in-class system cost, continuing on a path to even further integration.

From an advanced chipset, including integrated communications and application software, to powerhouse development tools, “always-on” connectivity and the industry’s smallest footprint, Freescale’s wireless platforms have what developers need to capture the broadest range of handset consumers. The i.250-20 and i.250-21 Innovative Convergence platforms allow manufacturers to get to market quickly. Each platform includes a leading-edge development environment, an advanced chipset and a field-proven GPRS software stack. Together, the i.250-20 and i.250-21 platforms offer a range of voice-centric, voice/data and data-centric products and a comprehensive roadmap with distinct industry advantages for smaller, lighter, more cost-effective wireless products. Here are just a few of the advantages of choosing an i.250 platform.

> Flexibility for selecting low-, mid-, or high-tier feature sets with options such as Web browsing, video mail, instant messaging and music
> Scalability for offering migration paths from 2G to 2.5G (with 2.75G and 3G protocols expected in the near future)
> Connectivity with personal area network solutions, such as Bluetooth™ wireless technology
> Ease of development with Java 2 Platform, Micro Edition (J2ME™) technology and industry-leading tools for creating mobile applications
> Industry’s lowest system part count to help deliver compact 2.5G devices from voice-only to higher-tiered voice and data products

As the wireless marketplace continues to expand, market requirements are increasingly demanding. Products need to be smaller in form factor, more cost-effective and more quickly deliverable to the market. To help manufacturers meet these requirements, Freescale’s system solutions with its 2.5G Innovative Convergence (i.250-20,-21) platforms feature fully-integrated hardware, software, and support services. These platforms, combined with Esmertec’s embedded Java technology, enable the rapid development and deployment of cost-effective handsets, making wireless products smarter and consumers’ lives better.

Learn More: For more information about Freescale products, please visit www.freescale.com.

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Jbed Advanced Brings Java Multitasking to Mass-Market Mobile Phones

Personalization and customization capabilities are becoming more important for device manufacturers and mobile operators to differentiate their services and encourage loyalty among end consumers. In recognition of these requirements, Jbed Advanced, a certified Java solution, consolidates the best of Esmertec’s embedded Java 2 Platform, Micro Edition (J2ME) technology and expertise within a high-performance, unified, modular Java execution platform.

By providing Java multitasking capabilities to CLDC/MIDP, Esmertec’s Jbed Advanced significantly extends the service capabilities of mass-market mobile phones.

Imagine that you are playing a game on your mobile phone, but you still want to be updated on the latest news headlines or listen to your favorite song? With Jbed Advanced, this is no longer an issue as multiple applications can run simultaneously. This means that the content can be constantly and automatically updated in the background on your phone.

Jbed Advanced, through enabling concurrently running applications, enhances the end consumers’ experience and lets them stay in touch in a dynamic and seamless way.

At the heart of the Jbed Advanced solution is a high-performance Java compilation engine, translating Java programming instructions, known as bytecodes, into the native instructions of the underlying microprocessor. Thanks to unique embedded compilation technologies and a highly-optimized footprint, Esmertec Java compilation engines deliver one of the fastest execution performance to mass-market mobile handsets, while requiring minimum memory, processing and energy resources from the devices.

Jbed Advanced delivers comprehensive and extensible Java solutions to mobile device manufacturers. The platform supports a large variety of Java 2 Platform, Micro Edition (J2ME) configurations and profiles, operators’ extensions and Central Processing Units (CPUs).

Customizable User Experience

With Brand Manager, Jbed Advanced enables device manufacturers to easily customize the user interface look and feel of their devices to fit a broad variety of branding requirements.

Esmertec’s Jbed Advanced Brand Manager provides build-time customization as well as over-the-air (OTA) personalization capabilities of MIDP 2.0 without requiring any modification of Java application software. For seamless integration of the Java environment into the mobile phone, an API feature will be available to enable the harmonization of the Java and the native user interface.

Partnering with Freescale

Combining Esmertec’s technology for high-speed Java-enabled mobile phones and other wireless devices with Freescale’s 2.5G cellular platform will provide customers with solutions to help create winning designs to meet the ever-changing demands of the mobile consumer marketplace.