World`s First Linux UMTS/EDGE Dual-Mode Smartphone Reference Design

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Infineon Technologies, Samsung Electronics, Trolltech and Emuzed today announced the world's first UMTS/EDGE smartphone reference design based on the Linux operating system. The reference platform showcases many advanced 3G and multimedia services such as UMTS/EDGE dual-mode voice calls, video calls and video streaming, high performance multimedia applications (H.264, MPEG-4, AAC+, MP3), ultra-fast Web browsing, stereo loudspeaker with 3D audio and Java-based 3D gaming.

A UMTS/EDGE smartphone featuring the Linux operating system will be demonstrated at the 3GSM World Congress (14-17 February, 2005, in Cannes, France) at Infineon's booth A19 in Hall 1 and at Samsung Electronics' booth D57 in Hall 2.

The hardware platform includes Samsung Electronics' S3C24A0 application processor and camera module, and Infineon's MP-U UMTS/EDGE modem platform. It is engineered for small form-factor designs and comes complete in a compact slider case.

"According to ZelosGroup report, Linux will secure a significant share of the feature and smartphone segment market in the next design cycle, especially due to its openness and low costs advantages," said Professor Dr. Hermann Eul, Executive Vice President and General Manager of the Communication business group at Infineon Technologies. "This complete solution will allow customers to enter the world of Linux-based UMTS/EDGE smartphone in record time and benefit from Infineon's

recognized experience and expertise in the area of dual-mode modem and system integration."

"This platform illustrates Samsung Electronics' outstanding capabilities in the mobile application processor and imaging areas," said Christopher D. Chang, Vice President at Samsung Electronics' Semiconductor Business, System LSI division. "It also demonstrates Samsung Electronics' leadership in providing a Linux solution for its line of mobile application processors targeting the smartphone market."

The software platform is a pre-integrated solution consisting of Infineon's proven UMTS/EDGE dual-mode protocol stack, Samsung Electronics' optimized Linux kernel and drivers certified by Montavista, Trolltech's Qtopia® software platform for Linux-based mobile phones and Emuzed's audio and video applications. Compelling new Java applications will be showcased on Sun's high-performance Java implementation. ARM and Superscape's Swerve 3D rendering engine, Opera's browser and QSound Labs' 3D audio and ringtone solutions are also included.

"Emuzed is excited to partner with Infineon, Samsung Electronics', and Trolltech on this leading-edge 3G platform that is ideal for high performance multimedia applications," said Dr. Rajesh Srivathsa, CTO, Emuzed Inc. "The Emuzed's integrated multimedia application (HipMedia) allows for a rich end user experience for recording, playing back and sharing home movies, photo albums and music in an intuitive easy to use manner," added Markus Kaarto, Director of Technology.

UMTS/EDGE and Linux Deliver Advanced Solution for Smartphone Innovation

The smartphone reference design is designed for handset manufacturers who want to quickly reach a leading position in the growing UMTS/EDGE smartphone market with a Linux-based device. Designed

to support UMTS and EDGE cellular standards, the platform enables users to have vast mobile network coverage and benefit from advanced multimedia features delivered at high data rates.

The Open Source Linux Operating System is rapidly becoming a leading software platform for smartphones. Providing a common platform with a huge developer community, Linux offers vendors far greater independence as well as control over branding and the user interface, thereby driving innovation. The platform makes it easy for manufacturers to take advantage of benefits that Linux brings in term of cost efficiencies, flexibility, and functionality.

"The Linux operating system gives manufacturers independence and control, and it's clearly becoming a standard platform for smartphone design," said Haavard Nord, Trolltech CEO. "Trolltech's Qtopia software is the face of Linux on mobile phones, offering a sophisticated, customizable application environment and user interface. Trolltech is pleased to collaborate with this group of industry leaders to combine many powerful technologies into an integrated, cutting-edge solution for 3G smartphones."