

# Philips demonstrates industry-first system solution for smartphones based on Linux

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Addressing the growing volume of smartphones and narrow time-to-market windows, Royal Philips Electronics unveiled its new Nexperia<sup>®</sup> Cellular System Solution 9000 family. Incorporating high-speed connectivity to the Internet, the solution enables consumers to download music, play 3D games and watch digital television, even while receiving calls. Running on the open source Linux<sup>®</sup> Operating System (OS), the smartphone system solution brings together Philips' expertise in multimedia, consumer TV and audio systems to benefit smartphone end users.

Making it simple for manufacturers to deliver advanced smartphones, the Nexperia Cellular System Solution 9000 family includes an application engine dedicated to sophisticated multimedia functions, a telecom modem, and a broadcast and connectivity subsystem. As a pre-integrated solution based on the Linux open OS and a high performance chipset, the new system solution family meets the increasing demand from cellular network operators and handset manufacturers to bring smartphones and portable multimedia devices quickly to market with the minimum of risk.

According to a study from the ARC Group, smartphone sales will take off over the next five years, growing from an estimated 27.6 million units in 2004 to 125 million units in 2009. The study also indicates that smartphone makers are expected to embrace open OS standards, with only 10 percent of smartphones using proprietary systems by 2009.

The Nexperia Cellular System Solution 9000 family harnesses the benefits of the open Linux platform. It enables Philips' customers to host a wide range of third-party applications and to continuously update features on their mobile phones, allowing them to easily customize and expand the phone's capabilities. Flexibility, portability of applications and inherent security is provided by the Java 2 Platform Micro Edition (J2ME). The combination of Linux and Java makes the Nexperia System Solution 9000 family the platform of choice for network operators to enable new services such as over-the-air download of applications, updates and maintenance.

"Philips is committed to advancing mobile handset features that truly integrate telephone, PDA and sophisticated multimedia functions by leveraging our huge multimedia IP portfolio and ASIC experience," said Gert-Jan Kaat, senior vice president Business Unit Mobile Communications, Philips Semiconductors. "For handset manufacturers the Nexperia Cellular System Solution 9000 family offers a ready-to-use format that helps shorten development cycles, allowing them to take increasingly advanced and cost-effective handsets quickly to market."

### **Features of the Nexperia Cellular System Solution 9000 family**

The first product available in the new family is the Nexperia Cellular System Solution 9100. It combines the processing power of Philips' PNX4008 application processor engine - for sophisticated video, imaging, audio and 3D gaming functions - with the Nexperia Cellular System Solution 6120 telecom and BGB204 Bluetooth subsystems. Further connectivity and broadcast subsystems, such as Wi-Fi 802.11b/g/h, DVB T/H, NFC and GPS modules, can easily be added.

The Nexperia Cellular System Solution 9000 family is packed with multimedia capabilities including real time, full frame rate video streaming/recording/playback, video telephony, enhanced music/audio, 3D gaming and advanced graphics. It also incorporates smartphone

applications such as audio, video, connectivity, security, gaming and PDA-type functionality.

The family is equipped with pre-validated hardware and software packages, including protocol stacks and a software development environment. Tools for the solution are available from Philips and third-party providers. The Bill Of Materials (BOM) is also highly competitive due to optimized component integration, and as a validated architecture the Nexperia Cellular System Solution 9000 family offers a low-risk, high performance solution for handset manufacturers.

Thanks to its application processor engine the Nexperia Cellular System Solution 9000 family is also able to support other operating systems such as Symbian OS<sup>®</sup>; and Microsoft Windows Mobile<sup>®</sup>;

### **Nexperia Partner Program**

The Nexperia System Solution 9100 provides access to Philips' Nexperia Partner Program, an initiative to enable Independent Software Vendors (ISVs) and Integrators to deliver middleware, applications and reference designs based on the company's Nexperia family of semiconductors. Through the program Philips and its partners will benefit their customers by delivering highly integrated hardware and software, reducing time to market and enabling manufacturers to focus on differentiating their products.

Philips pioneered the system solution approach in 1999. Today, more than 150 million Nexperia-based systems have been brought to market; and one in every 10 GSM/GPRS handsets built in 2004 will use Nexperia solutions. As a worldwide leader in cellular communications, Philips offers a global network of expertise to help its customers succeed.

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