TI Achieves First Netflix HD Certification, Brings New Streaming Capabilities to Android Devices

Texas Instruments became the first partner to achieve the Netflix Silicon Reference Implementation (SRI) certification for the Netflix HD application on Android. TI’s OMAP 4 platform, complete with M-Shield security technology and TI’s quad-radio WiLink 7.0 connectivity combo solution, met the Netflix requirements for mobile content streaming, including the ability to run up to full high-definition (HD) 1080p video within strict security measures. This milestone reflects the strength of TI’s M-Shield technology on the OMAP 4 platform and marks the first time Netflix has certified its 1080p streaming application with end-to-end protection on a mobile device.

With its dual ARM Cortex-A9 MPCore foundation featuring TrustZone, TI’s OMAP 4 platform sets the bar for multimedia-rich Netflix experiences on today’s mobile devices. It employs parallel processing for higher performance and better power efficiency, and includes engines that drive consumer-demanded capabilities such as full HD 1080p 30fps multi-standard video and more. Part of the OMAP 4 platform, TI’s M-Shield security technology protects premium content and mobile devices from attacks while streaming with the Netflix application. The M-Shield solution implements a hardware-protected, trusted execution environment (TEE), which runs on the OMAP processor, yet does not require a dedicated chip or extra CPU cycles. This allows M-Shield and OMAP architecture to provide optimal playback time, while maintaining low CPU loading so it is free to run other applications.

Additional streaming security was achieved through the use of Wi-Fi-based WEP, WPA and WPA2 protocols, part of TI’s WiLink 7.0 solution—the industry’s only single chip to include Wi-Fi, Bluetooth®, GPS and FM technologies.
Smartphones and tablets running the Netflix application on the OMAP 4 platform can also connect to larger, HDMI-supported televisions as the OMAP platform’s security includes HDCP encryption over the HDMI connection itself.

“Netflix already has a rich heritage of streaming to PCs, Macs, game consoles, Internet-connected TVs, iPhone and iPad, and many set-top-boxes, so we sought a semiconductor partner that could bring our service to the broader mobile environment smoothly and securely,” said Bill Holmes, Vice President Business Development, Netflix. "TI's OMAP architecture and M-Shield security will set the stage for a high-performance, low-power, secure platform that will help Netflix members instantly watch unlimited TV shows and movies on Android devices."

"TI is proud to be the first to achieve this coveted certification and to provide the solution that ensures a strong balance of performance, security and power efficiency as Netflix experiences migrate to the mobile world,” said Fred Cohen, director of the OMAP User Experience team, TI. “Our OMAP processors deliver rich, life-like experiences on mobile devices, while our M-Shield technology stands as the

guard dog, protecting customer, content provider and consumer assets. It's the best of both worlds, driving new growth opportunities for Netflix in the Android marketplace."

TI worked with Trusted Logic to develop the secure middleware component (SMC), which is the OMAP version of Trusted Logic Trusted Foundations. The SMC executes Trusted Logic TrustedShow and an OMAP-optimized implementation of the Netflix-required Microsoft PlayReady DRM scheme.

"This Netflix certification represents another milestone in our successful work with the TI team," said Olivier Leger, VP and General Manager, Trusted Logic. "We are thrilled to bring the most advanced features – including premium content distribution and streaming – to various consumer products in a safe, secure manner. Netflix users and stakeholders will benefit from our proven technology, now optimized for TI's M-Shield, and the best possible experiences on their mobile devices."

Support and availability
The OMAP 4 platform's Netflix certification supports Android 2.3 ("Gingerbread") today, with support for additional Android versions planned for this year. Devices with the OMAP 4 processor-driven Netflix application pre-installed will be launched in the near future.

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