

# ARM First to License OpenGL ES 2.0 Benchmarks From Futuremark

## World leader in mobile applications processors and graphics hardware to use Futuremark's tools to optimize OpenGL ES 2.0 3D performance

**Saratoga, California – May 2, 2007** – Futuremark Corporation, industry leading provider of mobile phone performance analysis software and services announced today that ARM [(LSE:ARM): (Nasdaq: ARMHY)] is the first licensee of both their SimulationMark ES 2.0 and 3DMarkMobile ES 2.0 benchmark products. ARM is expanding the relationship beyond active membership in Futuremark's Handheld Benchmark Developer Program (BDP) membership to include full licensing of Futuremark's OpenGL ES 2.0 3D performance analysis products. The benchmarks will provide ARM with dedicated OpenGL ES 2.0 3D graphics workloads targeted towards mobile platforms to assist with objective performance evaluations of ARM graphics IP solutions for partners.

ARM has stated that SimulationMark ES 2.0 and 3DMarkMobile ES 2.0 will fill a void within the mobile industry, providing forward looking mobile 3D game content. This contributes to the creation and validation of performance balanced OpenGL ES 2.0 solutions, with verifiable performance data for silicon providers and OEMs. With the ARM® Mali200™ graphics processing unit optimized for OpenGL ES 2.0 and by referencing game development community feedback, ARM recognized early that Futuremark was heading in the right direction to help industry players to bridge the gap between the mobile industry value chain and the gaming community.

"ARM has recognised the challenge that mobile device manufacturers face in the absence of any set metrics from content providers for hardware performance requirements. Sound decisions rely on the availability of benchmarks that are well supported by the major players in the gaming community," said Borgar Ljosland, graphics business development manager, ARM. "ARM is working with its Connected Community members to close the disconnect that has existed between the gaming and mobile value chains and as part of this we are actively contributing to Futuremark's BDP, providing feedback from our experiences into the benchmarking process".

### Futuremark's OpenGL ES 2.0 Toolset Overview

3DMarkMobile ES 2.0 is a complete OpenGL ES 2.0 test suite that includes 3D game content workloads and an array of OpenGL ES 2.0 API feature tests. Licensees are able to objectively evaluate and verify real-world gaming performance on existing OpenGL ES 2.0 hardware. SimulationMark ES2.0 evaluates pre-silicon OpenGL ES 2.0 design performance, allowing hardware designs to be tested without requiring the actual hardware to exist. The product is a combination of theoretical and practical shader test workloads based on high level shader and parameter descriptions published by Futuremark. Both benchmarks are defined and programmed by Futuremark in conjunction with the Handheld BDP member companies. The program's membership includes AMD, ARM, Broadcom, DMP, Freescale Semiconductor, GiQuila, Imagination Technologies, Intel, Marvell, Mtekvision, NexusChips, NVIDIA, Renesas, Samsung, Symbian and Texas Instruments.

"ARM has clearly emerged as the central nucleus of mobile applications processors. This transition from BDP member to first full licensee delivers a powerful endorsement of our OpenGL ES 2.0 tools, serving as credible proof that our benchmarks have become the industry standard for measuring and comparing performance in cell phones, handhelds and other embedded applications," said Petri Talala, Vice President of Futuremark's Mobile Business Unit. "We have long believed that our expertise in developing reliable performance analysis tools and services would provide the entire mobile industry with tools that will provide better performing graphics hardware, yielding a more enjoyable consumer experience. That vision is now becoming a reality."

### About Futuremark Corporation

Futuremark® Corporation is the leading provider of performance analysis software and services for PCs and smartphones. Futuremark® is known around the world for its benchmark products, including the 3DMark® and PCMark® Series, SPMark™ and VGMark™ (with more than 30 million copies distributed worldwide) and value-added services powered by a database of over 13 million real life benchmarking results. Futuremark® maintains offices in Saratoga, California and Helsinki, Finland. For more information, please visit <http://www.futuremark.com>

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