

GLBenchmark 2.0

GLBenchmark 2.0 benchmark suite for OpenGL® ES 2.0 demonstrated first on Texas Instruments OMAP™ 3 applications processor at Mobile World Congress 2008

The world's most popular OpenGL ES benchmark has been updated to support OpenGL ES 2.0, the highest-end mobile 3D API. Kishonti Informatics, the worldwide leader of mobile performance benchmarking has announced availability of GBenchmark 2.0, 3D performance benchmark suite for OpenGL® ES 2.0 compatible Linux, OpenCode, Symbian and Windows Mobile devices.



Revolution in embedded 3D

Compared to the fixed pipelines of former mobile 3D environments, OpenGL ES 2.0 creates unlimited possibilities for embedded developers through programmable shader technology. OpenGL ES 2.0 combines a version of the OpenGL Shading Language for programming vertex and fragment shaders that has been adapted for embedded platforms, together with a streamlined API from OpenGL ES 1.1 that has removed any fixed functionality that can be easily replaced by shader programs, to minimize the cost and power consumption of advanced programmable graphics subsystems.

Revolution in mobile benchmarking

"GLBenchmark 2.0 has been designed from the ground up to demonstrate and measure the true potential of OpenGL ES 2.0 Hardware" says Laszlo Kishonti, General Manager of Kishonti Informatics, "The built-in shader code (GLSL) generator enables real-time performance tuning and de-compositing. This is an in-valuable feature for OpenGL ES 2.0 Hardware vendors and Handset manufacturers."



Realistic content for future devices

GLBenchmark 2.0 is designed to run on, and be compatible with, all OpenGL ES 2.0 compatible devices. To make sure the benchmark does not over- or under-shoot future device capabilities, and consumer and operator expectations, Kishonti has worked together with all major OpenGL ES 2.0 vendors and created demanding, but compatible, benchmark scenarios.

"Benchmarks like GLBenchmark 2.0 are critical to objectively analyzing performance across diverse, graphic-enabled platforms. This latest benchmark is an important addition to cover emerging OpenGL ES 2.0-based solutions, like TI's low-cost, high-performance OMAP3430 applications processor," said Ameet Suri, graphics domain marketing manager, TI. "We are delighted to see that currently the top three position using GLBenchmark 1.0 are devices based on our OMAP 2 platform, and we look forward to seeing OMAP 3-based products in a similar position in the future."



Says Tony King-Smith, VP marketing, Imagination Technologies: "Imagination Technologies is delighted that TI and Kishonti are demonstrating this significant benchmark at MWC, on hardware incorporating our POWERVR graphics acceleration IP. GLBenchmark 2.0 is an important metric of the performance of advanced real-world graphics applications and we believe this kind of benchmark is vital for the continued successful growth of this segment of the industry."

Measurements and features

GLBenchmark 2.0 efficiently demonstrates several high quality real-time effects which were only made possible by Open GL ES 2.0 and expected to be popular with application developers: texture based and direct lighting; bump, environment and radiance mapping; soft shadows; vertex shader based skinning; automatic levels of detail (LOD); multi-pass deferred rendering; noise textures; ETC1 texture compression. The benchmark also measures low level OpenGL ES 2.0 system performance which makes easier to find bottlenecks at an early stage.

Availability

GLBenchmark 2.0 is available right now in source code and binary versions for GLBenchmark Development Program Members. More information available at: www.glbenchmark.com.

Kishonti's partners include:



Kishonti Informatics specializes in mobile performance measurement and development tools. Its popular JBenchmark and GLBenchmark test suites and performance databases let network operators, developers and consumers measure and compare more than 1400 mobile devices.

OpenGL® ES is a royalty-free, cross-platform API for full-function 2D and 3D graphics on embedded systems - including handheld devices, consoles, appliances and vehicles. It is a well-defined subset of desktop OpenGL, creating a flexible and powerful low-level interface between software and graphics acceleration. OMAP is a trademark of Texas Instruments.

Kishonti Informatics LP
Zöldlomb utca 16-18/D Budapest 1025 Hungary
Ph: +36 1 336 0033 ▪ Fax: +36 1 336 0034
www.glbenchmark.com ▪ sales@glbenchmark.com

