Nvidia shows off Kal-El -- new quad-core processing chip

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(PhysOrg.com) -- Nvidia, well known for its graphics chips, has made a pretty big statement by releasing a video on Youtube showing the capabilities of its new quad-core processing chip for smartphones and tablets. In the video, a ball, lit from within, moves around a virtual environment, shining its light on the other elements in its surroundings, demonstrating a step up in visual representation of real-time light imagery. Most video games use canned lighting, which means the game only has to show what has already been calculated. With the new chip in place, currently known as the Kal-El (Superman's real name) the light

projected is calculated and displayed (on moving objects yet) as the game is in play, something that requires incredible amounts of calculation at incredible speeds. The chip accomplishes this feat via its new quad-core (four processing units in a single component) processing chip.

Uploaded prior to the upcoming Computex trade show in Taiwan this week, the video demo of Glowball, as Nvidia has named the video game, shows that Nvidia is now to be considered a major player in the development of cutting edge ARM processors (the 32 bit RISC processors developed by Arm Holding that have come to dominate the mobile or embedded electronics market) moving into direct competition with such big names as Texas Instruments and Qualcomm. It also sheds some light, if you will, on the direction mobile applications are heading. While it's not known just how much money Nvidia has invested in developing its impressive new chip, it's safe to say that it was considerably more than it ever has for its graphics chips; a move that demonstrates just how lucrative the mobile market has become.

At the trade show, Nvidia demonstrated what a step up the new quad-core chip is by pushing a button on the demo pad that dropped the demo play to dual-core mode; a move that resulted in stilted jerky game movement.

If all goes according to plan, Kal-El powered tablets (running on Google Android of course) are expected to be on the market by September, followed shortly thereafter by quad-core smartphones, making them the only such choice for consumers until the competition catches up.

More information: Nvidia blog