

Design and Performance Perfected: NVIDIA Introduces Max-Q for Gaming Laptops

3x Thinner, 3x More Performance than Previous Generation Laptops

COMPUTEX -- NVIDIA today introduced Max-Q, a new design approach that redefines gaming laptops from the ground up -- making them thinner, quieter and faster. They will be available from all major OEMs worldwide, starting June 27.

Max-Q, an integral part of NASA's mission to launch man into space, is defined as the point at which the aerodynamic stress on a rocket in atmospheric flight is maximized. Thus, the design of the rocket is precision-engineered around Max-Q. NVIDIA has applied a similar philosophy to designing gaming laptops, enabling OEMs to build laptops that are 3x thinner with up to 3x more performance of previous generation products.

The results: a high-performance gaming platform, that is as small as 18mm thick -- as thin as a MacBook Air -- with up to 70 percent more gaming performance than what is currently available.¹

The Marvels of Max-Q

At the heart of this performance is NVIDIA Pascal™, the world's most efficient gaming GPU architecture. To deliver more performance to thin laptops, NVIDIA has further optimized and configured Pascal for even higher efficiency. And with Max-Q, everything in the design is precision engineered -- including the laptop, the GPU, the drivers, and the thermal and electrical components -- to ensure peak efficiency.

With its blend of rocket science and exacting design, Max-Q pushes PC gaming on laptops into another stratosphere:

- **Powerful GPUs at Max Efficiency:** Based on the [NVIDIA Pascal GPU architecture](#), GeForce® GTX 1080 is manufactured on the leading-edge FinFET 16nm process, and features cutting-edge GDDR5X memory. Max-Q combines a new way of operating the GPU for peak efficiency, with optimizations such as a low voltage optimized clock curve that wrings out gaming performance while reducing power.
- **Optimal Playable Settings:** In addition to efficient GPUs operating at max efficiency, NVIDIA Game Ready drivers have been tuned to deliver optimal system efficiency while delivering a great gaming experience for every game on every system.
- **Advanced Thermal Solutions and Optimal Regulator Efficiency:** To squeeze even more performance out of a system, these Max-Q designed laptops are engineered with sophisticated thermal and electrical design. New advanced thermal solutions, along with unprecedented regulator efficiency, enable dramatically higher performance and quieter operations in thin gaming laptops than in anything else currently available.

The Ultimate Gaming Laptop

With Max-Q designed laptops, gamers can experience high-fidelity gaming and high-resolution entertainment whenever and wherever they want it. Max-Q designed laptops support the entire GeForce gaming platform, which includes the latest gaming technologies, [Game Ready](#) drivers, [NVIDIA G-SYNC™](#) display technology, VR, 4K gaming, and more.

Max-Q designed laptops are also ready for [NVIDIA GeForce Experience](#), a complete software platform that provides automatic game profiles to ensure gamers are playing with the right settings out of the box, ensuring an optimal gaming experience every time.

NVIDIA WhisperMode Technology

NVIDIA also introduced WhisperMode technology, which makes laptops run much quieter while gaming. WhisperMode intelligently paces the game's frame rate while simultaneously configuring the graphics settings for optimal power efficiency. This reduces the overall acoustic level for gaming laptops. Completely user adjustable and available for all Pascal GPU-based laptops, WhisperMode will be available soon through a GeForce Experience software update.

Availability

Max-Q-designed gaming laptops equipped with GeForce GTX 1080, 1070 and 1060 GPUs will be available starting June 27 from the world's leading laptop OEMs and system builders, including Acer, Aftershock, Alienware, ASUS, Clevo, Dream Machine, ECT, Gigabyte, Hasee, HP, LDLC, Lenovo, Machenike, Maingear, Mechrevo, MSI, Multicom, Origin PC, PC Specialist, Sager, Scan, Terrans Force, Tronic5, and XoticPC. Features, pricing and availability may vary.

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About NVIDIA

[NVIDIA](#)'s (NASDAQ: NVDA) invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined modern computer graphics and revolutionized parallel computing. More recently, GPU deep learning ignited modern AI -- the next era of computing -- with the GPU acting as the brain of computers, robots and self-driving cars that can perceive and understand the world. More information at <http://nvidianews.nvidia.com/>.

Certain statements in this press release including, but not limited to, statements as to: the impact, performance, benefits and availability of Max-Q and WhisperMode are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners' products; design, manufacturing or software defects; changes in consumer preferences or demands; changes in industry standards and interfaces; unexpected loss of performance of our products or technologies when integrated into systems; as well as other factors detailed from time to time in the reports NVIDIA files with the Securities and Exchange Commission, or SEC, including its Form 10-Q for the fiscal period ended April 30, 2017. Copies of reports filed with the SEC are posted on the company's website and are available from NVIDIA without

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¹ Based on a test of 8 games, all running at 4K resolution, comparing an ASUS GX501 GeForce GTX 1080 Max-Q designed thin and light laptop versus a previous generation MSI GS63 GeForce GTX 1060-powered thin and light notebook. On average, the GeForce GTX 1080 Max-Q designed laptop was faster by 70 percent.