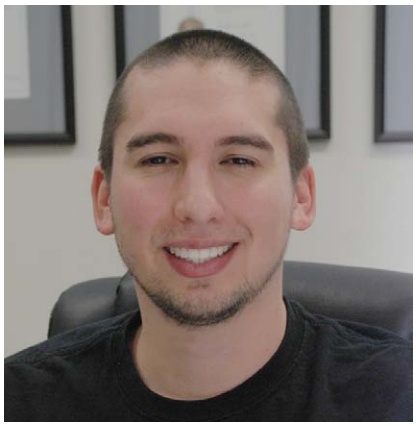
CASE STUDY
Intel® Solid-State Drives
Performance: Data-Intensive Computing

Sustaining quality with Intel® Solid-State Drives

Intel® Solid-State Drives enable EVGA to run quality assurance tests on 22 percent more graphics cards every day



EVGA prides itself on delivering high-performance NVIDIA-based graphics cards and Intel-based motherboards to system integrators, gamers, and technology enthusiasts. To maintain consistent product quality, the company tests all graphics cards before shipping them out, but that testing process can be time consuming. By replacing traditional hard disk drives with Intel® Solid-State Drives on test systems, the company dramatically reduced the time for starting up systems and running tests. As a result, the company now tests 22 percent more cards per day, helping to ensure that a constant supply of graphics cards is available while delivering the high-quality products that customers have come to expect from EVGA.

CHALLENGE

- **Accelerate product testing.** Reduce the time for starting up test systems and running tests on graphics cards to enhance worker productivity, ensure products are readily available, and maintain consistent product quality.

SOLUTION

- **Intel® Solid-State Drives.** EVGA replaced traditional serial ATA (SATA) hard disk drives with Intel® Solid-State Drives on graphics card testing systems.

IMPACT

- **Faster testing.** Intel Solid-State Drives shave more than a minute off of each system boot and test run—minutes that add up quickly over the course of the day.
- **Improved productivity.** By speeding up testing, EVGA can test more cards per day, making sure that customers have a constant supply of high-performance graphics cards for gaming, multimedia, and other applications.

"When you are testing product after product, every minute counts. The Intel® Solid-State Drives help us speed up the repetitive tasks in product testing significantly."

– Jacob Freeman, Product Manager, EVGA

Consistently delivering high-quality products has played an essential role in building and retaining EVGA's large and loyal customer community. "We test all of our graphics cards to identify any potential problems before shipping them out the door," says Jacob Freeman, product manager at EVGA. "The process involves powering on a test PC in a Microsoft Windows* 7 environment, installing the correct drivers, and executing performance tests. After each test is complete, we power the system down, install a new graphics card, and repeat the process."

Though necessary, the testing process can be time consuming and has the potential to slow shipments of new cards. "Just booting up a machine and installing drivers adds several minutes to testing. Those minutes add up over the course of a day," says Freeman. "We need a way to speed up each part of the testing process so we can test more cards every day and ensure a constant supply of high-quality products."

The EVGA product testing group saw an opportunity to speed up testing by replacing spinning disks with solid-state drives. "The faster we can pull data from a drive, the faster we can prepare the systems and run the tests," says Freeman. "Implementing solid-state drives provides a simple way to improve disk I/O."

Intel® Solid-State Drives Accelerate Testing

EVGA adopts Intel® Solid-State Drives to reduce testing time

For the EVGA team, it was a clear choice to select Intel® Solid-State Drives. "We began working with Intel several years ago on motherboards and developed a very strong relationship," says Freeman. "As soon as we learned about Intel Solid-State Drives, the Intel team arranged for us to acquire a number of them for our testing room. We wanted to jump right in and see what kind of performance gains we could achieve."

EVGA installed Intel® X25-V Mainstream SATA Solid-State Drives with 40 GB capacity for several of its existing test computers. "Performance was the key reason we chose Intel Solid-State Drives," says Freeman. "The compact size of the drives also made them easy to install in our customized test system chassis."

The test systems, which include components found in typical customer environments, use NVIDIA nForce 780i SLI* motherboards equipped with Intel® Core™ processors with vPro™ technology. "Intel processors help deliver exceptional performance, so it's no surprise that they have become a standard for gamers and other technology enthusiasts," says Freeman. "By combining Intel processors with Intel Solid-State Drives, our customers could see some impressive results with a variety of multimedia tasks."

Intel Solid-State Drives help shave minutes off testing

By replacing traditional SATA hard disk drives with Intel Solid-State Drives, the EVGA testing team has reduced the time to boot up systems by more than a minute while shaving another minute off the time to install drivers and run performance tests. "When you are testing product after product, every minute counts," says Freeman. "The Intel Solid-State Drives help us speed up the repetitive tasks in product testing significantly."

EVGA tests 22 percent more cards per day

By running tests faster, the EVGA team can test more cards per day. "Now each system can test 11 cards per day instead of 9," says Freeman. "Across all of our testing systems, we can evaluate 220 graphics cards per day as opposed to 180 before—that's a 22 percent increase in output, all because we switched to Intel Solid-State Drives."

Faster testing helps ensure a consistent product supply

In addition to enhancing productivity, the new drives help make sure that products are never in short supply. "Testing more cards per day enables us to bring new products to market faster and maintain the supply of existing models—we can be sure there are always products ready to sell," says Freeman.

SPOTLIGHT ON EVGA

Founded in 1999, EVGA today is a recognized leader in providing NVIDIA-based graphics card solutions and Intel® processor–based motherboards for system integrators, gamers, and technology enthusiasts. EVGA's dedication to customer service and quality control sets it apart from the competition and has earned the company one of the highest customer loyalty ratings in the industry.

Faster testing also helps minimize customer downtime if problems arise later. "We offer a premium service that lets customers receive replacement cards before sending back defective ones," says Freeman. "By testing more cards, faster, we can be sure we have enough tested cards on hand to send out replacements."

EVGA extends use of Intel drives across all test systems

Given the benefits realized so far, EVGA plans to deploy Intel Solid-State Drives in additional test systems. "Approximately 20 percent of our test machines currently use Intel Solid-State Drives," says Freeman. "We plan to implement the drives across all of the testing systems to maximize the benefits for our business and our customers."

Performance: Data-Intensive Computing. Support the most demanding business data processing, and computationally intense graphics.

Find the Intel® Solid-State Drive solution that is right for your business. Contact your Intel representative or visit **www.intel.com/go/ssd** for product information.

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