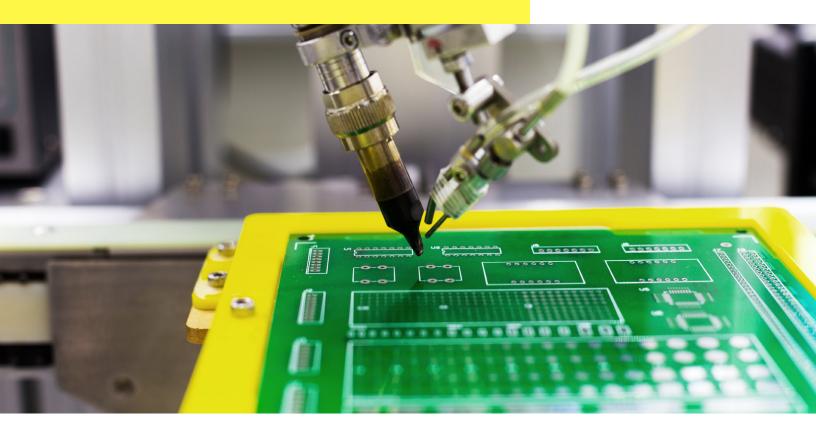
Innovium accelerates networking chip development with NetApp flash

■ NetApp



High-powered NetApp® flash storage delivers blazing performance for EDA workloads.

Innovium is an industry-leading designer and manufacturer of high-performance silicon switches. The company's TERALYNX product family is deployed in data centers around the world.

Innovium's customers rely on their switches to deliver insanely fast throughput, ranging from 3.2Tbps to a whopping 12.8Tbps. And with each new generation comes even faster performance.

To deliver these new switches with rapid time to market, Innovium needed a lightning-fast storage solution that could keep up. Innovium's product designers need to be able to test new features and capabilities quickly, involving multiple electronic design automation (EDA) tool iterations on some of largest silicon databases in the world.



NetApp AFF delivers market-leading performance

"My advice for storage investment in a new environment: Start with a proven, reliable, feature-rich solution like NetApp. In retrospect, we would have saved millions of dollars had we gone with NetApp from the start."

Rajiv Khemani CEO and Founder, Innovium

The need for speed

Innovium's customers include the world's biggest hyperscale clouds. These companies run massive networks and need a supplier they can trust to deliver flexible, innovative technology. We're talking about the speed of the internet—performance matters for these customers.

Microchips are always in demand, and when your semiconductors power some of the world's most advanced technology, getting them to market as quickly as possible is paramount.

Innovium had an existing storage solution supporting their design workloads that was struggling to deliver the bandwidth they needed. The lower-cost storage could not perform under extreme workloads. It couldn't maintain performance expectations as data grew, and Innovium knew that it was time to pivot.

To keep up with the speed their developers required, Innovium needed tens of Gbps of bandwidth and tens of millions of NFS IOPS. They began searching for a scale-out solution that could meet or exceed their performance demands.

All the horsepower you could ask for

The choice of NetApp came down to a performance shootout. Although other solutions from competitors could deliver the bandwidth that Innovium was looking for, they could achieve it only with their toptier performance models. NetApp demonstrated that Innovium could get the horsepower they needed (and more) with a cost-effective NetApp mid-tier AFF A400 storage system, saving valuable rack space and maintenance overhead. With AFF, Innovium achieves higher performance than the highest-tier competitive solution, while saving significant costs each month.

"In hindsight, I wish we had picked NetApp right off the bat," says Rajiv Khemani, CEO of Innovium. "When you're in the early stages of an innovative business creation, you have to take risks. It is advisable to focus on taking risks on the innovative product and market aspects. Implementing a low-cost storage solution was one risk I would have managed differently had I known at the time what the implications would be."

In addition to delivering improved performance over competitive products, NetApp also offers enhanced enterprise features that further accelerate product development. The AFF A400 has additional NIC compatibility (40Gb and 100Gb) that Innovium can use to make development easier and faster than with competitive storage systems.

You dish it, NetApp can take it

With NetApp, it's easy and fast to scale storage capability to meet demand, which is key in the ever-changing world of chip development. Instead of having to add more expensive SSD storage to expand aggregates and volumes, NetApp ONTAP® FlexGroup volumes allow Innovium to upgrade clusters on demand. This enables Innovium to leverage a multitier approach to expanding their environment while controlling costs.

Using a unified NetApp architecture, Innovium can expand up to 24 nodes with load balancing. AFF also supports NVMe for high-performance compute. Whether deploying block, SAN, or object storage, Innovium can do it all on the same HA pair to support anything from small DevOps environments to full-blown production workloads. This unified cluster setup simplifies management while providing a future-proof architecture.

"At the end of the day, NetApp was the clear choice to start with initially and drive our business forward," said Khemani.



NetApp products

- AFF A400 storage systems
- ONTAP FlexGroup volumes



About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services and applications to the right people—anytime, anywhere. To learn more, visit www.netapp.com

