

Company Summary



DRUT TECHNOLOGIES INC.

2025

Drut Technologies: Redefining Data Center Performance

At Drut Technologies, we are committed to driving innovation that delivers cutting-edge performance. Our groundbreaking solutions are designed to revolutionize data centers, paving the way for the future of computing.

Drut Technologies is building the DynamicXcelerator (DX Fabric) for a disaggregated photonic data center, an alternative approach to electrical packet-switched data center designs. Our architecture separates the compute, storage, GPUs, and networking components into distinct resource pools connected by high-bandwidth all photonic interconnects. In the future, we will show memory and CPU disaggregation as well.



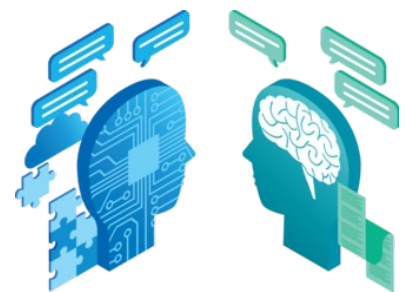
This disaggregated architecture, combined with photonic interconnect technology, enables unparalleled scalability, flexibility, performance, and cost improvements. By decoupling the components, data centers can be optimized for specific workloads, reducing costs and maximizing resource utilization. By using photonic switching in place of electrical switching, we deliver compelling advantages in power, heat, and cooling metrics.

Our Mission

Our corporate mission is: Organizing the World's Data Center Resources Around a Photonic Fabric, Because Architecture Matters, and Direct Connect is Better. We strive to empower businesses to achieve their AI goals with energy-efficient, high-performance data centers for the next generation of computing power.

Our Vision

By harnessing the power of innovation, we aim to transform data centers and set new standards for responsible growth. Improved performance for AI/HPC/ML clusters is delivered by high-speed, all photonic interconnects, allowing for ultra-low latency and high bandwidth data transmission. This results in significantly improved performance, enabling faster data processing, reduced bottlenecks, and enhanced user experiences. The underlying hardware can be grouped and isolated around software workloads providing better performance, higher utilization rates, and security.



Our Technologies

Drut Technologies' cutting-edge solutions are designed to optimize energy utilization and significantly reduce power consumption. By leveraging advanced algorithms and innovative architectures, we ensure that every watt of energy is utilized efficiently, minimizing the environmental impact of our solutions.

Our PCIe over Photonics (PoP) disaggregated architecture provides hardware innovation for modern data centers. This approach disaggregates hardware and software, closing the loop between hardware composition and software application layer provisioning. With an ultra-low latency photonic fabric, our platform is tailored for modern cloud, AI, and HPC workloads, including GPU virtualization and GPU cluster fabric, deployable in single rack-to-cluster size deployments across rows and pods.

Performance Without Compromise

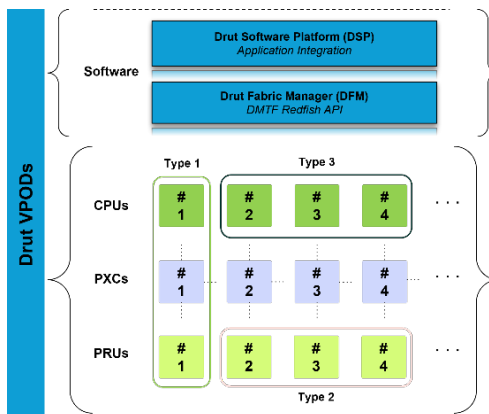
Drut Technologies' solutions are engineered to deliver unparalleled capabilities, empowering businesses to achieve their goals with unmatched efficiency and speed. Our team of experts continuously pushes the boundaries of innovation, developing groundbreaking technologies that redefine industry standards. From advanced computing architectures to cutting-edge algorithms, we ensure that our solutions remain at the forefront of technological advancements.



Drut Technologies' solutions are designed with scalability and flexibility in mind, allowing businesses to adapt to evolving needs and market demands seamlessly. Our modular approach ensures that our technologies can grow alongside your organization, providing a future-proof investment.

Unrivalled Performance

Our solutions reflect our commitment to performance. By accelerating computational tasks, optimizing data processing, and enhancing operational efficiency, Drut Technologies delivers unrivalled performance, empowering businesses with unmatched speed and precision.



Our photonic data centers feature a disaggregated architecture that enables modular scalability. Compute, storage, GPU, and networking resources can be independently upgraded or expanded, allowing efficient resource utilization and cost optimization for GPU-intensive applications in AI, ML, and HPC clusters. The DynamicXcelerator transitions data center infrastructure from the Hypervisor Era to the Accelerator Era, optimizing performance across interconnect bandwidth, software integration, power/cooling, latency, and overall system performance.

We use software to control node construction within the DX fabric, creating virtual PODs (VPODs). This allows on-demand resource slicing through the Drut Software Platform (DSP) for specific workloads. With a DX fabric, users can start small and scale up. The photonic fabric is rate-agnostic, remaining viable with optics upgrades and driven entirely by software. While we value Ethernet for cloud scale-out, we believe in direct connect, dynamic photonic switching for high-performance clusters in the Accelerator Era. Our all-photonic switching design significantly improves power and cooling efficiency, performance, and latency.

Team Background and Company Status:

Founded in 2018 by a proven cloud data center development team, the company has successfully raised three rounds of venture capital funding in 2021, 2022, and 2023. The core founding members of the Drut team successfully deployed three generations of an all-optical switch at a large hyperscaler in the 2010s. After founding Drut, the team demonstrated optically disaggregated GPUs with Microsoft Azure in 2020 (Dynamic Abundance). Our first commercial sales occurred in June 2022, and we continue to build momentum onboarding new channel partners and customers.

Leadership Team

William Koss
Chief Executive Officer
[LINKEDIN](#)

Chris Lee
Co-Founder, Head of Technology
[LINKEDIN](#)

Simon McCormack
VP of Product Management
[LINKEDIN](#)

Venkata Prasanna Tumiki
Co-Founder, System Software Lead
[LINKEDIN](#)

Kenny Mitchell
SVP Finance
[LINKEDIN](#)

Global Presence

Drut Technologies is headquartered in greater Boston (Nashua, NH) with a software development office in Hyderabad, India at the T-Hub Innovation Center.

Intellectual Property:

Drut has a pool of over 31 patents. We have been building on top of this IP pool and expect to continue to grow our IP base each year.

Investors

Drut Technologies is backed by leading financial investors in the Boston area as well as Europe:



Drut Technologies is at the forefront of sustainable innovation, revolutionizing data centers with their disaggregated photonic architecture, delivering unmatched performance while minimizing environmental impact for a greener future.
