SILVERBACK
DATA CENTER SOLUTIONS

Building the World's Largest AI Training Supercluster

100,000 NVIDIA H100 GPUs • 122 Days • 25,000+ High-Speed 400 GbE Fiber Links

xAI set out to build Colossus, the world's largest AI training supercluster, with an ambitious objective: deploy 100,000 NVIDIA H100 GPUs and bring the environment online in just 122 days. The project established a new benchmark for AI infrastructure deployment, combining unprecedented scale with one of the fastest execution timelines ever achieved.

As part of this initiative, Silverback Data Center Solutions supported the physical deployment of the AI infrastructure, delivering high-density structured cabling, rack integration, direct-to-chip liquid cooling deployment support, infrastructure validation, and quality assurance across approximately 1,500 AI racks.

Working under compressed schedules and evolving deployment requirements, Silverback executed more than 25,000 high-speed 400 GbE fiber connections, helping transform thousands of independent AI systems into a single, fully integrated AI training supercluster while maintaining deployment quality throughout the project.

Project	Metrics
GPUs Deployed	100,000 NVIDIA H100 GPUs
Deployment Timeline	122 Days
Racks Deployed	1,500
High-Speed Fiber Links	25,000+ 400 GbE Connections
Cluster Performance	Approximately 95% Throughput
Cooling Infrastructure	Direct-to-Chip Liquid Cooling Deployment Support
Network Fabric	High-Density 400 GbE Ethernet

Services Delivered

- AI Infrastructure Deployment
- High-Density Structured Cabling
- Rack Integration
- Direct-to-Chip Liquid Cooling Deployment Support
- Infrastructure Validation
- Quality Assurance

Deployment Highlights

- Contributed to deploying the world's first gigawatt-scale liquid-cooled AI data center.
- Executed more than 25,000 high-speed 400 GbE fiber connections across approximately 1,500 AI racks.
- Delivered one of the fastest AI infrastructure deployments, completing it in under an aggressive 122-day schedule.
- Maintained deployment quality while supporting rapidly evolving installation requirements.

About Silverback

Silverback **Data Center Solutions is the execution partner behind high-density AI infrastructure. We deploy, integrate, and migrate next-generation compute environments, including direct-to-chip liquid cooling systems, for enterprises, colocation providers, OEMs, and AI innovators.**

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