



ScaleMatrix provides cost-effective high-density colocation, cloud, and big data services from revolutionary Data Centers across the U.S. which are equipped with the company's patented Dynamic Density Control™ Cabinet technology. This platform allows clients the freedom to colocate hardware with varying density profiles (1 – 52kW) without concern for power, cooling, or airflow availability, supporting even the most demanding high-performance workloads with extreme efficiency.

Cirrascale Corporation is a premier developer of hardware and cloud-based solutions enabling GPU-driven deep learning infrastructure.

Their patented Vertical Cooling Technology and proprietary PCle switch riser technology provides the industry's densest rackmount and blade-based peered multi-GPU platforms. The company sells to infrastructure operators, hosting and cloud service providers, and HPC users.

CIRRASCALE BUSINESS NEED

Cirrascale provides its deep learning and HPC customers with the ability to **support up to eight GPUs in a single server.**

Cirrascale's high-density, bare metal, GPU-based cloud offering can **utilize 3,000w of power** or more per system.

Cirrascale workloads are dynamic and require a data center which can efficiently deliver 20-50kW per equipment rack, on demand, at any time.

Power, cooling, and airflow, plus security and cost-efficiency were among the chief concerns for Cirrascale when selecting a hosting partner.



Dynamic Density Control™ Data Centers

ScaleMatrix delivers unmatched power density, energy efficiency, airflow management, security, and risk-mitigation through the use of the Dynamic Density Control Platform (DDC). This solution was ideal for the Cirrascale deployment, which required extreme density (20-50kW), significant airflow management (up to 3500CFM), and the ability to deploy 45U racks of high-density equipment at a

moment's notice, anywhere across ScaleMatrix' U.S. footprint of Data Centers.

The proprietary DDC enclosures leverage localized heat exchange to dramatically improve density and energy efficiency. As thermal loads increase or decrease inside the cabinet, DDC automatically adjusts resource delivery and is able to cool 52kW of power load while maintaining the cabinet's supply temperature within 2 degrees of the desired set-point.

ScaleMatrix provides always-on, high-density Data Center availability which provides Cirrascale with better business agility and a competitive edge for their cloud service platform.

THE SCALEMATRIX AND CIRRASCALE SOLUTION

- Cirrascale GX8 Multi-GPU Servers make up the major element of the solution, with each server able to draw more than 3000w of power.
- The ScaleMatrix Dynamic Density Control™ Platform delivers industry-leading, high-density cooling (52kW), airflow (3500CFM), and security for Cirrascale's cloud offering.
- Efficient delivery of power and cooling through the DDC™ platform (PUE of 1.1 or better) ensures competitive pricing for service through ScaleMatrix′ U.S. Data Center footprint.

BUSINESS BENEFITS FOR CIRRASCALE



Freedom to Choose any Hardware Vendor



No-Stress Technology Refresh Cycles



Cirrascale HPC Servers have Ideal Operating Conditions



Reduction in Cabling and Network Fabric Costs



Variety of Geographic Options



Ability to Support Any
Compliance or Security Requirement



Extended Life of Cirrascale Equipment

THE RESULT

Cirrascale delivers best-in-class, extreme density compute solutions with the agility and responsiveness their clients demand, without concern for data center, thermal, or density issues thanks to the Dynamic Density Control platform, available at ScaleMatrix.









