

# The GX4 Series Multi-Device Peering Platform

The Ultimate Rackmount Platform Designed to Peer up to 4 PCle Gen 3 Compatible Devices on a Single Root Complex including the NVIDIA® Tesla® M40 GPU Accelerator

Until now, there has never been a rackmount multi-device peering platform available with this level of performance and scalability perfect for highly parallel applications. Cirrascale is proud to introduce the GX4 rackmount server series utilizing its revolutionary PCle switch riser technology.

The new Cirrascale GX4 rackmount server series supports the recently released Intel® Xeon® processor E5-2600 v4 or v3 product families and up to five PCle Gen 3.0 devices enabling multi-device peering on a single PCle root complex. This makes the GX4 a perfect solution for highly parallel applications and libraries like those used for deep learning, machine learning, and molecular dynamics such as Tensorflow, Caffe, Torch 7, Theano, and AMBER.

The Cirrascale GX4 implements the new low power, high speed DDR4 memory technology providing increased bandwidth and power efficiency while enabling higher overall memory bandwidth with lower density DIMMs. Additionally, the new systems provide improved performance of various high performance computing, professional imaging and feature detection applications and include next-gen networking improvements, new virtualization and security features. Overall, the Cirrascale GX4 is perfectly aligned for various scientific, analytics, and engineering applications worldwide, including those for deep learning, machine learning, and molecular dynamics.

With these new products, Cirrascale is facilitating data center transformation by providing scalable PCIe device performance. Customers deploying next generation scale-out infrastructure will benefit from the combination of NVIDIA's latest GPU accelerator platforms and Cirrascale's PCIe switch riser peering technology.

"Cirrascale peer to peer technology, like that used in the new GX4, allows us to unlock the true power of GPUs for scientific computation. This is the first platform of its kind and provides the unprecedented bandwidth needed to scale an individual molecular dynamics simulation with AMBER across all the GPUs and devices within a node. This previously unattainable performance will have impact on many fields."

Ross Walker, Associate Research Professor
San Diego Supercomputer Center

## About Cirrascale

Cirrascale Corporation is a premier developer of hardware and cloud-based solutions enabling GPU-driven deep learning infrastructure. Cirrascale leverages its patented Vertical Cooling Technology and proprietary PCIe switch riser technology to provide the industry's densest rackmount and blade-based peered multi-GPU platforms. The company sells hardware solutions to large-scale deep learning infrastructure operators, hosting and cloud service providers, and HPC users. Cirrascale also licenses its award winning technology to partners globally.

# Contact Us Today

To learn more about Cirrascale and its unique data center infrastructure solutions, please visit us on our website at www.cirrascale.com or contact one of our Account Managers by calling (888) 942-3800.



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### Cirrascale GX4 Series Rackmount Platform

With the consistent advances in technology, Cirrascale engineering and development teams are constantly testing and deploying the latest technical specifications being offered by our technology partners. We make every effort to provide the below specifications error-free and upto-date. However, we always encourage our customers to contact us to discuss Cirrascale's latest improvements to its products.

#### **Cirrascale GX4 Series Rackmount Specifications**

4U rackmount server or pedestal chassis containing:

#### **Processor:**

Options include dual Intel<sup>®</sup> Xeon<sup>®</sup> processor E5-2600 v3 / v4 product family

#### **Chipset:**

• Intel C612 PCH

#### Memory:

- Supports up to 1TB DDR4 Memory
- 16 DIMM Slots 2133/1866/1600MHz

#### Storage:

- 10 x SATA III 6Gb/s ports
- Supports RAID 0, 1, 5, 10

#### **Networking:**

- 2 x Gigabit LAN Controller(s) (Intel® I210-AT)
- 1 x Management LAN

#### **Expansion Slots:**

- 5 x PCle 3.0/2.0 x16 (x16 mode)
- 2 x PCle 3.0/2.0 x16 (x8 mode)

All slots may not be available due to configuration options.

#### **Supported PCIe Peering Configurations:**

 Supports up to 5 PCle devices by utilizing the Cirrascale PCle Gen 3 Switch Riser (SR3615)

#### **Integrated Graphics:**

- VGA Integrated in ASPEED AST2400 32MB
- 1920x1200@60Hz 32bpp

#### Management and Monitoring:

• WfM 2.0, DMI 2.0, WOL by PME, PXE

#### **Operating Systems Supported:**

- Windows® Server 2003 and later
- RedHat Enterprise Linux 6 and later
- CentOS 6 and later
- Ubuntu 12.04 and later
- Please call for additional OS Support



