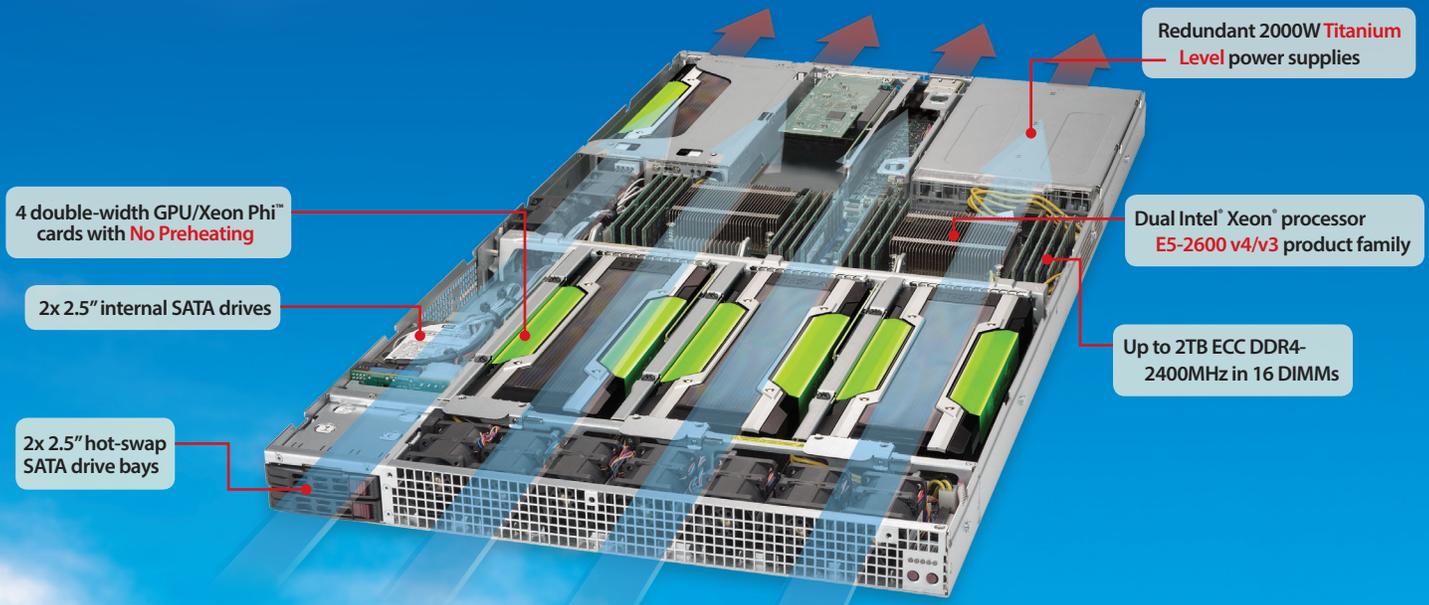




# GPU/Xeon Phi™

## Supercomputing Server Solutions

Up to **4** Double-Width PCI-E 3.0 in **1U**  
Supports Active & Passive GPU/Xeon Phi™ cards



4 double-width GPU/Xeon Phi™ cards with **No Preheating**

2x 2.5" internal SATA drives

2x 2.5" hot-swap SATA drive bays

Redundant 2000W **Titanium Level** power supplies

Dual Intel® Xeon® processor **E5-2600 v4/v3** product family

Up to 2TB ECC DDR4-2400MHz in 16 DIMMs



SYS-1028GQ-TR(T)



Medical Imaging



Oil & Gas Exploration



3D Rendering & Gaming



Astrophysics



Quantum Chemistry



Financial Simulation

- **PERFORMANCE:** Up to 4x 300W GPU/Xeon Phi™ cards in 1U to maximize computing power
- **FLEXIBILITY:** Capable of supporting Active & Passive GPU/Xeon Phi™ for unique workloads
- **MANAGEABILITY:** Server management & GPU status monitoring through IPMI 2.0
- **RELIABILITY:** 2000W (1+1) Redundant Titanium Level power supplies & intelligent cooling control
- **EFFICIENCY:** Breakthrough system architecture to optimize TCO, with Titanium Level power supplies, advanced cooling, and high-end motherboard components
- **DESIGN:** Optimized architecture with no GPU/Xeon Phi™ preheating



# GPU/Xeon Phi™ Supercomputing Server Solutions

The new Supermicro GPU/Xeon Phi™ SuperServer® - SYS-1028GQ-TR(T) supports up to: 4 GPU/Xeon Phi™ cards in 1U, with 2TB DDR4 2400MHz ECC 3DS LRDIMM or RDIMM memory in 16 DIMM slots, 4 SATA 3.0 (6Gbps) ports with Intel® C612 controller, LAN options up to 2x 10GBase-T or 2x Gigabit Ethernet ports, redundant Titanium/Platinum Level power supplies, integrated IPMI 2.0 with KVM over dedicated LAN, and dual Intel® Xeon® processor E5-2600 v4/v3 product family up to 44 cores per node and 145W TDP.

Generating massively parallel processing power and unrivaled networking flexibility with PCI-E 3.0 expansion slots and 10GBase-T LAN, the Supermicro GPU/Xeon Phi™ SuperServer® systems deliver the maximum processing acceleration for the most compute-intensive workloads in the smallest physical dimensions. With support for the very latest DP processors and up to 4 GPU/Xeon Phi™ cards in 1U, these powerful Supermicro GPU/Xeon Phi™ SuperServers help customers to create the most optimized solutions for their supercomputing needs. These systems are offered with Supermicro Global Services and Support featuring Next Business Day or 4-Hour Same Day hardware maintenance service to increase system uptime and productivity.

Supermicro's powerful GPU/Xeon Phi™ SuperServer® systems are optimized for HPC, Medical Imaging, Oil and Gas simulation, Computational Finance, Science and Engineering, and Media/Entertainment.



MODEL	SYS-1028GQ-TR(T)
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 (Broadwell)/v3 (Haswell) product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>• HPC cluster computer nodes</li> <li>• 2D/3D and CAD Applications</li> <li>• High-performance computing</li> <li>• Oil &amp; Gas</li> <li>• Cloud and Virtualization needs</li> <li>• Astrophysics</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Up to 4 double width GPU cards in 1U</li> <li>• Supports 16 DIMM, DDR4-2400MHz</li> <li>• 2000W Redundant Titanium Level high-efficiency power supplies</li> <li>• 4x 2.5" SATA drives</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• GPU health monitoring with fan speed control</li> </ul>
Serverboard	SUPER• X10DGQ
Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	4 PCI-E 3.0 x16 slots (4x GPU/Xeon Phi™ opt.) 2 PCI-E 3.0 x8 (in x16) low profile slots
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10
Connectivity	-TR: Dual LAN with Intel® i350 Gigabit Ethernet controller -TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T connector
VGA/Audio	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	2x 2.5" hot-swap SATA drive bay + 2x 2.5" internal HDDs
Power Supply	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	9x 4cm heavy duty counter-rotating PWM fans with air shroud with optimal fan speed control
Form Factor	1U Rackmount: 437 x 43 x 894mm (17.2" x 1.7" x 35.2")

\* Please check with your Supermicro sales representative for compatibility

MKT-0005-04/2016

