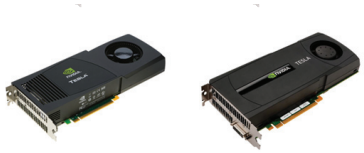
a-BriX

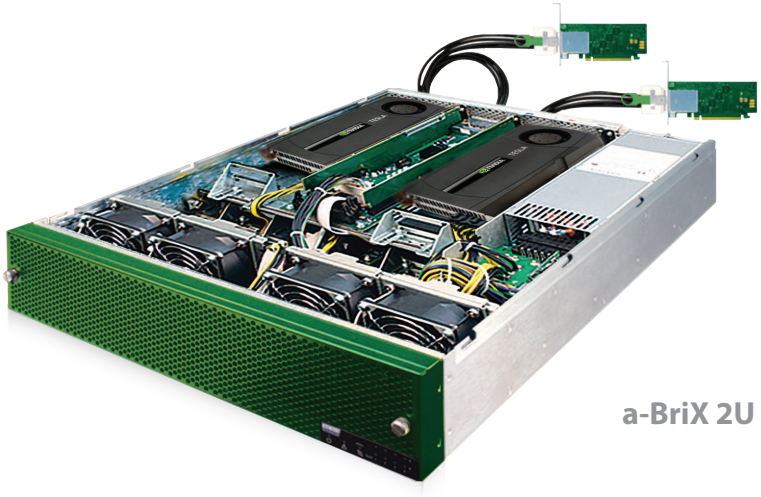
XTREME COMPUTE TECHNOLOGIES

Based on the NVIDIA CUDA™ GPU architecture code named "FERMI," the Xtreme Compute Technologies (XCT) XS2-2050 & 2070 2u Computing Systems are designed from the ground up for High Performance.

The XCT-XS2-2050 & 2070 Compute Systems deliver "must have" features for the technical and enterprise computing space including ECC memory for uncompromised accuracy and scalability, and 7x the double precision performance compared to Tesla 10-series GPU computing products. Compared to typical quad-core CPU's, Tesla 20-series based compute systems deliver equivalent performance at 1/10th the cost and 1/20th the power consumption. Designed with FOUR Fermi based processors in a standard 2u chassis, the XCT-XS2-2050 & 2070 computing systems scale to solve the worlds most important computing challenges - more quickly and accurately. OIL & GAS, SCIENCE, FINANCE AND MORE!



Tesla M2050
Tesla M2070



a-BriX 2U

## Technical Specifications

| | |
|---|---|
| Form Factor | 2U |
| # of Tesla GPUs | 4 |
| Memory Speed | 1.55 GHz GPU |
| Memory Interface | 384-bit GPU |
| Memory Bandwidth | 148 GB/sec |
| DP Floating Point | 2 Tflops (Peak) |
| SP Floating Point | 4 Tflops (Peak) |
| Total Dedicated Memory | |
| 12 GB GDDR5: A-BriX XS2-2050 | |
| 24 GB GDDR5: A-BriX XS2-2070 | |
| System Interface | PCIe x16 Gen2 |
| Software Development Tools | |
| CUDA C/C++ | |
| Fortran, OpenCL, DirectCompute Toolkits | |

| a-BriX Benefits | XCT | NVIDIA/ NextIO Tesla S |
|---|---|---|
| **Flexibility** Mix Tesla or Quadro for optimum application and budget requirements | ✓ | ✗ |
| **Serviceability** Field Serviceable Reduce downtime Peace of mind | ✓ | ✗ |
| **Upgradability** Stay current with future Fermi architecture advances | ✓ | ✗ |
| **3 year Standard On-Site Warranty INCLUDED!** | ✓ | ✗ |
| **Made in USA** | ✓ | ✗ |
| **Data Center Certified** | ✓ | ✓ |

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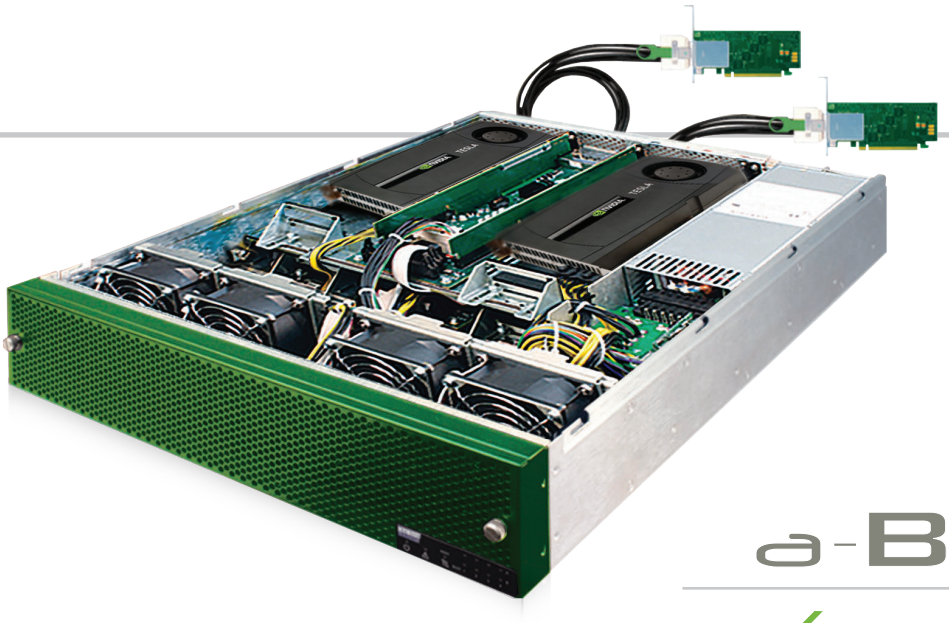
sales@xtremecompute.com



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## Tesla - 2U Specifications

**Enclosure**
Dimensions: 19″w x 3.5″h x 21″d
Removable front bezel with air filter
Front panel LEDs: Power, Fail, Link status
One or two rear panel PCIe x16 cable connectors
Rack ears and rack slides included

**PCIe Expansion Slots**
PCIe 2.0 compliant
Four or Eight PCIe x16 slots (electrical and mechanical)

**Power**
Dual 850W power supplies
Each slot provides 3.3V & 12V plus a 6-pin 12V connector

**System Monitoring**
Monitors 8 temp sensors
Monitors 4 fan tachometers
Monitors 3 voltages +12V, +5V, +3.3V

**Operating Environment**
Temperature Range: Operating: 0˚Cto 50˚C
Storage: -40˚C to +85˚ C
Humidity:
Operating: 10% to 90% relative humidity (non-condensing)
Non-operating: 5% to 95% relative humidity (non-condensing)
Altitude: Operating 0 to 10,000 feet
Storage: 0 to 50,000 feet

**Agency Compliance**
FCC Class A, CE Mark, UL

**Host cable adapter**
One or two PCIe x16 Gen 2 cable adapters
PCIe half-card
Standard and low profile brackets provided

**PCIe x16 cable**
Standard PCIe x16 shielded differential pairs with side band signals
PCIe External Cabling Specification, Rev. 1.0
Cables can be ordered in 1m, 3m, 5m, 7m lengths

**Brackets for I/O cards provided upon request**

**PCIe Over Cable**
The 2U expansion enclosure cables to the host system with one or two PCIe x16 cables. The high-speed cables allow data transfers to and from the hosts simultaneously up to 160Gb/s each way.

**Installation**
The two PCIe x16 Gen 2 cable adapters can be installed in the PCIe x16 slots of the same host system or of two different hosts. No additional software is required for the expansion enclosure to be fully operational.

**System Monitoring**
The internal system monitor surveys system parameters of temperature, fan speed, and power voltages. System status can be easily accessed through an Ethernet port on the rear of the enclosure.

**Power**
Dual 850 watt hot swappable power supplies provide ample power for high-end GPU boards. Additional 12V power is provided by 6-pin cables for each slot.

**Cooling**
Superior cooling is provided across all the boards. A power modulator controls the speed of the fans based on temperature within the chassis.