Rackgo X Big Basin Overview
AI Will Change Everything

QCT can leverage SDK work, combined with frameworks to enter new market verticals
(1) DL (2) Cars (3) VR (4) Gaming (5) Higher Education (6) Design (7) Robot
Rackgo X Big Basin

**Industry First JBOG with NVLink Support**

*Execute Deep Learning Algorithms Like Never Before*

- **Industry First JBOG – Just a Bunch of GPUs**
  - The first ever designed pure GPU enclosure with up to 8 SXM2 modules

- **NVLink Enabled Architecture**
  - High-bandwidth, energy efficient GPU interconnect for ultra fast communication

- **Flexible GPU Topologies for Specific Workloads**
  - Deep Learning SKU: 1x host with 8x SXM2
  - AI Simulation SKU: 2x host with 4x SXM2/each
2x PCIe x8 Expansion slots

4x PCIe x16 Host uplink or downlink Expansion slots

Debug Port v2
Dedicated Mgmt Port
Debug Port v1
Rackgo X Big Basin Top View

IO board
(2) PCIe Gen3 x8 slot

SXM2

FHHL PCIe Gen3 x16 slot
FHHL PCIe Gen3 x16 slot

SXM2

FHHL PCIe Gen3 x16 slot
FHHL PCIe Gen3 x16 slot

SXM2

BMC

PLX

PLX

PLX

PLX
Topology 1

Host 1

- SXM2
- PLX
- PCIe Gen3 x16
- NVLink

PLX PCIe Gen3 x16 connector

Diagram showing the connectivity between Host 1, SXM2, and PLX components.
Topology 2

- Host 1
- SXM2
- PLX
- PCIe Gen3 x16
- PCIe Gen3 x8
- PCIe Gen3 x16 connector
- NVLink
# Rackgo X Big Basin System Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>GPUs</td>
<td>(8) Nvidia Tesla P100</td>
</tr>
<tr>
<td>GPU Memory</td>
<td>128GB HBM2 (8x 16GB)</td>
</tr>
<tr>
<td>Expansion Slot</td>
<td>(4) PCIe gen 3 x16 FHHL slot</td>
</tr>
<tr>
<td></td>
<td>(2) PCIe gen 3 x8 FHHL slot</td>
</tr>
<tr>
<td>Integrated BMC chip</td>
<td>Aspeed AST2500</td>
</tr>
<tr>
<td>Management port</td>
<td>(1) dedicated 1GbE RJ45 mgmt port</td>
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<tr>
<td>Front I/O</td>
<td>(1) Debug port</td>
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<tr>
<td>Form Factor</td>
<td>3 OU (Open Rack) Rackmount</td>
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<tr>
<td>Rack Compatible</td>
<td>Open Rack v.2</td>
</tr>
<tr>
<td>GPU Throughput</td>
<td>FP16: 170 TFLOPs</td>
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<td></td>
<td>FP32: 85 TFLOPs</td>
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<td>FP64: 42.5 TFLOPs</td>
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(8x) P100 Baseboard

--- Highest Density (8) Tesla P100 baseboard
Single Host Topology 1 Block Diagram
Single Host Topology 2 Block Diagram
Take “Deep-Learning” to the Next Level!!

AVAILABLE TODAY

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