OCP SUMMIT

March 20-21
2018
San Jose, CA

OPEN. FOR BUSINESS.

QCT's New Gen Offering For OCP & Olympus

Alan Chang/QCT

OCP U.S. SUMMIT 2018

March 20-21 | San Jose, CA

QCT SPEAKING SESSIONS

QCT's New Gen Offering for OCP and Olympus

Tuesday March 20
12:50pm - 1:05pm

Expo Hall Session / Hall 1

OCP Design for EIA Adoptions

Tuesday March 20
3:45pm - 4:10pm

Executive Track / 210 EF

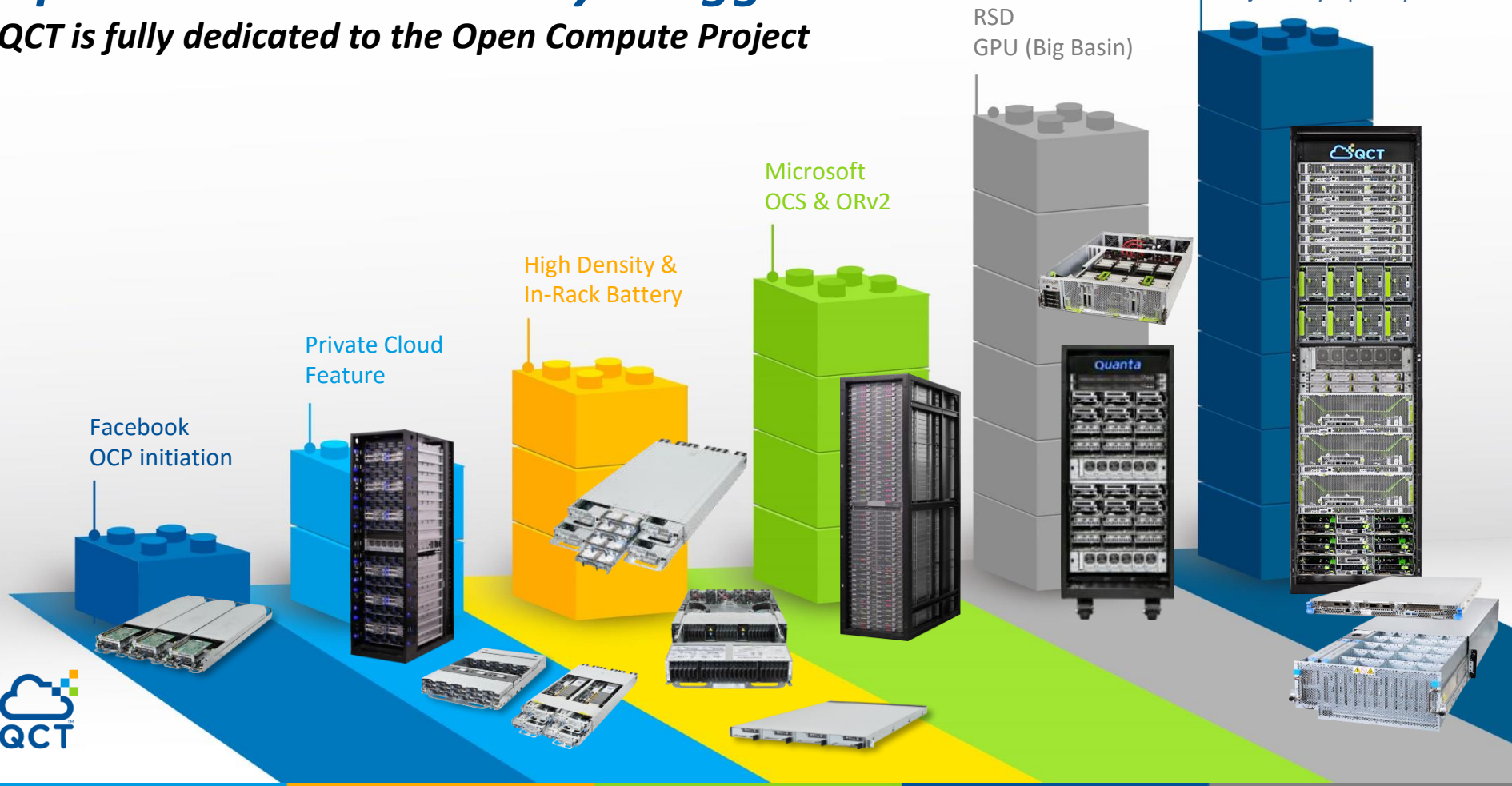
Quanta QCT Project Olympus

Wednesday March 21
9:30am - 10:00am

Engineering Workshop:
New Servers & GPUs / 210 F

Openness is the Industry's Biggest Trend !!

QCT is fully dedicated to the Open Compute Project



Industry Trend – Data Fabric in Cold Aisle

facebook

Open Rack

Microsoft

Olympus

Tencent 腾讯

Alibaba Group

Baidu 百度

Scorpio

QCT™

QCT has the most OCP design Building Blocks deployed by CSPs

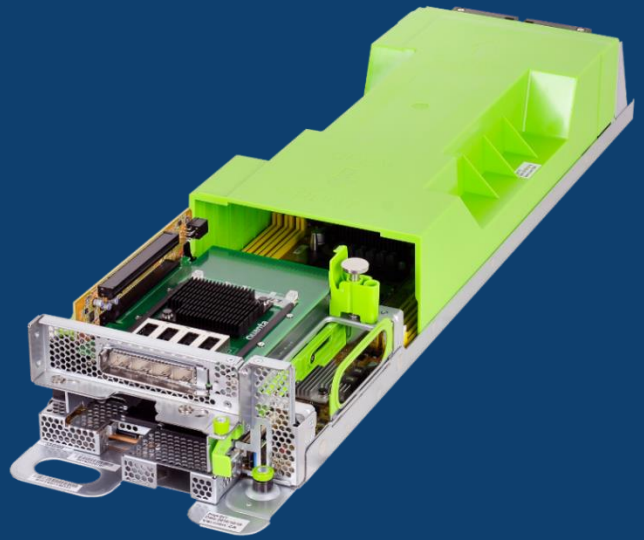
This year, we are adding even MORE to an already rich product line

QCT™

Tioga Pass Overview

OCP Compute Server Refresh

- **Intel Next Generation Platform**
  - Supporting the latest and most powerful Intel®Xeon® Skylake-SP processor family
  - Up to 1.5TB 2666 MHz DDR4 memory
- **Maximize Performance while Reducing Eco-footprint**
  - Eco-Friendly completely Halogen free board and component design
- **Uniform Scale-up and Scale-out Building Block**
  - Scale out on Capacity and Computing
- **High Reliability, Serviceability and Availability**
  - Incredible level of business continuousness
- **Air Cooling thermal design for existing infrastructure**
  - Support up to 165W processor TDP with ambient operating temperature of up to 40°C* to reduce operating costs



40°C* is stretch goal, 35°C is spec

Tioga Pass Chassis Overview

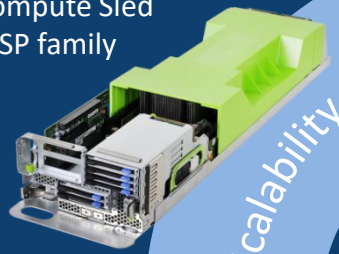
Uniform Modular Design as Previous Generation

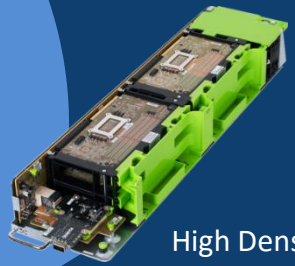
Modular Infrastructure Allows Simplicity and Flexibility

add or remove building blocks as needed

One Infrastructure with Wide Application Coverage

High Performance Compute Sled
Intel®Xeon® Skylake SP family





High Density Compute uServer
Intel®Xeon® D-1500 family

High Capacity All Flash NVMe
(16x per tray)
Intel ® P3520 NVMe
optional Intel ® Xeon-D compute node

Scalability

Flexibility

Compatibility

Yosemite v2

Open Compute Project Microserver

Up to 4 Xeon® D-2100 Family SOC per Sled*

Up to 18 NVMe M.2 per Sled*

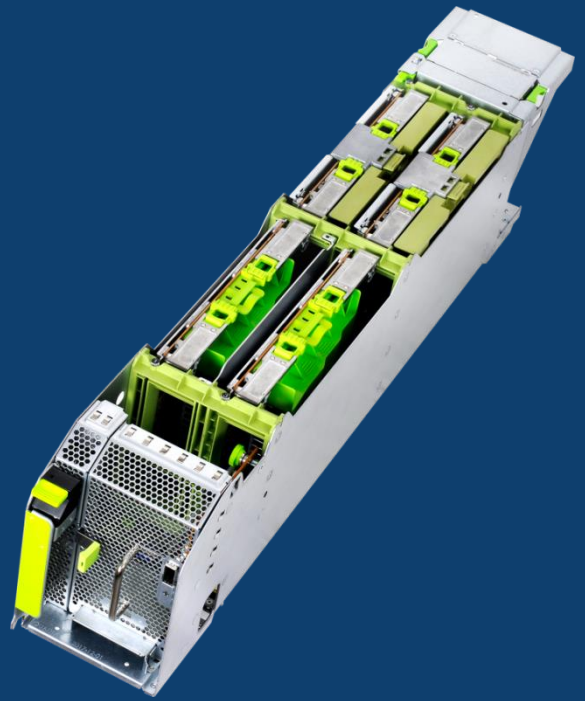
Up to 16 Nodes In 4OU Rackmount

* Depends on module configuration

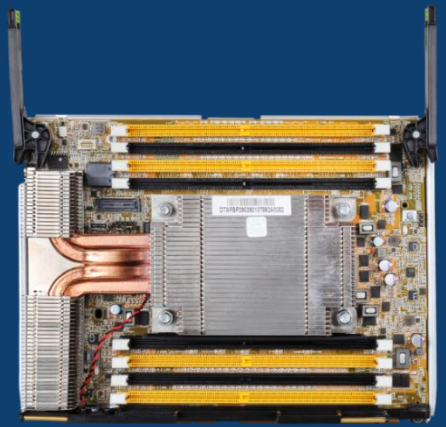
Yosemite v2

Multi-Node, Multi-Sled Microservers

- High-end Performance at Low-end power consumption
  - Supporting the Intel® Xeon® Skylake-D Processor family
  - Up to 128G 2666MHz DDR4 memory
- Glacier Point Module Support
  - (6) M.2 per board for up to 12x NVMe/SATA per sled
- Multi-Host Networking Aggregation
  - SuperNIC supports (4) Node I/O aggregation
- Ultra Dense Chassis Design
  - High density 4OU 4 Sled for total of 16 node high density design



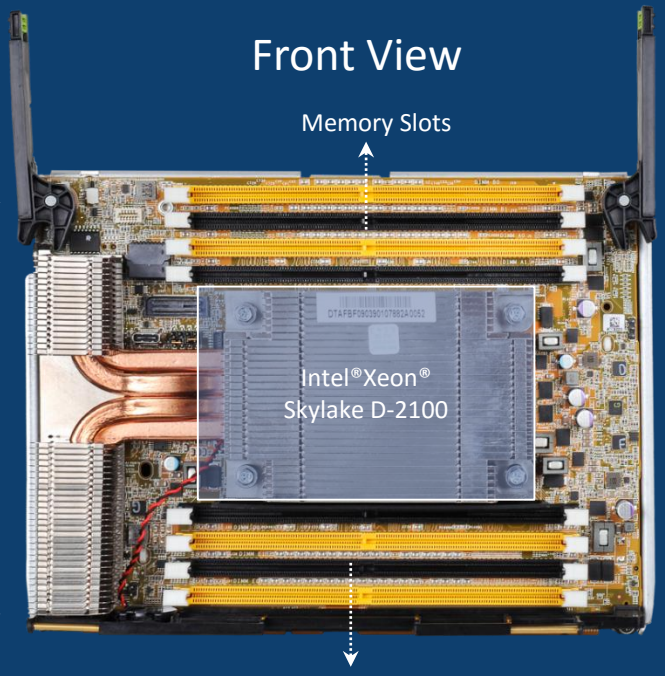
Yosemite v2 Front View



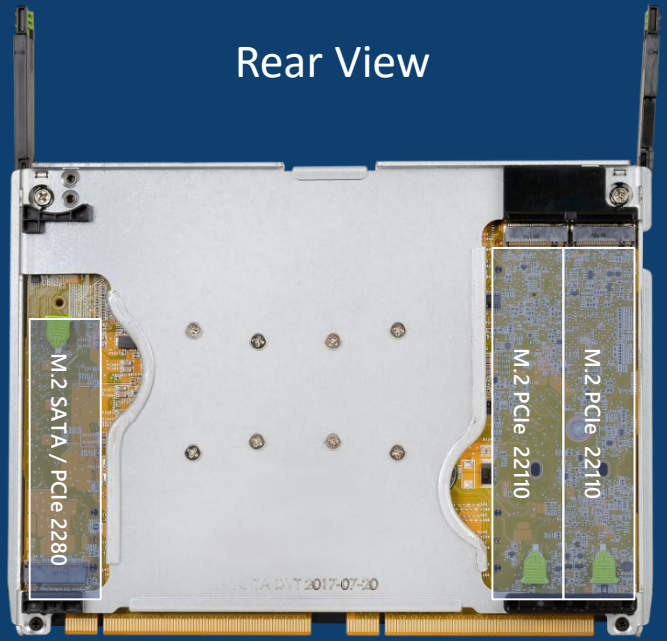
Yosemite v2 Modules

Twin Lakes Motherboard

Front View



Rear View

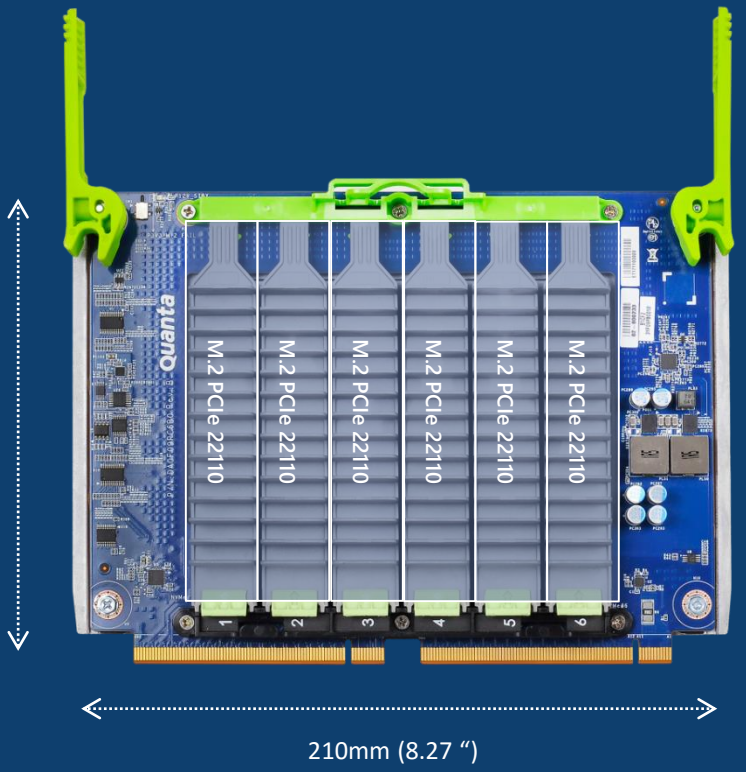


Yosemite v2 Modules

Flexible Workload Modules – Glacier Point

Glacier Point Module:

- Increase cache/storage capacity
- 6x PCIe M.2 SSD* adaptor

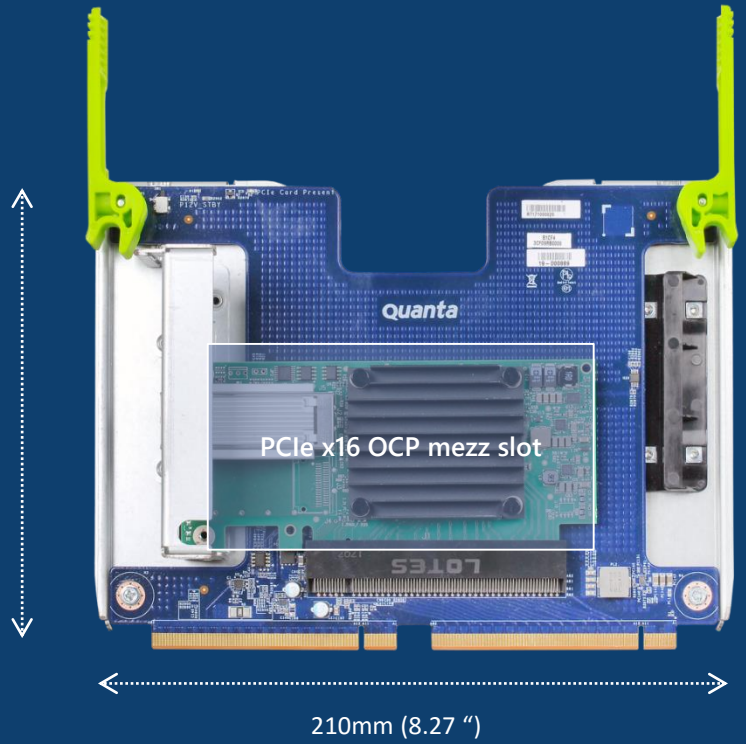


* Replaces a Twin Lake compute module

Yosemite v2 Modules

Flexible Workload Modules – Crane Flat

Crane Flat Module:
Increase network bandwidth
with 100Gb OCP mezzanine *



* Replaces a Twin Lake compute module

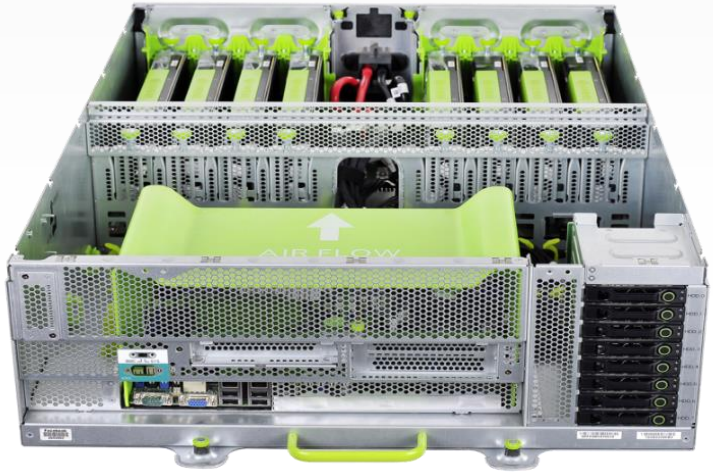
Yosemite v2

CPU: 1x Intel® Xeon Skylake-D 2100 SOC
(up to 105W TDP) per Node
DIMM slots: 8x 2666MHz DDR4 RDIMM per Node
Storage: 1x 2280 SATA/PCIe M.2 per Node
2x 22110 PCIe M.2 per Node
Expansion Modules (up to 2 per sled):
Glacier Point: 6x 22110 PCIe M.2 SSD
Crane Flat: 1x PCIe x16 3.0 OCP Mezzanine NIC

QCT™

intel XEON PLATINUM inside

Big Sur Refresh with Intel® Xeon Scalable Processor Motherboard
Also refreshed with V100 GPU card support



Big Sur

Big Sur Refresh

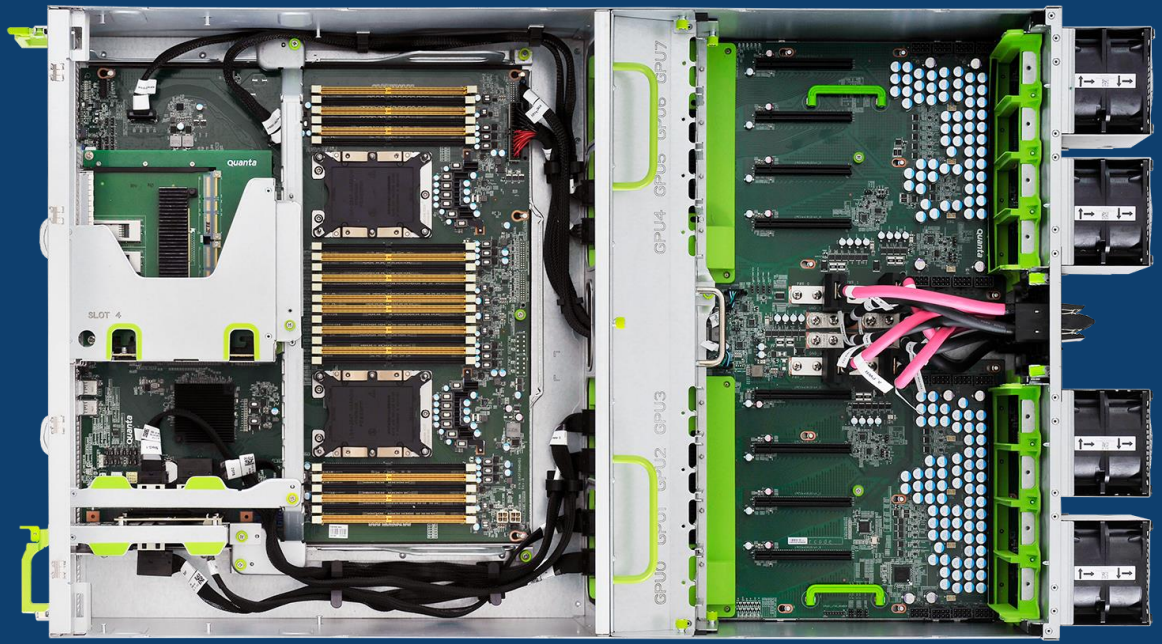
Rackgo X Big Sur Refresh

Open Compute Project GPU server

- Up to 2 Intel® Xeon® Scalable Processor
- Up to 4 onboard PCIe/SATA M.2
- Up to 8 Dual-Width PCIe Gen 4 GPUs
- Up to 24 Memory Modules

Truly Dedicated to OCP Philosophy

- MB will contribute back to community for upgrade
- PCIe Gen4 GPU baseboard PoC



Rackgo X Big Basin with V100 Refresh

Industry First JBOG with NVLink Support

Up to 8 Nvidia Tesla P100/V100-SXM2 modules

Up to 4 PCIe Host uplink/downlink slots

Up to 116 TFLOPs in FP32 throughput

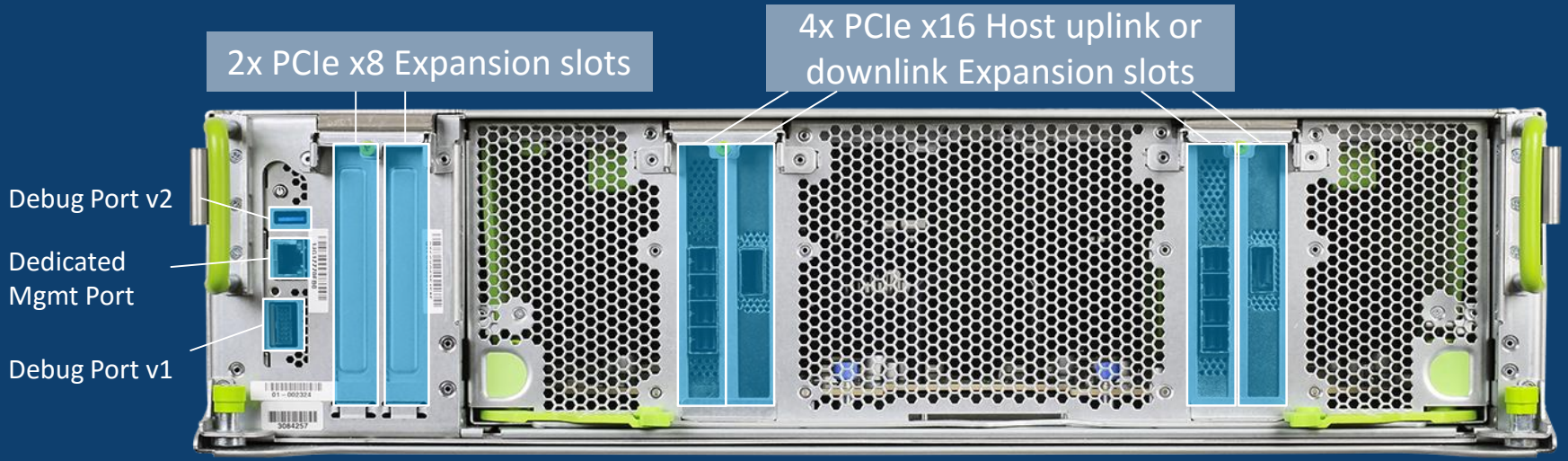
* Refreshed with NVLink 2.0 to support Tesla V100

Rackgo X Big Basin

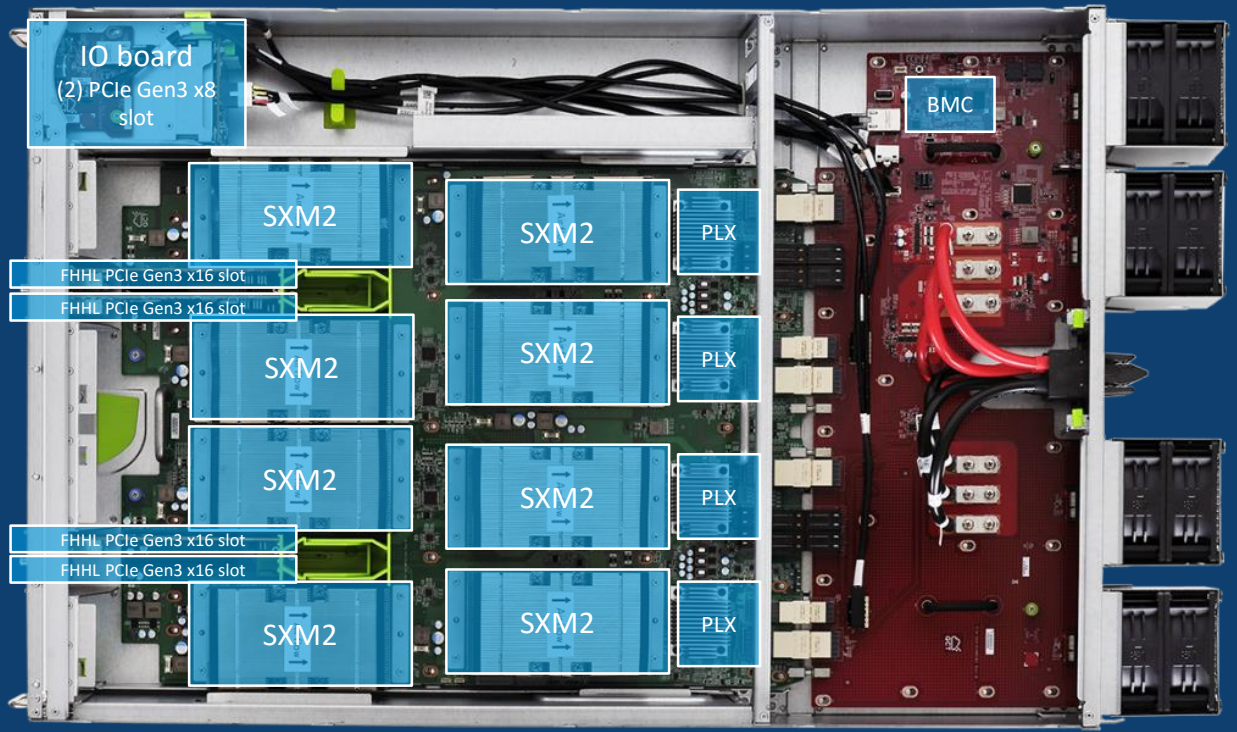
Execute Deep Learning Algorithms Like Never Before

- Industry First JBOG – Just a Bunch of GPUs
  - The first ever pure GPU enclosure design with SXM2 support
  - Host up to 8 Tesla P100/V100-SXM2 via NVLink interconnect
- NVLink Enabled Architecture
  - High-bandwidth, energy-efficient interconnect for ultra-fast communication
- Flexible GPU ratios (8x SXM2) for Specific Workloads
  - Deep Learning SKU : 1x host with 8x SXM2
  - Business Analytics (BA) SKU : 2x host with 4x SXM2 each

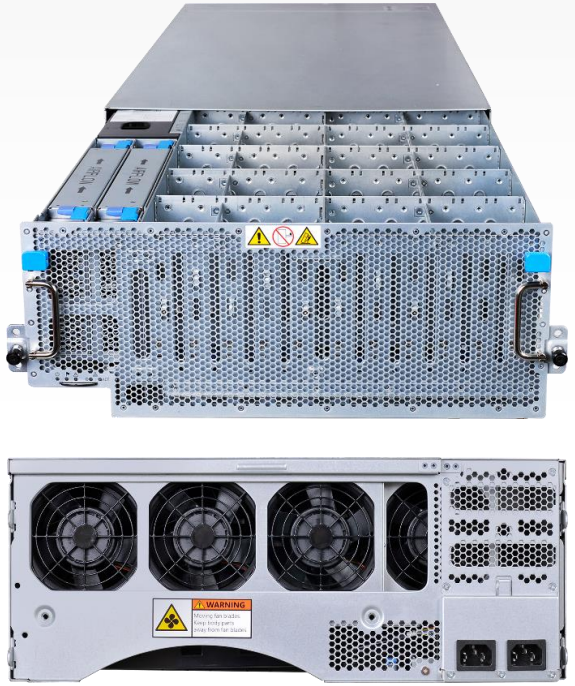
Big Basin Front View



Big Basin Top View



We are also adding Project Olympus DX-88 to our line up.



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