



OPEN
Compute Project



OCP U.S. SUMMIT 2017

Santa Clara, CA



Designing Open Source Hardware to Inspire an Ecosystem

Mark Shaw

Director, Azure Cloud Hardware Infrastructure

OPEN HARDWARE.

OPEN SOFTWARE.

OPEN FUTURE.



PROJECT OLYMPUS – OPEN SOURCE HARDWARE

Next-gen Cloud Hardware

Open sourcing
leading edge
Hyperscale cloud
hardware currently
under development
at Microsoft

Development Model

New collaboration
model with OCP
community –
co-develop open
hardware at cloud
speed

Industry Ecosystem

Bootstrap a vibrant
ecosystem in OCP for
the next generation
of datacenter
hardware

https://github.com/opencomputeproject/Project_Olympus



PROJECT OLYMPUS BASE

PROJECT OLYMPUS BASE ECOSYSTEM

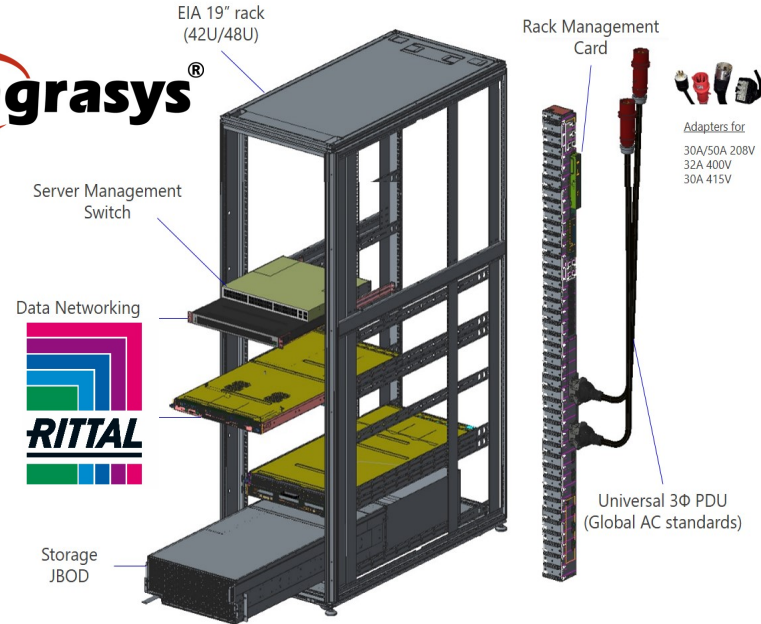
wiwynn®



flex



ingrasys®



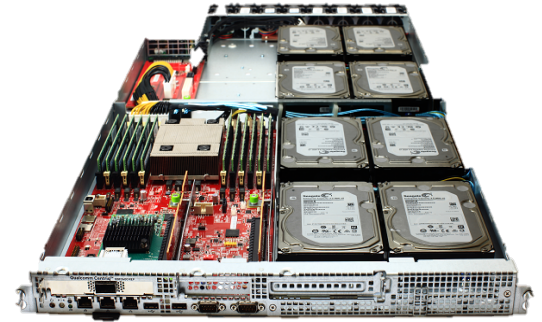
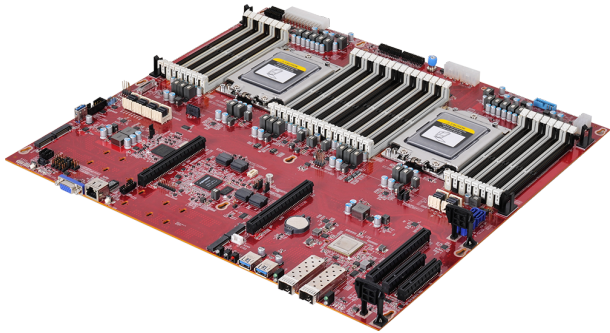
NEW MOTHERBOARDS

DROP IN OR ADAPT TO PROJECT OLYMPUS SERVER CHASSIS

AMD

CAVIUM **Inventec**

QUALCOMM

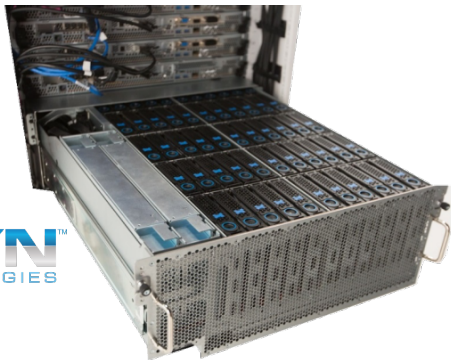


STORAGE MODULES

HIGH DENSITY HDD, HIGH PERFORMANCE FLASH

- 88 HDDs
- 1.2+ PB

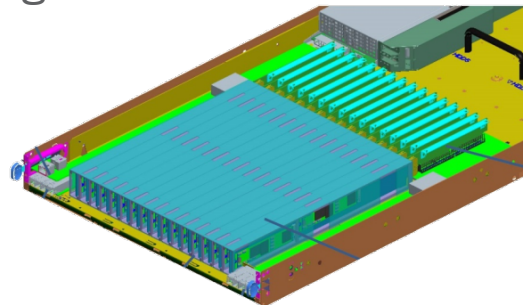
Quanta



ARTESYN
EMBEDDED TECHNOLOGIES

- 64 NVME M.2
- 64 – 256 TB
- 16 Hot-Plug M.2 Carriers

Partner
soon to be
announced



ARTIFICIAL INTELLIGENCE CLOUD COMPUTING

PROJECT OLYMPUS HYPERSCALE GPU ACCELERATOR – HGX-1



Pascal P100 with NVLINK



Pascal P100 with PCIe

UNIVERSAL POWER

UNIVERSAL PDU TECHNOLOGY MOVING INTO THE ENTERPRISE



HOW TO DOWNLOAD

COMMUNITY PARTICIPATION

https://github.com/opencomputeproject/Project_Olympus

 [LICENSE.md](#)

 [Project_Olympus_Universal_PDU.pdf](#)

 [Project_Olympus_2U_Server_Mechanical.pdf](#)

 [Project_Olympus_Chassis_Mechanical.pdf](#)

 [Project_Olympus_Rack_Manager.pdf](#)

 [Project_Olympus_Server_Mechanical.pdf](#)

 [Project_Olympus_StandAlone_Rack_Manager.pdf](#)

 [Project_Olympus_Universal_Motherboard.pdf](#)

 [Project_Olympus_Universal_Power_Cord.pdf](#)

 [Project_Olympus_Universal_Power_Monitoring_Distribution_Unit.pdf](#)

 [README.md](#)

RECOMMENDED SESSIONS

Day	Time	Title	Presenter	Session Type
Weds, March 8 th	12:30pm	Designing Open Source Hardware to Inspire an Ecosystem	Mark Shaw	Expo Hall Theatre

Weds, March 8 th	2:35pm	Enabling Cloud Workloads Through Innovations in Silicon	Leendert van Doorn	Executive Track
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Day	Time	Title	Presenter	Session Type
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Thurs, March 9 th	9:00am	Microsoft Project Olympus Overview	Mark Shaw Siamak Tavallaei	Workshop
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Thurs, March 9 th	10:00am	Microsoft Project Olympus Servers	Mark A. Shaw	Workshop
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Thurs, March 9 th	11:00am	Microsoft Project Olympus High Density Flash	Mark A. Shaw	Workshop
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Thurs, March 9 th	11:30am	Microsoft Project Olympus Storage JBOD	Bruce Hoch	Workshop
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Thurs, March 9 th	1:00pm	Microsoft Project Olympus GPU Expansion	Siamak Tavallaei	Workshop
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