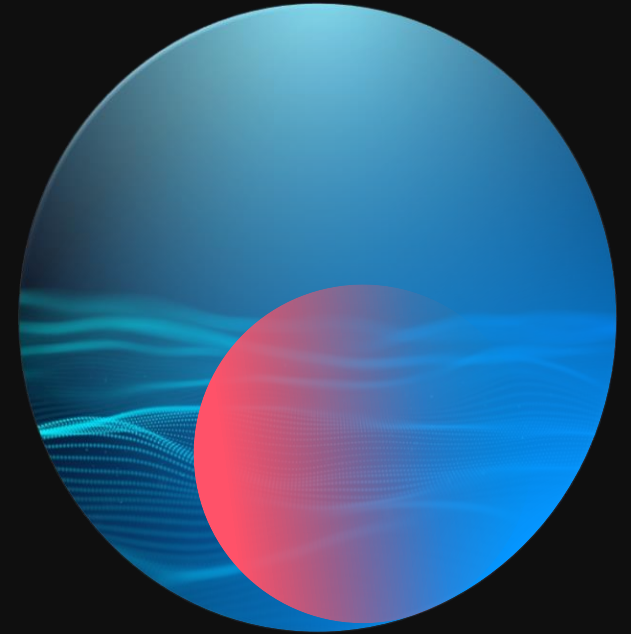# PCCC21

To Exascale ... and beyond

Jean-Pierre Panziera
CTO HPC @ Atos
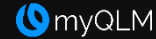
Atos European HPC leader
2021 Highlights

Consolidation our Worldwide presence

With new projects in

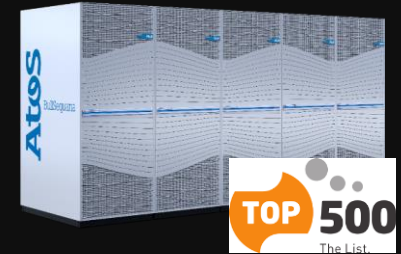Europe, Latin America, India, Africa +

Korea, KSA, Columbia, Brazil

Towards Hybridation

Nimbix acquisition

HPC cloud SW

Unique IP

Partnerships to prepare the future

IQM, Pascal

Megazone, Graphcore

AMD, Intel, Nvidia, SiPearl

DDN, VAST Data

Google, OVH

+15 systems ranked since 1yr

CEA entry with BXI V2

DKRZ

EuroHPC installations

PCCC21

AtoS

On the road to Exascale

Strategy & New technologies

BullSequana XH2000

Highly Integrated DLC HPC/AI Platform

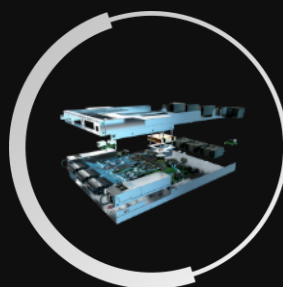Processors, Accelerators

High-Speed Interconnect

Atos QLM

Atos Quantum Learning Machine

Be prepared for the next computing challenges

BXI

Bull Exascale Interconnect

Targeting high scalability and reliability for exascale

BullSequana Xstor
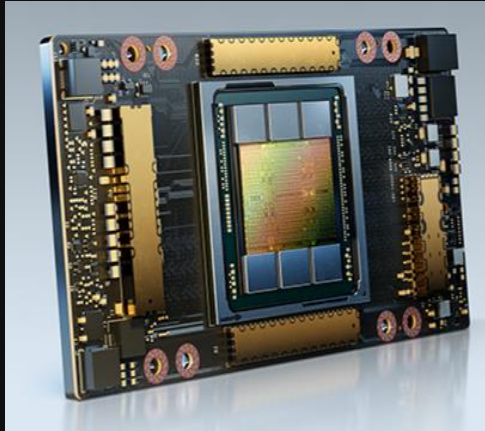
Storage Appliance

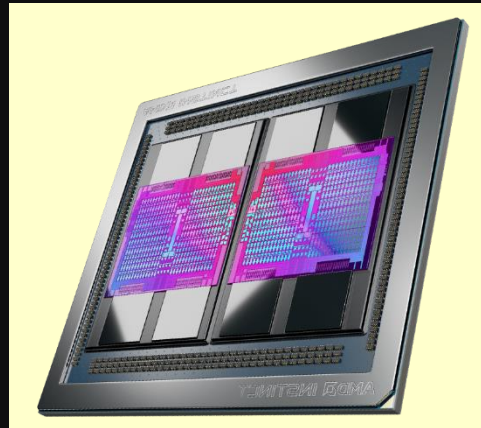Family of modular storage appliance

Atos Smart Management Suites

Energy, Resources, Cluster, Applications
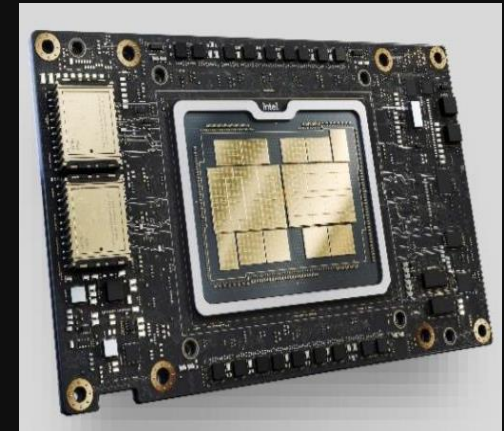
AtoS

Accelerators – Heterogeneous Computing
Exascale is prime time for GPUs

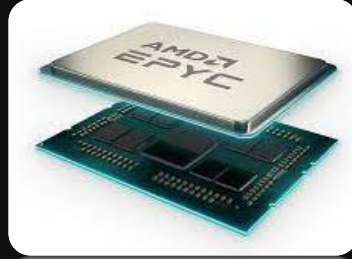Nvidia A100 (JSC #8)

AMD MI 200

Intel Xe (PVC)

… and new technologies: FPGAs, neuromorphic … and quantum computing

PCCC21

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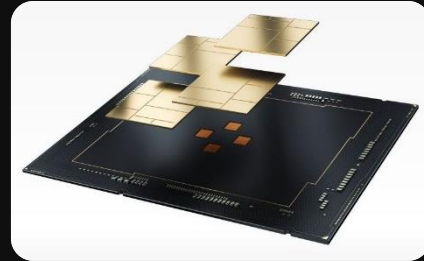# Exascale still needs CPUs
... and many of them

Exa1 is CEA new HPC system
- #14 in the Top500 list
- 12,960 AMD "Milan" CPUs

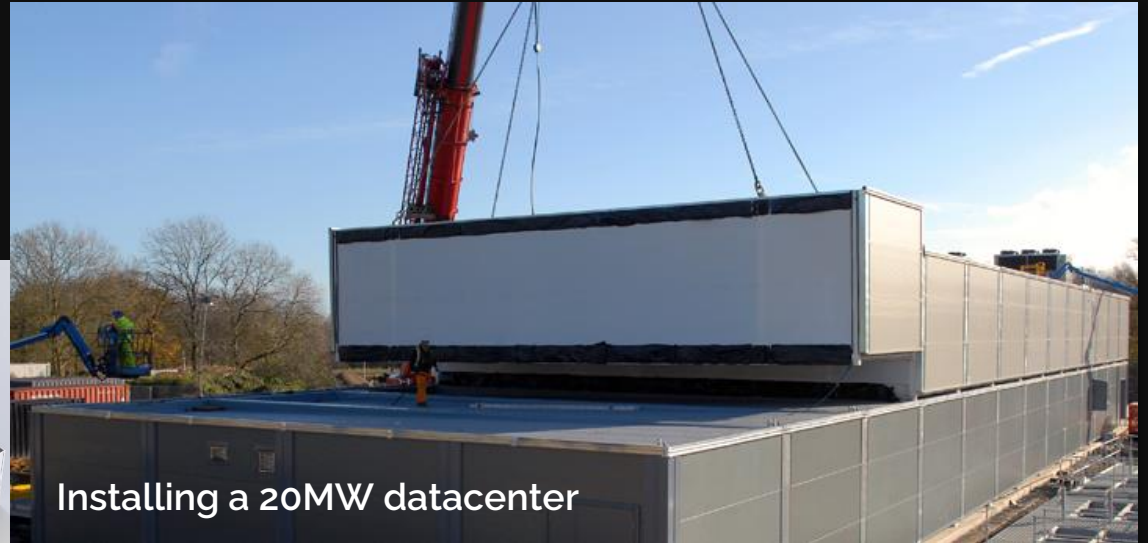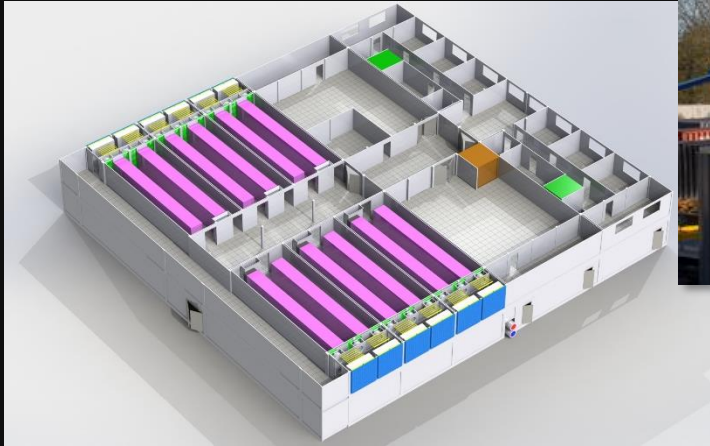More CPUs coming soon to support exascale HPC applications:
- Intel Sapphire Rapids (with HBM option)
- AMD next generation CPU "Genoa"
- SiPearl Rhea
- ...
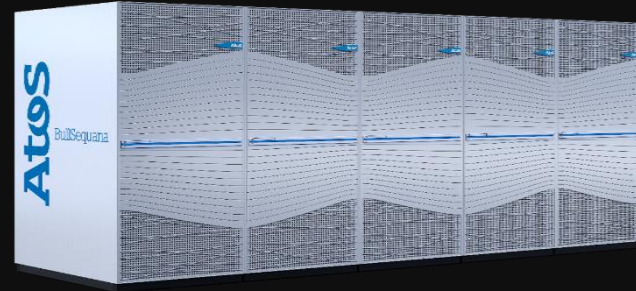
Atos

Exascale Modular DataCenter
Grow as you need your infrastructure

- Reduced costs
- Fast delivery (months vs years)

Installing a 20MW datacenter

Atos

Our next missions

Keep design innovative, energy efficient **on-premise and cloud based** solutions for HPC AI Quantum customers

Expand Hybridation further, unlashing applications workflows

Decarbonization ambition
Reach "net-zero" by 2028

AtoS

Thank you!

https://atos.net/en/solutions/high-performance-computing-hpc

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