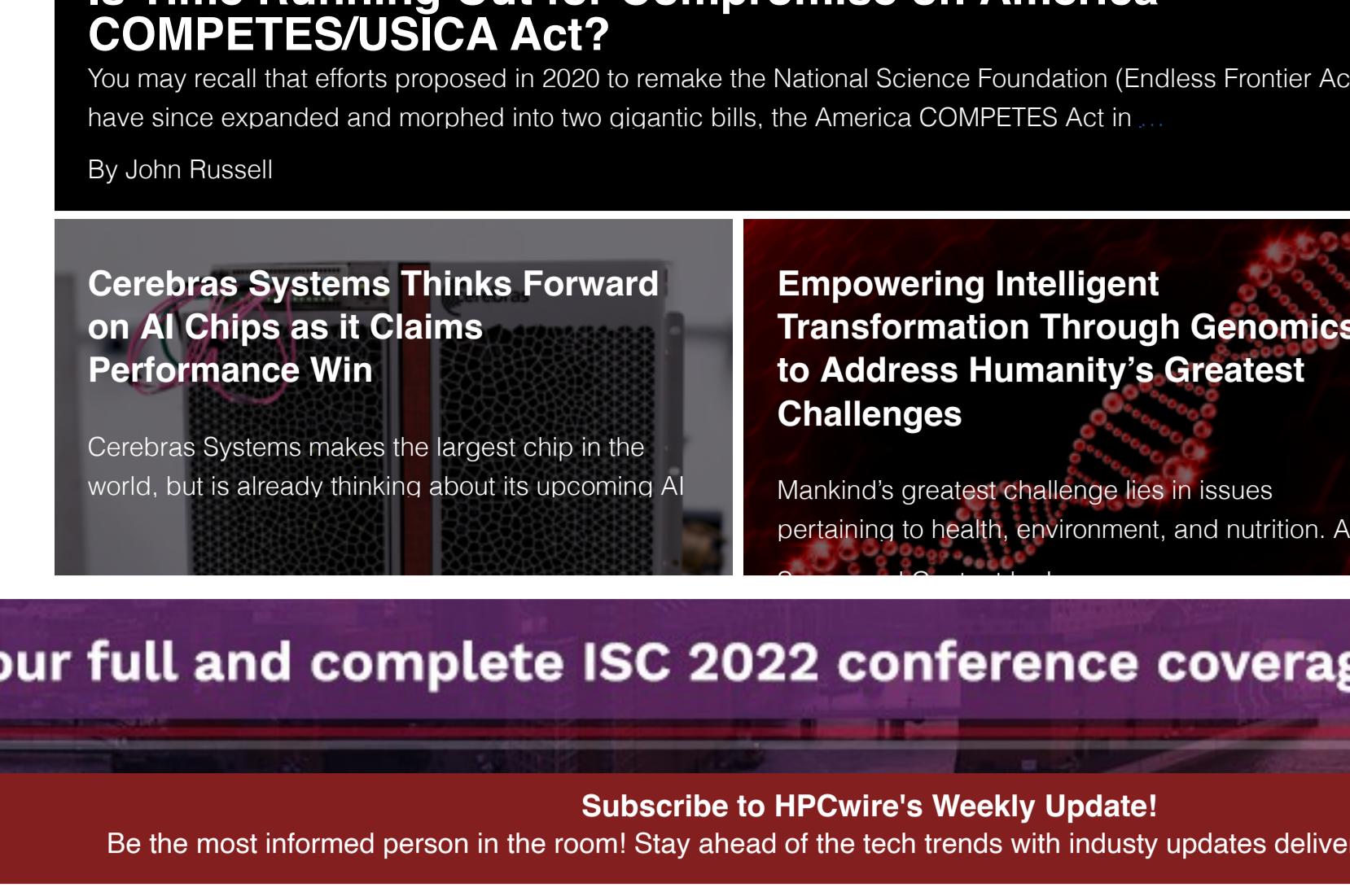
**AMD's MI300 APUs to Power Exascale El Capitan Supercomputer**

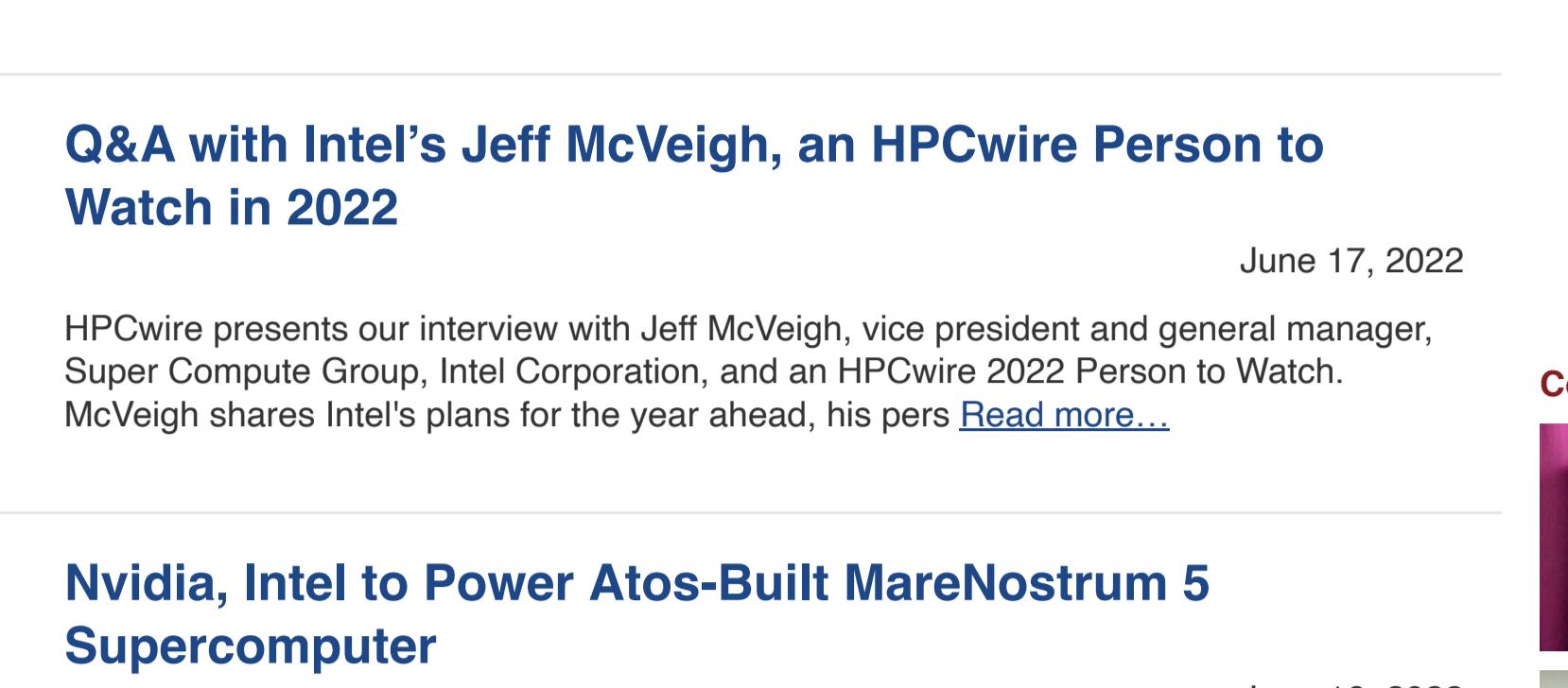
Additional details of the architecture of the exascale El Capitan supercomputer were disclosed today by Lawrence Livermore National Laboratory's (LLNL) Terri Quinn in a presentation delivered at the ISC 2022 conference.

By Tiffany Trader

**Is Time Running Out for Compromise on America COMPETES/USICA Act?**

You may recall that efforts proposed in 2020 to remake the National Science Foundation (Endless Frontier Act) have since expanded and morphed into two gigantic bills, the America COMPETES Act in...

By John Russell

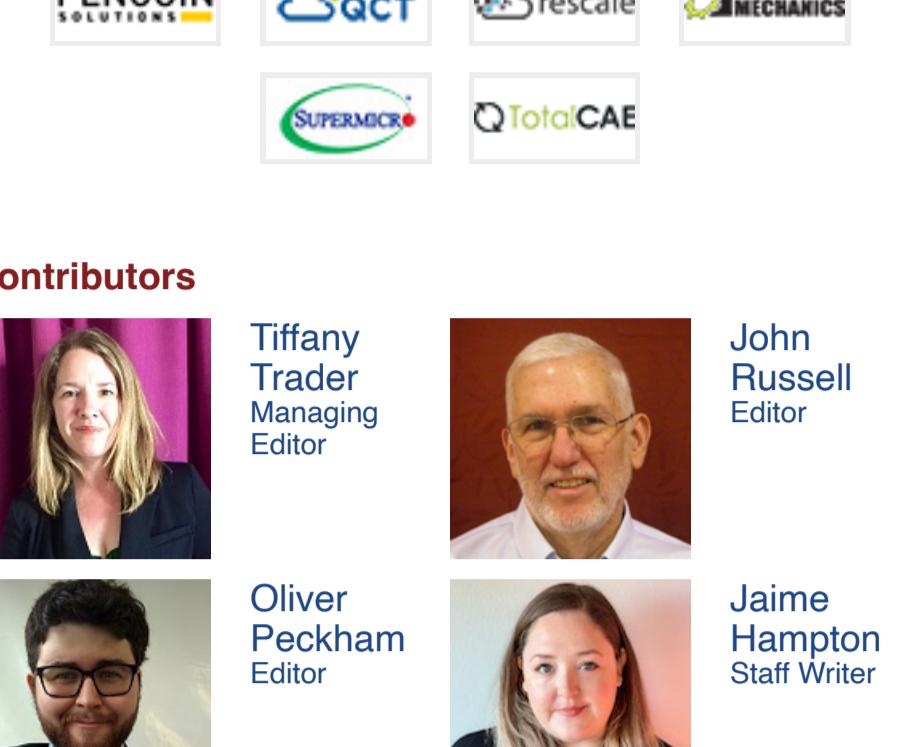
**Cerebras Systems Thinks Forward on AI Chips as It Claims Performance Win**

Cerebras Systems makes the largest chip in the world, but is already thinking about its upcoming AI

Empowering Intelligent Transformation Through Genomics to Address Humanity's Greatest Challenges

Mankind's greatest challenge lies in issues pertaining to health, environment, and nutrition. All

- Off The Wire** **Breaking News**
- June 27, 2022
 - NSF Research Traineeship Program Expands To Include 43 States
 - HPE GreenLake Adds Red Hat to Expanding Ecosystem
 - Kalray's K200-LP Now Integrated into Piximeda's Storage Solution Pixstor
 - Quantum Network Between Two National Labs Achieves Record Sync
 - Accenture Announces Intent to Acquire XtremeEDA
 - Rigetti Computing to Join Russell 3000 Index
 - NTT Research Names Brent Waters as CIS Lab Director
 - BSC and FC Barcelona Present IoT Twins Project
 - June 24, 2022
 - TSMC Japan 3DIC R&D Center Completes Clean Room Construction in AIST Tsukuba Center
 - Women in HPC to Host ISC 22 Re-Cap Webinar on July 12th
 - ITRI Partners with Industry and Academia in Magnetic Memory Technology
 - Ansys Multiphysics Solutions Achieve Certification for TSMC's N3E and N4P.
 - Offices Open in Germany, Australia, and Mexico



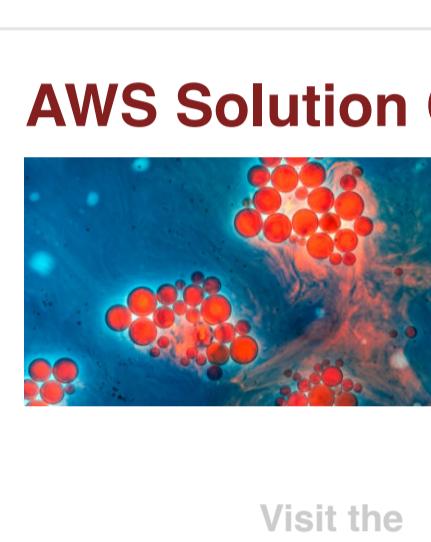
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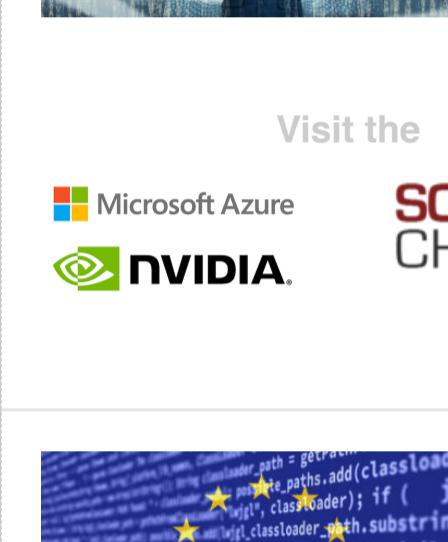
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**IDC Perspective on Integration of Quantum Computing and HPC**

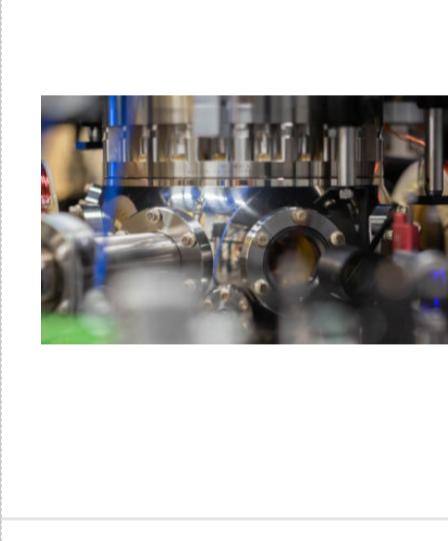
June 20, 2022

The insatiable need to compress time to insights from massive and complex datasets is fueling the demand for quantum computing integration into high performance computing (HPC) environments. Such an integration would allow enterprises to accelerate and optimize current HPC applications and processes by simulating and emulating them on today's noisy... [Read more...](#)

**Q&A with Intel's Jeff McVeigh, an HPCwire Person to Watch in 2022**

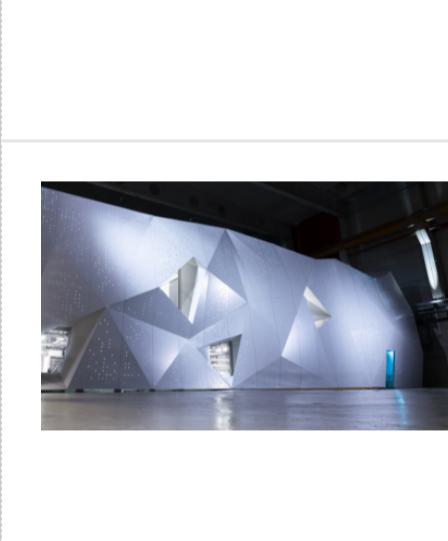
June 17, 2022

HPCwire presents our interview with Jeff McVeigh, vice president and general manager, Super Compute Group, Intel Corporation, and an HPCwire 2022 Person to Watch. McVeigh shares Intel's plans for the year ahead, his pers... [Read more...](#)

**Nvidia, Intel to Power Atos-Built MareNostrum 5 Supercomputer**

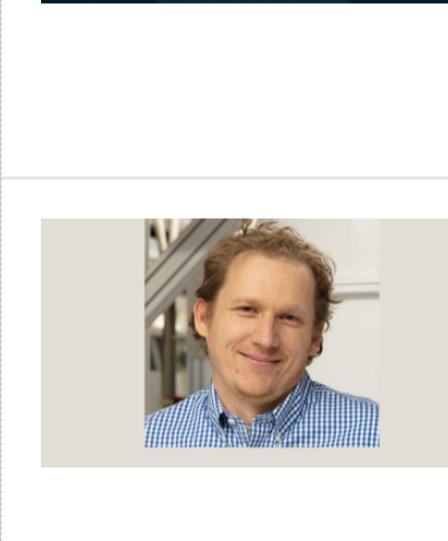
June 16, 2022

The long-troubled, hotly anticipated MareNostrum 5 supercomputer finally has a vendor: Atos, which will be supplying a system that includes both Nvidia and Intel CPUs and GPUs across multiple partitions. The newly reimag... [Read more...](#)

**D-Wave Debuts Advantage2 Prototype; Seeks User Exploration and Feedback**

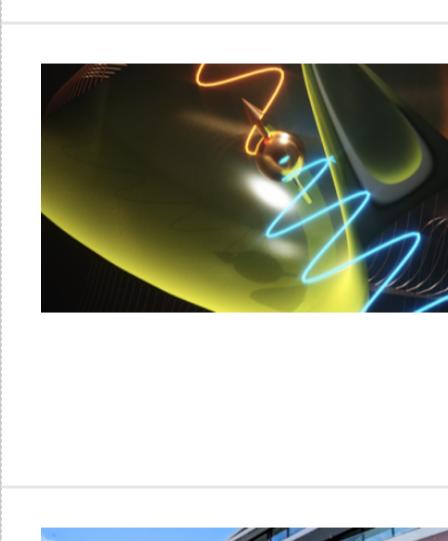
June 16, 2022

Starting today, D-Wave Systems is providing access to a 500-plus-qubit prototype of its forthcoming 7000-qubit Advantage2 quantum annealing computer, which is due in the 2023/24 timeframe. The prototype showcases Advanta... [Read more...](#)

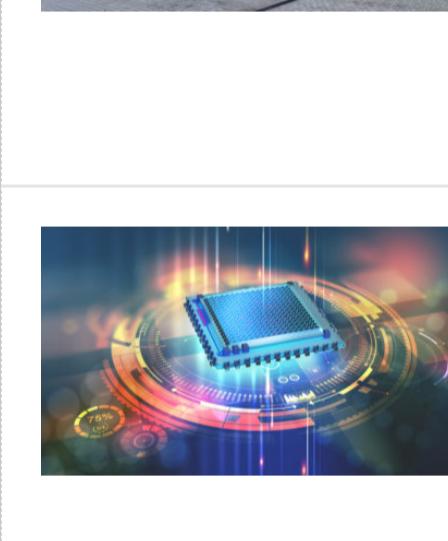
**AMD Opens Up Chip Design to the Outside for Custom Future**

June 15, 2022

AMD is getting personal with chips as it sets sail to make products more to the liking of its customers. The chipmaker detailed a modular chip future in which customers can mix and match non-AMD processors in a custom chip package. "We are focused on making it easier to implement chips with more flexibility," said Mark Papermaster, chief technology officer at AMD during the analyst day meeting late last week. [Read more...](#)

**Individumed Boosts Cancer Research With Powerful Analytics Built on AWS**

Hamburg-based Individumed specializes in using the highest quality biospecimen and comprehensive clinical data to advance research and development in precision oncology. Its IndiviType discovery solution uses AWS to store data and support analysis to decipher the complexity of cancer. [Read more...](#)

**Microsoft/NVIDIA Solution Channel****Using Cloud-Based, GPU-Accelerated AI to Track Identity Fraud**

Consumers use many accounts for financial transactions, ordering products, and social media—a customer's identity can be stolen using any of these accounts. Identity fraud can happen when setting up or using financial accounts, but it can also occur with communications such as audio, images, and chats. [Read more...](#)

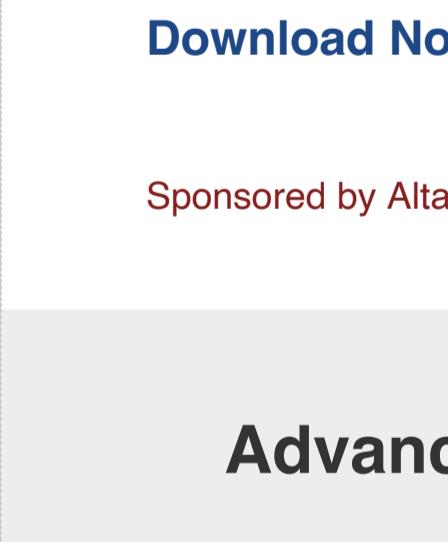
Previous:

- Bayesian ML Models at Scale with AWS Batch
- Running cost-effective GROMACS simulations using Amazon EC2 Spot Instances with AWS ParallelCluster
- Introducing the Spack Rolling Binary Cache hosted on AWS

**EuroHPC Announces First Exascale Supercomputer and Four Other Systems**

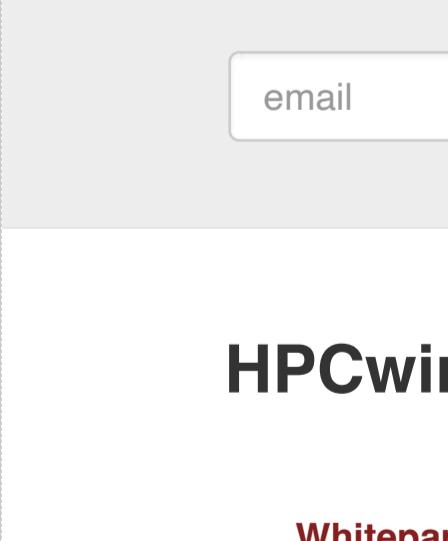
June 15, 2022

Just a couple of weeks ago, EuroHPC Executive Director Anders Jensen told HPCwire that there would be big news coming out of the meeting of EuroHPC's governing board in Kajaani, Finland yesterday. He wasn't joking: today, the EuroHPC Joint Undertaking announced the first details of its first exascale system and also announced host sites and names for four additional... [Read more...](#)

**Quantinuum Debuts 20-Qubit H1-1 System; JPMorgan Chase Showcases its Strength**

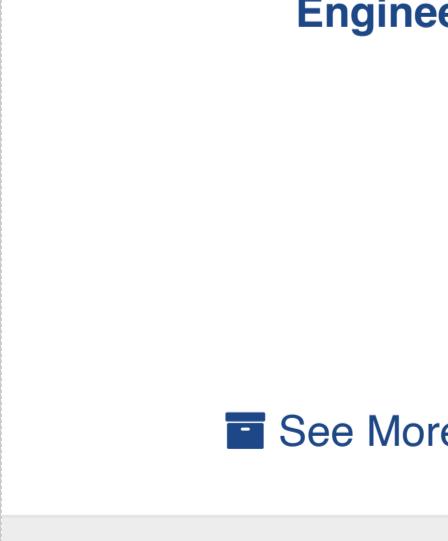
June 14, 2022

Quantinuum today announced a significant upgrade to its ion trap quantum computer, H1-1, which now has 20 qubits – up from 12 qubits – and features all-to-all connectivity. At the same time, researchers from JPMorgan [Read more...](#)

**NSF Issues DCL on Supplemental Funding Access to Cloud-based Quantum Computing**

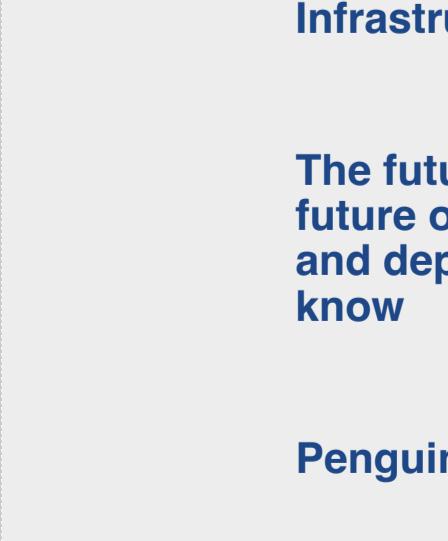
June 13, 2022

Looking for more access to quantum computing resources? The National Sciences Foundation (NSF) recently reiterated its support for supplemental funding for access to cloud-based quantum computing resources via Amazon, IBM, and Microsoft. The latest Dear Colleague Letter (DCL) on the topic is very similar to one issued in 2020, which initiated the program. Reprinted below... [Read more...](#)

**As LUMI Launches, a Look at the State of EuroHPC**

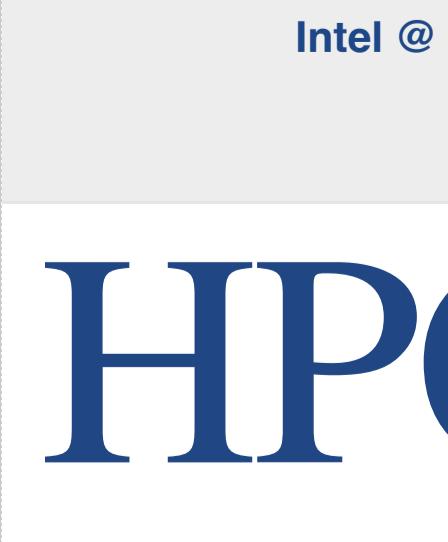
June 13, 2022

Today, the LUMI pre-exascale supercomputer was inaugurated in Kajaani, Finland. LUMI—which currently weighs in around 152 terapetaflops, but is expected to soon exceed 375—represents the largest success thus far of the EuroHPC Joint Undertaking, Europe's concerted supercomputing play. LUMI marks the beginning of the end for the first phase of EuroHPC, but the... [Read more...](#)

**AMD Lines Up Alternate Chips as It Eyes a 'Post-exaflops' Future**

June 10, 2022

Close to a decade ago, AMD was in turmoil. The company was playing second fiddle to Intel in PCs and datacenters, and its road to profitability hinged mostly on its chips appearing in Microsoft's Xbox One and Sony's Play... [Read more...](#)

**Q&A with IBM Quantum's Jay Gambetta, an HPCwire Person to Watch in 2022**

June 9, 2022

HPCwire presents our interview with Jay Gambetta, IBM Fellow and VP, Quantum, and an HPCwire 2022 Person to Watch. Few companies have tackled as many parts of the complicated quantum computing landscape as IBM. From hard... [Read more...](#)

**Start-up Agnostiq Tackles HPC-Quantum Workflow Development**

June 9, 2022

Imagine some years hence the HPC landscape, already confusing in its heterogeneity, also includes quantum computing resources. How does a user choose from among those resources the best workflow and computing engines for... [Read more...](#)

**Newly-Observed Higgs Mode Holds Promise in Quantum Computing**

June 8, 2022

The first-ever appearance of a previously undetectable quantum excitation known as the axial Higgs mode – exciting in its own right – also holds promise for developing and manipulating higher temperature quantum materials... [Read more...](#)

At ISC, the Green500 Witnesses a New Frontier in Efficient Computing

June 8, 2022

Back in 2008, the U.S. Defense Advanced Research Projects Agency (DARPA) set an ambitious target: an exascale supercomputer in a 20-megawatt envelope. That target, once viewed by many with skepticism—research at the ti... [Read more...](#)

Quantum Computers Emerging as Accelerators in HPC, Like GPUs

June 7, 2022

As quantum computing comes closer to mainstream, it's universally agreed that these systems won't replace classical computing. That raises the question: where exactly do quantum computers fit in computing infrastructures... [Read more...](#)

Covid Policies at HPC Conferences Should Reflect HPC Research

June 6, 2022

Supercomputing has been indispensable throughout the Covid-19 pandemic, from modeling the virus and its spread to designing vaccines and therapeutics. But, despite supercomputers' formative role in our understanding of... [Read more...](#)

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Whitepaper**5 HPC Optimization Techniques**

For many organizations, decisions about whether to run HPC workloads in the cloud or in on-premises datacenters are less encompassing and more about leveraging both infrastructures strategically to optimize HPC workloads across hybrid environments. From multi-clouds to on-premises, dark, edge, and point of presence (PoP) datacenters, data come from all directions and in all forms while HPC workloads run in every dimension of modern datacenter schemes. HPC has become multi-dimensional and must be managed as such.

This white paper explores several of these new strategies and tools for optimizing HPC workloads across all dimensions to achieve breakthrough results in Microsoft Azure.

**Delivering Superior Electromagnetic Simulations with Altair® Feko® and Third-Generation AMD EPYC™ Processors**

The Forrester Wave™: AI Infrastructure, Q4 2021 - The 13 Providers That Matter Most And How They Stack Up

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QCT POD Modern Converged Platform for HPC/AI Workloads

Streamline Precision Medicine Workloads with QCT POD for Medical

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A Purpose-built HPC/AI Solution for Higher Education and Research

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