



HYPERION RESEARCH

SC23 Update Conclusions

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Overall Conclusions

- **2023 is expected to be a healthy growth year**
 - The first half of 2023 grew at 9.5%
 - Generative AI & LLMs are major growth drivers
 - Exascale systems will help drive growth in 2023-2025
 - GPUs, cloud, & other AI/ML/DL are high growth areas
- **New technologies are showing large numbers:**
 - Processors, AI hardware & software, memories, new storage approaches, Quantum, etc.
 - Composability may fit well in certain applications
- **The cloud has become a viable option for many HPC workloads**
- **Storage will likely see major growth driven by AI, big data and the need for much larger data sets**
- **There are still concerns about the supply chain and growing concerns around power/sustainability & talent**

Conclusions: Questions That We Are Exploring

- **How will new and aggressive computational demands for AI alter the overall HPC hardware and software market landscape?**
 - Where will LLMs have the greatest impact over the next few years?
- **Is this the year the quantum computing becomes a self-sustaining industry sector?**
 - What will be the QC use cases that attract the most end use attention?
- **How are the growing capabilities of HPC in the cloud changing the overall HPC sector?**
 - What are the key opportunities and challenges in operating an efficient effective hybrid on-prem/cloud environment?
 - When will the next tipping point happen in the use of clouds for HPC & AI?
- **What will be the path for post-exascale system evolution, and how will it impact mainstream HPC design and end use?**
- **What new or emerging technologies will drive future HPC & AI performance, power and/or sustainability gains?**
 - Composable computing? Optical I/O? New CPUs & accelerators? Cooling and/or packaging advances?

Thank You For Joining Us Today!

We Welcome Questions, Comments And Suggestions

You can contact us at:
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