

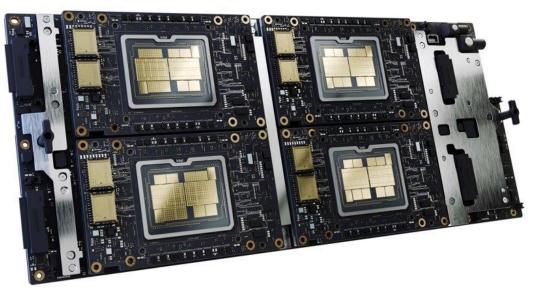
Update from Cambridge

RSEcon 2023 HPC BoF Session

Cambridge Open Zettascale Lab – Chris Edsall - @hpcchris@scholar.social

Out with the old, in with the new

- Intel Skylake -> 0
- Intel Icelake 544 -> 700
- Intel Sapphire Rapids 0 -> 110
- Intel PVC 0 -> 4
 - 2x Intel
 - 2x Dell PowerEdge XE9640
- Nvidia A100 80 -> 90
- Nvidia L40 0 -> 10





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CAMBRIDGE OPEN

ETTASCALE LA

Energy Efficient HPC

- Follows on from static power management on GPUs (work from Athena Elafrou on Nvidia A100s presented at GTC 21)
- Dynamic power management on CPUs (Intel Icelake)
 - GeoPM
 - Work in progress from Matt Walker (DiRAC placement student)
 - SPEChpc 2021 workload
 - Stalled during Summer 2023
- Revive with DiRAC work from Tom Meltzer (now at Cambridge) and new placement student
- Observability platform (work from Dominic Friend)

Energy-Efficient Computing

Zettascale systems require an extremely large volume of computing, networking and storage devices. Together these consume vast



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