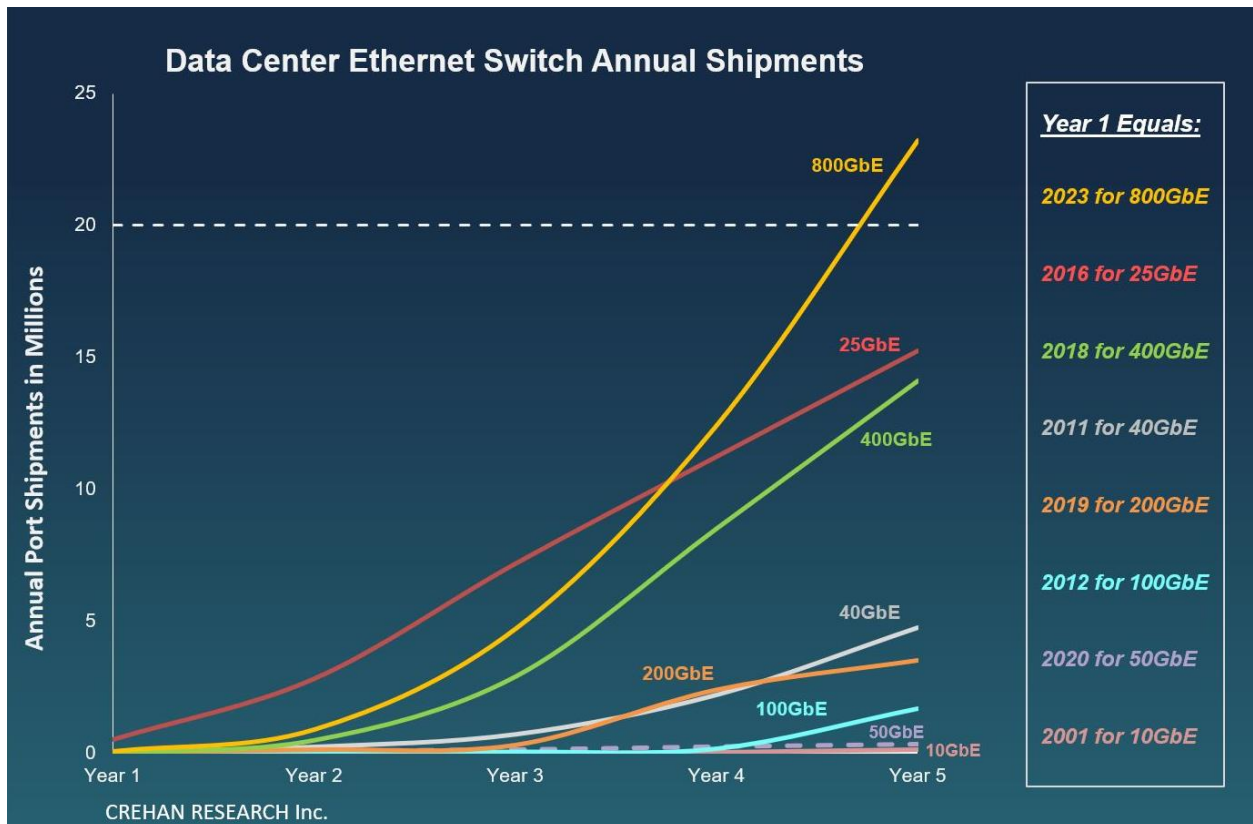


Generative AI Applications to Propel 800GbE to Fastest Ever Data Center Ethernet Switch Speed Ramp, Forecasts Crehan Research

100-Gbps SerDes Poised to Become Standard Building Block for Ultra High-Speed Data Center Ethernet Switches

SAN FRANCISCO, CA, January 22, 2024 — In its most recent Data Center Switch Long-Range Forecast Report, [Crehan Research](#) predicts that 800 gigabit Ethernet (GbE) switches will see rapid customer adoption and will surpass 20 million ports in annual shipments within four years – equating to the fastest ever data center Ethernet switch speed ramp (see accompanying chart). An expected key driver of the fast adoption is generative AI, which requires much higher networking bandwidth than other workloads.



“Generative AI is potentially the biggest killer application to emerge in decades,” said Seamus Crehan, president of Crehan Research. “As the de facto data center

networking technology, with an installed base of over 400 million switch ports as well as the proven ability to incorporate additional features to handle the requirements of new applications, we expect Ethernet to be the main enabler of these workloads,” he said. “Already, Ethernet networking is seeing generative AI enabling deployments in five of the top seven hyperscale cloud service providers, as well as the world’s fastest supercomputers including the Frontier exascale system and the Aurora system.”

In conjunction with strong adoption of high-speed Ethernet switches to handle generative AI applications, Crehan’s report also predicts rapid growth in 100-Gbps SerDes shipments. The company expects this technology to surpass 50-Gbps SerDes shipments to become the most-deployed data center Ethernet switch SerDes speed within three years.

"100-Gbps SerDes are the building blocks for the next generation of ultra-high-bandwidth data center Ethernet switch silicon products," Crehan said. "That includes Broadcom’s Tomahawk 5 and Jericho3-AI as well as Cisco’s Silicon One G200, which will serve as the data center networking foundations for the next phase of generative AI adoption."

About Crehan Research Inc.

Crehan Research Inc. produces reports with very detailed statistics and information on the data center switch and server-class adapter & LOM/controller (NIC) markets. The company’s reports are supported with rich insights and context to deliver increased value. For more information about Crehan Research Inc. email info@CrehanResearch.com, phone 650-273-8400, or visit www.CrehanResearch.com.

###