

Market Forecast

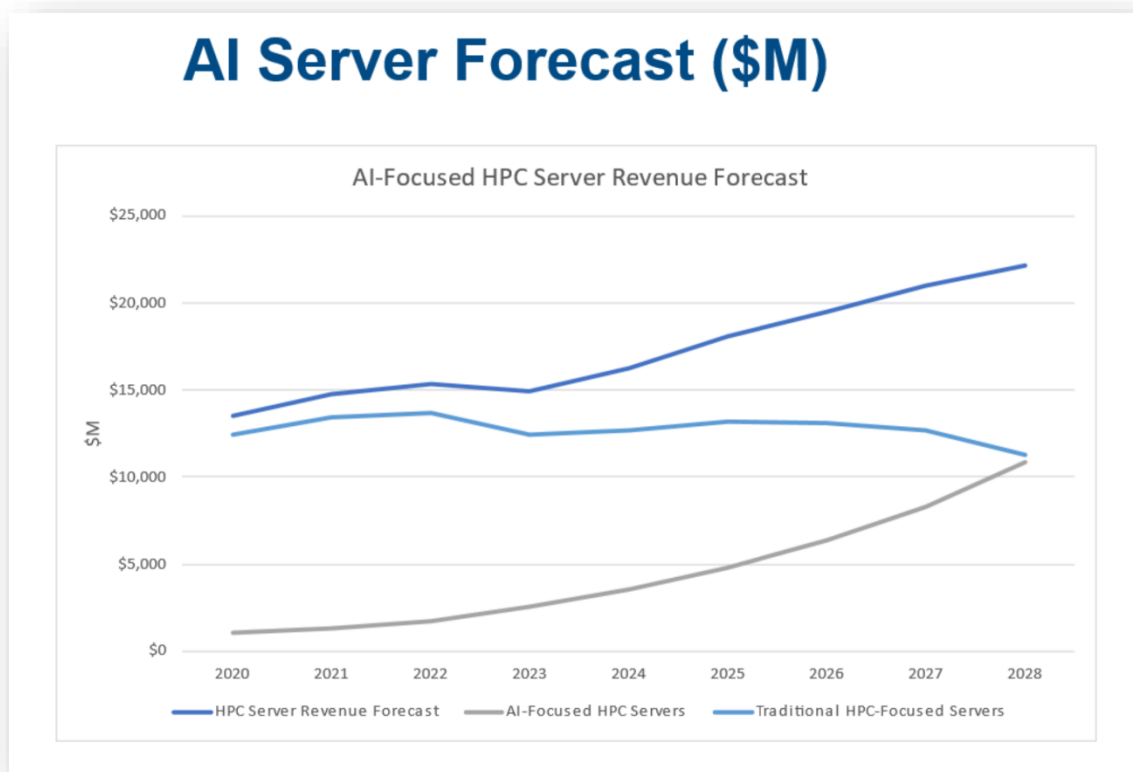
AI Focused Server Revenue to Overtake HPC by 2028

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HYPERION RESEARCH OVERVIEW

Hyperion Research’s upcoming forecast suite includes coverage of the worldwide revenues of AI-focused advanced data centers and on-premises advanced computing sites. In this forecast, AI-focused HPC server revenues are expected for the first time to overtake traditional HPC-focused server revenue by 2028 and continue growth beyond that point. This growth is anticipated to supplant an increasing portion of traditional HPC server revenue during this period, while lifting the overall market revenue size by over \$5B during the interim.

Figure 1



Source: Hyperion Research 2024

FORECAST DETAILS

In the coming years, advanced computing applications will continue to onboard AI technology at an unprecedented rate. As more hardware innovations are made and unique, AI-centered products and options are brought to market, industry, scientific, and commercial sectors will introduce AI tools with greater depth and breadth. To meet the increased needs of AI workloads, specifically inference scaling and continued fine-tune training, HPC users and administrators will continue to seek new avenues of efficiency, and in greater numbers. The AI boom is well under way, with large user groups already integrating the technology into production environments, particularly among finance, biosciences, and manufacturing design. This wave of production integration will continue, expanding into a more diverse set of market players, aided by support technology such as advanced data processing products, continued framework and library developments, and a wider range of AI-focused hardware devices.

This surge of integration and development stands to change the face of HPC systems and advanced data center design, architecture, and usage. It is also a tremendous market opportunity to those who create and manufacture innovative workload-specific hardware, software, and other ancillary technology. As is clear in Figure 1, this market trend will create a significant upswing in the total HPC server revenue distinct from the previous trend of pre-AI HPC market growth that was centered primarily on modeling and simulation jobs, while introducing a plethora of new market opportunities within the landscape. Beyond 2028, this trend is anticipated to continue upward. Going forward, advanced computing and AI are inextricably linked, and their synergy will almost certainly create not only an evolution in market dynamics towards AI usage, but an expansion of the market overall.

About Hyperion Research, LLC

Hyperion Research provides data-driven research, analysis and recommendations for technologies, applications, and markets in high performance computing and emerging technology areas to help organizations worldwide make effective decisions and seize growth opportunities. Research includes market sizing and forecasting, share tracking, segmentation, technology, and related trend analysis, and both user & vendor analysis for multi-user technical server technology used for HPC and HPDA (high performance data analysis). Hyperion Research provides thought leadership and practical guidance for users, vendors, and other members of the HPC community by focusing on key market and technology trends across government, industry, commerce, and academia.

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