HYP_Link

NVIDIA Announces NVLink Fusion to Support Semi-custom AI Infrastructure

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RECENT DEVELOPMENT

At the recent COMPUTEX 2025 exhibition, NVIDIA announced NVLink Fusion, its initiative to allow 3rd-party CPU and GPU providers to integrate directly into NVIDIA AI platforms. Included in the licensing package are the NVLink protocol and physical transport. As part of the announcement, MediaTek, Marvell, Alchip Technologies, Astera Labs, Synopsys, and Cadence were identified as partners to support development and provide custom AI devices for integration into the NVLink ecosystem. Also announced were plans from Fujitsu and Qualcomm to build custom CPUs that can be integrated with NVIDIA GPUs to build AI platforms and provide choices for users creating AI factories.

ANALYST COMMENTARY

NVIDIA has become the dominant provider of accelerated AI infrastructure. Its market share exceeds 90% in recent Hyperion Research studies, and its networking solutions are broadly adopted in the architecture of numerous AI platforms. Its technology has proven to be performant and reliable and has been a catalyst for AI being integrated into numerous enterprise and scientific workflows. However, as markets mature, users also want a more diverse supply chain and a variety of infrastructure choices that can be tailored to specific applications.

NVLink Fusion appears to be NVIDIA's response to this market demand. By providing access to NVLink IP to the industry, NVIDIA is aiming to create an open ecosystem around NVLink. It's unclear whether NVLink Fusion is available to all and whether there are any use case restrictions within its terms and conditions. The more open NVLink Fusion is, the more likely its success may be in the market.

Alternatives to vendor-specific solutions like NVLink are also emerging. The UltraAccelerator Link (UAL) consortium was formed in 2024 to develop a new industry standard dedicated to advancing high-speed and low latency communication for scale-up AI systems. With the goal of establishing an open standard that will enable AI accelerators to communicate more effectively, the group expects the effort will enable the industry to create a pathway for easier integration, greater flexibility, and enhanced scalability of their AI infrastructure. There is overlap between NVLink Fusion partners and members of the UAL consortium. The industry can likely benefit from both moving forward as openness, collaboration, and competition are seen by many as key elements for the long-term success for many critical technologies.

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