



NVIDIA Aerial 5G Platform Extends Support for Arm

New Software-Defined AI-on-5G Running on Arm Enables Standard NVIDIA AI Enterprise Systems from Global OEMs to Deploy Intelligent Services over 5G

Mobile World Congress—NVIDIA today announced it is extending support for Arm-based CPUs in the NVIDIA Aerial™ A100 AI-on-5G platform, bringing more choice to the 5G ecosystem.

The move will help businesses everywhere easily deploy intelligent services at the edge by enabling the world's leading OEMs to offer industry-standard servers running highly efficient Arm-based CPUs and NVIDIA AI Enterprise software with Aerial 5G.

These NVIDIA-Certified Systems™ will create a simplified path to building and deploying self-hosted vRAN that converges AI and 5G capabilities across private enterprises, network equipment companies, software makers and telecommunications services providers.

The NVIDIA Aerial A100 AI-on-5G computing platform uses the NVIDIA Aerial software development kit and will incorporate 16 Arm® Cortex®-A78 processors into the NVIDIA® BlueField®-3 A100. This results in a self-contained, converged card that delivers enterprise edge AI applications over cloud-native 5G vRAN with improved performance per watt and faster time to deployment.

“We’re bringing together two worlds — AI of computing and 5G of telecommunications — to create a software-defined platform for AI on 5G,” said Ronnie Vasishta, senior vice president of Telecom at NVIDIA. “Now supporting Arm, our growing Aerial platform is accelerating AI-on-5G everywhere.”

Enabling an Internet of Things Economy

BlueField-3 A100 includes NVIDIA's extensive [AI software library](#) and [Aerial 5G SDK](#), which speeds time to deployment and will fuel an array of ultra-low-latency enterprise AI projects, including precision robots, automated guided vehicles and digital twins for product development and manufacturing.

“This convergence of edge AI and 5G technology is driving the need for more diverse compute than ever before,” said Chris Bergey, senior vice president and general manager of the Infrastructure Line of Business at Arm. “BlueField-3 expands the Arm ecosystem by offering a combination of NVIDIA accelerated computing and Arm performance to enable network providers more choice in how they create and deploy 5G systems.”

NVIDIA AI Enterprise provides compatibility for a broad set of accelerated CUDA® applications, AI frameworks, pre-trained models and software development kits running in the hybrid cloud. Optimizations enable workloads to scale across multiple nodes to support large deep learning training models with full GPU virtualization.

Self-Hosted 5G vRAN

BlueField-3 A100 can be deployed both with x86 and Arm-based CPUs. By offering the choice of Arm technology with BlueField-3 A100, enterprises and network operators will be able to deploy software-defined 5G base stations and AI applications with ease of upgrade of features and performance, while maximizing the value of their infrastructure investments.

BlueField-3 is a next-generation [data processing unit](#) built for AI and accelerated computing, helping every enterprise deliver AI applications with industry-leading performance and data center security. It is optimized for 5G connectivity, multi-tenant, cloud-native environments, offering software-defined, hardware-accelerated networking, storage, security and management services at the edge.

NVIDIA announced in April it is teaming with Fujitsu, Google Cloud, Mavenir, Radisys and Wind River to [develop solutions for NVIDIA's AI-on-5G platform](#).

Availability

BlueField-3 A100 is expected to be available in the first half of 2022.

About NVIDIA

[NVIDIA](#)'s (NASDAQ: NVDA) invention of the GPU in 1999 sparked the growth of the PC gaming market and has redefined modern computer graphics, high performance computing and artificial intelligence. The company's pioneering work in accelerated computing and AI is reshaping trillion-dollar industries, such as transportation, healthcare and manufacturing, and fueling the growth of many others. More information at <https://nvidianews.nvidia.com/>.

Certain statements in this press release including, but not limited to, statements as to: the benefits, impact, performance,

features, and availability of our products and services; NVIDIA extending support for Arm-based CPUs in the NVIDIA Aerial A100 AI-on-5G platform; the world's leading OEMs offering industry-standard servers running highly efficient Arm-based CPUs and NVIDIA AI Enterprise software with Aerial 5G; NVIDIA's Aerial platform accelerating AI-on-5G everywhere; BlueField-3 expanding the Arm ecosystem; NVIDIA teaming with Fujitsu, Google Cloud, Mavenir, Radisys and Wind River to develop solutions for NVIDIA's AI-on-5G platform; and the expected timing for the availability of BlueField-3 A100 are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners' products; design, manufacturing or software defects; changes in consumer preferences or demands; changes in industry standards and interfaces; unexpected loss of performance of our products or technologies when integrated into systems; as well as other factors detailed from time to time in the most recent reports NVIDIA files with the Securities and Exchange Commission, or SEC, including, but not limited to, its annual report on Form 10-K and quarterly reports on Form 10-Q. Copies of reports filed with the SEC are posted on the company's website and are available from NVIDIA without charge. These forward-looking statements are not guarantees of future performance and speak only as of the date hereof, and, except as required by law, NVIDIA disclaims any obligation to update these forward-looking statements to reflect future events or circumstances.

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Cliff Edwards
NVIDIA Corporation
+1-415-699-2755
cliffe@nvidia.com