

NEXCOM's AIEdge-X®80 Provides Power and Performance for Responsive Edge AI in Security and Retail Applications

Real-time Information Processing in Semioutdoor Environments Delivered in a Credit Card-Sized PC

FREMONT, CA, UNITED STATES, December 10, 2024 /EINPresswire.com/ -- NEXCOM, a leading

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The development of AI at the edge delivers real-time processing with minimal latency, allowing providers to capture in real-time the risk intelligence and data insights to make responsive decisions"

Peter Yang, President

global supplier of intelligent retail solutions, announced today the launch of the <u>AIEdge-X®80</u>, an edge artificial intelligence (AI) fanless box PC that couples low power with high performance in a compact form factor. When used as an image AI processing system for object detection, the AIEdge-X®80 delivers the power and performance needed to integrate the predictive response of edge AI in security and retail applications – including for sorting machines, public safety and security management, parcel tracking systems, access control, and smart traffic enforcement.

The AlEdge-X[®]80 supports software development with the

most comprehensive solution available for building end-to-end accelerated AI applications, the NVIDIA JetPack[™]. This provides a full development environment for hardware-accelerated, edge AI development, enabling the performance of advanced inference tasks, including image classification, object detection, anomaly detection, and semantic segmentation – requirements for edge AI security and retail applications. With the NVIDIA[®] Jetson Orin[™] NX system on module (SoM), the AIEdge-X[®]80 supports multiple AI application pipelines with NVIDIA[®] Ampere architecture GPU for deep learning and vision accelerators.

"The development of AI at the edge now delivers real-time information processing with minimal latency, allowing businesses and public service providers to capture in real time the risk intelligence and data insights needed to enhance public safety and make responsive, data-driven decisions," said Peter Yang, President of NEXCOM. "NEXCOM's newest edge AI computer is designed to excel in semi-outdoor applications, such as identity management and image processing, bringing the latest edge AI performance capabilities to a wide range of uses."

The AIEdge-X[®]80 fanless edge AI computer is powered by the newest NVIDIA[®] Jetson Orin[™] NX and promises exceptional processing speeds of 70 to 100 TOPS. This Al inference acceleration performance is up to 3X the performance of Jetson AGX Xavier™ and up to 5X the performance of Jetson Xavier[™] – with power consumption of only 10W to 25W. The AIEdge-X[®]80 also provides enhanced AI inference capabilities through robust multi-connectivity to other sensors and devices in the field via 1 x HDMI. 2 x COM port, 2 x USB 3.2, and 2 x USB 2.0 ports.



"The AIEdge-X[®]80 integrates with the state-of-the-art NVIDIA[®] Jetson Orin™

NX, allowing users to perform complex AI tasks with the advantage of lower power consumption – delivering one of the best performance-per-watt ratios available," said Yang. "The NVIDIA[®] Jetson Orin[™] NX packs the power of edge AI computing in a compact module smaller than a credit card. A fanless design that delivers reliability and durability supports high power computing in diverse environments and space limitations."

The AIEdge-X[®]80 supports M.2 B keys for 5G/LTE and Mini PCIe cards for Wireless LAN, allowing for the allocation of resources more efficiently, enhancing overall performance, and reducing latency. Four LANs, two COM (RS232/422/485 and RS232), and multiple USB ports enable multitasking to deliver real-time data collection and monitoring, including for sorting and tracking machine scenarios. A remote power button unlocks system integration possibilities, and its rugged design makes the PC suitable for most applications, with extended operating temperatures of -20 to 60°C.

To learn more, please visit the <u>NEXCOM Website</u>.

Features:

- □ Built-in NVIDIA[®] Jetson Orin[™] NX , up to 70/100 TOPs
- □ Pre-installed NVIDIA JetPack[™](version 5.1.2 or higher) in Ubuntu 22.04 LTS
- \Box 4 x Intel[®] GbE LAN port
- I x M.2 3042/3052 Key B for 5G / LTE
- 1 x full-size Mini PCIe for WiFi / BT
- 1 x HDMI, 2 x COM port, 4 x USB 1 x USB OTG
- $\hfill\square$ Extended operating temperature -20 ~ 60 °C

DC in 24V with 3-pin Phoenix terminal block

About NEXCOM

Founded in 1992, NEXCOM integrates its capabilities and operates eight global businesses, which are Industrial Mesh, Intelligent Platform @ Smart City, Intelligent Video Security, Mobile Computing Solutions, Medical and Healthcare Informatics, Network and Communication Solutions, Smart Manufacturing, and Open Robotics and Machinery. This strategic deployment enables NEXCOM to offer time-to-market, time-to-solution products and services without compromising cost.

Peter Yang NEXCOM +1 510-386-2266 peteryang@nexcom.com Visit us on social media: LinkedIn

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