

Ambarella and Plus Announce High Performance Transformer-Based AD Perception Software Stack, PlusVision™, for CV3-AD AI Domain Controller Family With Industry-Leading Power Efficiency

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Birds-Eye-View Vision Technology Enables OEMs to Offer L2+/L3 Autonomy Across Vehicle Models With Uniform Perception Software

SANTA CLARA, Calif., July 31, 2024 (GLOBE NEWSWIRE) -- Ambarella, Inc. (NASDAQ: AMBA), an edge AI semiconductor company, and Plus, an AI-based driver assist and autonomous driving (AD) solutions provider, today announced that Plus's PlusVision™—a high-performance transformer-based AD perception software stack with industry-leading power efficiency—is now available on Ambarella's CV3AD AI domain controller family of systems-on-chip (SoCs), which provides industry leading AI performance per watt. This state-of-the-art perception offering will help Tier-1 suppliers and carmakers to accelerate the launch of next-generation vehicles with L2+/L3 autonomy.





PlusVision is the transformer-based, deep neural network AI perception software that combines Plus's L4 perception capabilities with an extensive and diverse dataset. Plus's AD stack has accumulated millions of real-world driving miles in the U.S., Europe and Australia. This data collection has made PlusVision smarter, enabling incredibly information-rich output that helps OEMs develop and fine-tune detailed autonomous driving policies. Implementing uniform perception software is key to enabling these data-driven, custom policies across different vehicle models and trim levels.

"We are delighted to collaborate with Ambarella in offering PlusVision's leading-edge perception capabilities on their CV3-AD SoCs," said David Liu, CEO and co-founder at Plus. "This combination will provide Tier-1s and OEMs with a flexible, high-performance and power-efficient perception solution, enabling them to create a future-proof platform that can be adapted for their evolving autonomy needs."

"Our collaboration with Plus offers Tier-1s and OEMs additional cutting-edge transformer-based AI perception software solutions, to help accelerate their next-generation vehicle development," said Fermi Wang, president and CEO of Ambarella. "This is a pivotal time for the automotive industry, and solutions like this give Tier-1s and OEMs the flexibility to efficiently differentiate their offerings and maximize customer value."

The PlusVision stack, running on a mid-range CV3-AD655 SoC, is capable of delivering peak performance of 11 cameras being simultaneously processed at 30 frames per second. This solution provides more than 200 meters of front-camera detection range, enabling the long-distance perception that is crucial in high-speed driving conditions.

The CV3-AD SoC family offers industry-leading low power consumption while providing advanced image processing and superior AI performance per watt. The Plus and Ambarella teams collaborated to optimize the transformer-based PlusVision model for the CVflow® AI engine inside the CV3-AD SoCs, which provides an optimal solution for AD systems with high performance, low latency and low power AI processing. Additionally, the CV3-AD family's efficiency helps increase battery range in new electric vehicles and its optimized processing performance provides OEMs with additional headroom to integrate other software and create differentiated features.

About Ambarella

Ambarella's products are used in a wide variety of human vision and edge Al applications, including video security, advanced driver assistance systems (ADAS), electronic mirror, drive recorder, driver/cabin monitoring, autonomous driving and robotics applications. Ambarella's low-power systems-on-chip (SoCs) offer high-resolution video compression, advanced image and radar processing, and powerful deep neural network processing to enable intelligent perception, fusion and planning. For more information, please visit www.ambarella.com.

About Plus

Plus is an AI company whose mission is to build driving intelligence to power a safer and greener world. Plus's autonomous driving solutions span from driver-out SuperDrive™, to highly automated PlusDrive®, next-gen safety technology PlusProtect™, and model-based perception software PlusVision™. Headquartered inSilicon Valley with operations in the U.S., Europe, and Australia, Plus is named by Fast Company as one of the World's Most Innovative Companies. Plus's large AI models are already powering vehicles in commercial use today. Partners including Bosch, dm-drogerie markt, DSV, Hyundai Motor Company, IVECO, Luminar, Nikola, Scania / MAN / Navistar of the TRATON GROUP, and Transurban are working with Plus to accelerate next-generation transportation solutions. For more information, visit http://www.plus.ai/.

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A photo accompanying this announcement is available at: https://www.globenewswire.com/NewsRoom/AttachmentNg/6b70a128-0ada-41e2-bb57-f244861a23c2



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