



Kodiak Robotics Selects Ambarella AI Domain Controller SoC For Next-Generation Autonomous Trucks

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Kodiak Moves AI Perception and Machine Learning Systems to Ambarella's CV3-AD685 AI SoC for Higher AI Efficiency and Performance in Long-Haul Trucking Fleets

SANTA CLARA, Calif. and MOUNTAIN VIEW, Calif., Jan. 02, 2024 (GLOBE NEWSWIRE) -- [Ambarella, Inc.](#) (NASDAQ: AMBA), an edge AI semiconductor company, and [Kodiak Robotics, Inc.](#), a leading autonomous vehicle company focused on trucking and defense, today announced that Kodiak selected Ambarella's CV3-AD685 AI domain control system-on-chip (SoC) as a complete embedded compute solution for its next-generation autonomous vehicles. This SoC provides a complete embedded solution for Kodiak's multi-sensor perception, fusion and path planning—running neural networks while processing multiple cameras, lidars and radars.



Building on the success of the companies' [current partnership](#), Kodiak has already logged over 300,000 miles on Ambarella's CV2 AI perception SoC while delivering over 875 loads, demonstrating that Kodiak Driver with help from the Ambarella hardware can withstand the rigorous environment of highway trucking. The CV2 has enabled premium image quality through rain, fog and darkness—ensuring that Kodiak delivers freight for its customers safely and on time.

Kodiak's next-generation self-driving truck platform will utilize the CV3-AD685 SoC to optimize hardware cost, reliability, size and robustness, while improving safety and performance. Designed with Ambarella's "algorithm first" philosophy, this 5nm SoC is purpose-built to provide a high-performance compute solution in the smallest form factor, which enables Kodiak's modular autonomous vehicle platform hardware across a wide variety of environmental conditions.

"The CV3-AD685 enables the Kodiak Driver, Kodiak's autonomous system, to turn sensor data into actionable insight with lower latency, lower power consumption, and higher reliability," said Don Burnette, Kodiak's Founder and CEO. "We are excited to exhibit a Kodiak autonomous truck at Ambarella's invitation-only event during CES for the second year in a row, demonstrating how our partnership furthers the mission of autonomous trucking."

"We are thrilled to continue our partnership with Kodiak as we pave the way together for the future of autonomous trucking," said Fermi Wang, President and CEO at Ambarella. "Our CV3-AD685 SoC provides the autonomous vehicle industry with the processing performance needed to set

new benchmarks in AI-based autonomous safety, efficiency and innovation.”

The Ambarella CV3-AD685 AI domain controller offers a unique combination of highly efficient AI processing, advanced image signal processing and ultra-low power consumption. Its next-generation CVflow® AI engine includes a neural vector processor engine that is 20x faster than the previous generation of CV2 SoCs, along with a general vector processor to provide the overall performance needed for full autonomous driving stacks.

View Kodiak’s autonomous truck and learn more about what Ambarella’s SoCs are doing inside at Ambarella’s invitation-only exhibition during CES in Las Vegas. Contact your Ambarella representative to schedule a meeting. For more information about Ambarella, please visit www.ambarella.com. For more information about Kodiak Robotics, please visit www.kodiak.ai.

About Kodiak Robotics, Inc.

Kodiak Robotics, Inc. was founded in 2018 and has become the trusted world leader in autonomous ground transportation committed to a safer and more efficient future for all. The company is developing an industry-leading technology stack purpose-built for long-haul trucks, making the freight industry safer and more efficient. Kodiak’s unique modular hardware approach integrates sensors into a streamlined sensor-pod structure that optimizes for perception, scalability, and maintainability. The company delivers freight daily for its customers across the South, using its autonomous technology. Kodiak also leverages its commercial self-driving software to develop, test and deploy autonomous capabilities for the U.S. Department of Defense. Learn more about Kodiak on the web at kodiak.ai, and on [LinkedIn](#) and [Twitter](#). You can find the company press kit [HERE](#).

About Ambarella

Ambarella’s products are used in a wide variety of human vision and edge AI 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.

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