Press RELEASES

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Ambarella's Latest 5nm AI SoC Family Runs Vision-Language Models and AI-Based Image Processing With Industry's Lowest Power Consumption

CV75S SoCs Add CVflow® 3.0 AI Engine, USB 3.2 Connectivity and Dual Arm® A76 CPUs for Significantly Higher Performance in Security Cameras, Video Conferencing and Robotics

SANTA CLARA, Calif., April 8, 2024 — Ambarella, Inc. (NASDAQ: AMBA), an edge AI semiconductor company, today announced during the ISC West security expo, the continued expansion of its AI system-on-chip (SoC) portfolio with the 5nm CV75S family. These new SoCs provide the industry's most power- and cost-efficient option for running the latest multi-modal vision-language models (VLMs) and vision-transformer networks. This efficiency makes these cutting-edge AI technologies feasible for a broad range of cost- and power-constrained devices within security cameras for enterprises, smart cities and retail; industrial robotics and access control; and a host of AI-enabled consumer video devices, such as sports and conferencing cameras.

"With the CV75S family, we are enabling mass-market product designers with the ability to integrate the latest vision-transformer technologies, including VLMs that allow zero shot image classification and multi-modal inferencing for real-time visual analytics without the need for training," said Chris Day, VP of marketing and business development at Ambarella. "We're also bringing our advanced AI-based image processing technology to cameras with a wide range of price points, offering significantly greater image quality for a broad spectrum of applications."

A typical example of how the CV75S will be used to run VLMs in enterprise cameras is a natural-language search that is processed within the camera to look for any object or scene among the content it has captured. A multi-modal VLM, such as the contrastive language–image pre-training (CLIP) model, can scour the footage and provide instantaneous results without being trained on that specific object or context. This opens a whole new range of AI capabilities for enterprise cameras, which can now run AI tasks tailored to their installation and user needs without retraining and deploying new AI models for each task.

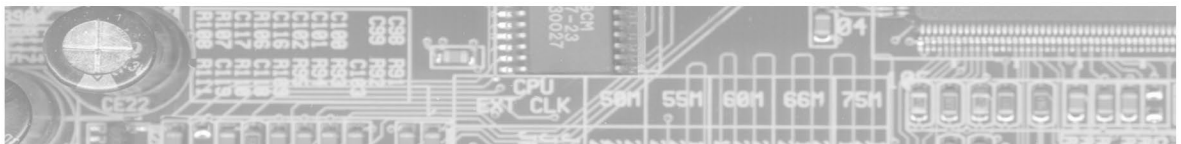
This is Ambarella's first mass-market SoC family to integrate its latest CVflow® 3.0 AI engine, which provides 3x the performance over the prior generation with support for VLMs and vision transformers, as well as advanced AI-based image processing. Additionally, the CV75S integrates the latest generation of Ambarella's industry-leading image signal processor, 4KP30 H.264/5 video encoding, dual Arm® Cortex-A76 1.6GHz cores and USB 3.2 connectivity.

To accelerate time to market, the CV75S family is supported by Ambarella's Cooper™ Developer Platform. This recently introduced platform provides comprehensive hardware and software solutions for creating edge AI systems, including powerful, safe and secure compute and software capabilities. It consists of industrial-grade hardware tools, collectively called Cooper Metal; along with Cooper Foundry, which provides a multi-layer software stack that supports Ambarella's entire portfolio of AI SoCs. Learn more at www.ambarella.com/cooper.

The CV75S is sampling now, and will be demonstrated at Ambarella's invitation-only exhibition at ISC West in Las Vegas this week. For more information or to schedule a demo during the show, please contact your Ambarella representative.

Availability and Pricing

More Information about availability and pricing, please visit email: sales.europe@macnica.com.



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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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About Macnica ATD Europe GmbH, (former Macnica GmbH)

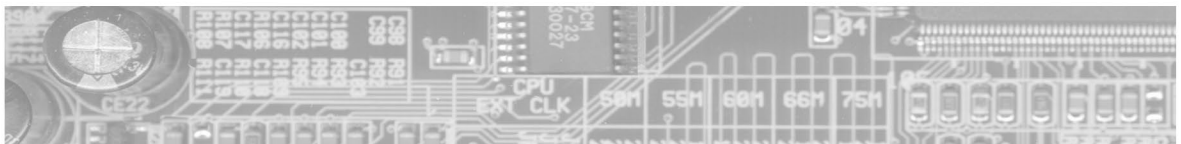
Macnica's ATD Europe GmbH, (former Macnica GmbH), was originally established in the UK in 2006, and moved to Germany in July 2008, to increase efficacy of its service for European customers.

By it's acquisition of the Munich based company Scantec Mikroelektronik in 2014 Macnica Europe formed a powerful semiconductor distribution with headquarter in Ingolstadt and offices in Munich, Regensburg, Milton Keynes (UK) and Warsaw offering an attractive and competitive portfolio of highly sophisticated devices.

Macnica provides end to end support from design-in to production through its global service network to its customers, regardless of the final destination of the product shipment to customers' manufacturing locations.

About Macnica ATD Europe S.A.S.

Founded in 1990 as ATD Electronique, Macnica ATD Europe headquarter offers innovative components dedicated to imaging applications for the European market. Its product portfolio includes: image sensors (CCD, CMOS, InGaAs, Thermal etc.), optics, interface circuits, FPGA & IPs, imaging processors, cables and OLED microdisplays.



It also covers development tools and design services enabling fast and efficient realization of new high-performance camera systems for markets such as machine vision, medical, life sciences, surveillance, automotive and others. After the acquisition of the company by Macnica Inc. as of October 1, 2020 the company operates under the name Macnica ATD Europe.

About Macnica, Inc.
Macnica was established in 1972 as a semiconductor distribution company headquartered in Yokohama, Japan, and has over 85 sales offices worldwide in eastern Asia, Europe and the USA. Total number of employees is over 3,900 and its consolidated revenue for fiscal 2021 was approximately US$ 7.6 B.

Macnica is famous for having an excellent engineering team of more than 900 application support engineers, IC designers and software developers with strong focus on providing technical support for its customers including custom design services. Macnica is continuing to extend its presence globally by having successful partners in strategic areas in the electronics market.

More information about Macnica: https://www.macnica.com/global/en/home.html.