Advanced SoC Research for Automotive (ASRA) Announces Strategic Collaboration with imec

-Aiming to Establish Specifications for a Shared Architecture for Automotive Chiplet Technology-

Advanced SoC Research for Automotive (ASRA), a collaborative innovation partnership of Japan, which conducts research and development on the automotive application of high-performance digital semiconductors (System on Chip/SoC) utilizing chiplet technology, agreed on a strategic alliance with imec, a global semiconductor research institute headquartered in Belgium, on November 10th, 2025. Going forward, through the alliance organization "Automotive Chiplet Program (ACP)" (https://www.imec-int.com/en/expertise/cmos-advanced-and-beyond/compute/automotive-chiplet-program) established by imec, the two parties will jointly advance research on shared architecture specifications.

ASRA will collaborate with imec, aiming to develop and publish common specifications derived from both parties' research findings by mid-2026.

Comments from Each Organization

Nobuaki Kawahara, Executive Director, ASRA: imec and ASRA will jointly create and publish a new requirements specification document ("Joint Document") for automotive chiplets. This collaboration will benefit both imec's ACP partners and ASRA members, supporting future industry standardization. Currently, each OEM has different powertrains, vehicle variants, and electronic platforms. This approach will enable the provision of optimal SoCs for electronic platforms through chip combinations. We are confident this partnership will yield outstanding results and lead to the realization of a future automotive chiplet ecosystem.

Bart Placklé, VP Automotive, imec: "ACP and ASRA share a common goal: to accelerate and derisk chiplet adoption by promoting interoperability, reliability, and scalability. By committing to jointly explore and promote shared architecture specifications, and build on each other's work, we can give partners the confidence that the technologies they develop will be scalable and widely adoptable. We believe this early convergence will reduce confusion and uncertainty in the market and help accelerate real-world deployments. It's a win-win for all stakeholders – and we hope this collaboration sparks a broader snowball effect across the industry."

Overview of ASRA

Established date	December 1, 2023
Chairman	Keiji Yamamoto
Executive Director	Nobuaki Kawahara
Members	Automotive Manufacturers:
(in alphabetical	Honda Motor Co., Ltd., Mazda Motor Corporation, NISSAN MOTOR CO., LTD.,
order)	Ltd., SUBARU CORPORATION, SUZUKI MOTOR CORPORATION, TOYOTA
	MOTOR CORPORATION
	Automotive Suppliers:
	Astemo, Ltd., DENSO CORPORATION, Panasonic Automotive Systems Co.,
	Ltd.
	Semiconductor-Related Companies:
	Cadence Design Systems, Japan, MIRISE Technologies Corporation, Nihon
	Synopsys G.K., Renesas Electronics Corporation, Socionext Inc.
Location	Nagono Campus, 2-14-1 Nagono, Nishi-ku, Nagoya-shi, Aichi, Japan
of the headquarter	
Activities	Research and development of automotive SoCs utilizing chiplet technology

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