

BASiC Semiconductor and CASTC partner to advance automotive semiconductor technology

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The collaboration aims to enhance power semiconductor application, focusing on safety, reliability and standardization in automotive chips



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On Aug. 23, BASiC Semiconductor, based in Shenzhen, China, signed a strategic cooperation agreement with China Automotive Chip (Shenzhen) Technology Co. Ltd. (CASTC) to progress automotive-grade semiconductor technology, according to a report published by World-Energy Media. The partnership aims to enhance the

development and application of power semiconductors within the automotive industry. BASiC Semiconductor will utilize its expertise in silicon carbide (SiC) power device research and commercialization, while CASTC will lend its capabilities in functional safety, information security, reliability certification and national standards development. The agreement seeks to address technical challenges in power and driver chips, promoting innovation through a collaborative effort.

The collaboration will focus on developing testing technologies for safety and reliability in automotive chips. BASiC Semiconductor and CASTC aim to establish a comprehensive service system that encompasses research, testing, certification and application. This initiative will promote resource sharing to improve the performance and adoption of domestically developed automotive chips within the industry.

BASiC Semiconductor is recognized for its innovations in China's third-generation semiconductor sector, particularly in SiC power devices. The company oversees the entire SiC value chain, including chip design, wafer production, packaging, testing and driver applications. Its products, such as SiC diodes, metal-oxide-semiconductor field-effect transistor (MOSFET) chips, and automotive- and industrial-grade modules, cater to global clients in various sectors, including electric vehicles and renewable energy.

CASTC, created by the China Automotive Technology & Research Center (CATARC) and China Reform Holdings's China Reform Development Investment Co. Ltd., functions as a public platform for testing and verifying automotive-grade chip standards. It focuses on functional safety, information security, reliability, performance and system-level validation, playing a crucial role in developing standards and fostering the ecosystem for automotive chip adoption in China.

This collaboration strengthens the domestic automotive semiconductor industry by integrating BASiC Semiconductor's SiC expertise with CASTC's testing and standardization capabilities. The partnership is set to deliver high-performance, reliable chips that comply with global standards, bolstering China's EV and clean energy sectors. By addressing technical bottlenecks and enhancing resource sharing, the agreement contributes to the advancement of sustainable automotive technologies.

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