



Golden Award

Al@Edge Fanless Embedded Al System with NVIDIA® Jetson AGX Orin™



AAEON Technology Inc. 研揚科技股份有限公司

Company Website



Winning Reason

This rugged in-vehicle edge AI computer was launched in response to the current market trend towards smart mobility in vehicles. Unlike strategies targeting general commercial or passenger vehicle markets, this PC has a wide variety of ADAS applications, including heavy vehicles, school buses, motorcycles, and AMRs, supporting autonomous driving and logistics automation. It's equipped with industrial-grade designs for shock resistance, dustproofing, and electromagnetic protection, and meets various vehicle certifications. Featuring integration with NVIDIA's AGX Orin AI platform, the device is effective in a range of edge computing fields such as satellite positioning, image transmission, communication applications, and data sensing. The areas of application and potential markets for this product include ADAS intelligent driving assistance, machinery automation for smart agriculture, handling equipment in smart warehousing, forklifts, and more, providing everything that's needed for intelligent mobility applications from image processing to multi-sensor integration.

Product Feature

The BOXER-8645AI is the first automotive AI Edge PC powered by NVIDIA® Jetson AGX Orin™, featuring E-Mark certification for safe and reliable in-vehicle use. Designed with vehicle power protection and EMC anti-interference, it ensures stable operation in complex automotive environments. Integrated with GMSL2 technology, it provides 6 Gbps bandwidth and 15µs low-latency video transmission, supporting 4K resolution or 1080p at 60fps without compression, delivering high-quality real-time imaging. With frame and time synchronization integration, the BOXER-8645AI synchronizes multicamera frames with GPS timing, ensuring precise positional accuracy for AMR and automated vehicle applications, enhancing navigation and AI-driven operations.