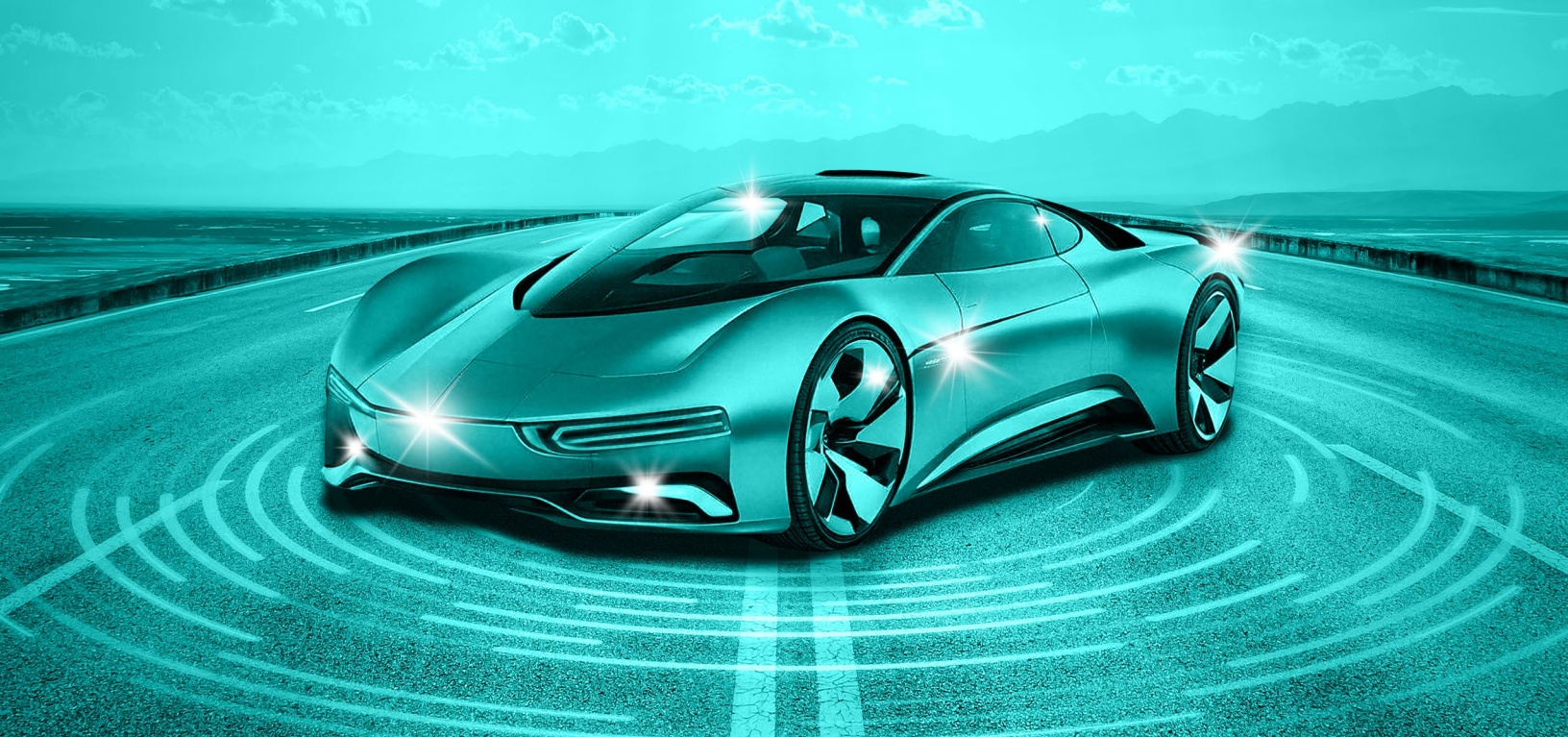
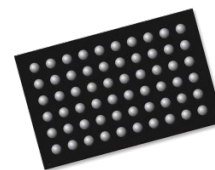




OAX7700

ASIC Product Brief



Lowest Power AI Companion Processor for Always-On Vehicle Security Systems

The OAX7700 ASIC is an always-on vision (AOV) AI companion processor designed as an upgrade to existing exterior camera solutions such as surround-view systems (SVS) and ultralow-power edge AI-based parking surveillance systems.

The OAX7700 ASIC integrates a neural processing unit (NPU) to support edge AI functions such as human presence detection, person and object detection, and distance measurement. It only triggers on confirmed threat objects, avoids false triggers from non-threat motions, and features up to 10 seconds of pre-roll video.

Parking surveillance systems equipped with the new ultralow-power OAX7700 ASIC consume 97% less power than existing solutions on the

market today. It also greatly reduces the processing burden on the central compute platform while enabling faster and more efficient decision-making on the edge. The NPU allows customers to develop their own AI-based algorithms on the chipset, extending functionality beyond security while preserving the ASIC's exceptionally low power consumption. Developers can also deploy sophisticated updates over the air.

The OAX7700 features stacked PSRAM and flash memory in a 60-pin BGA package.

Samples are available now, with mass production scheduled for the first quarter of 2027.

Applications

- Ultra-low-power automotive always-on AI security sensing
- Parked-vehicle security / surround-view sentry systems
- Event-triggered pre-roll (pre-event) video capture

Features

- Embedded 25.6 GOPS NPU (128 MAC @ 100 MHz) — deep-learning person / object detection with a low false-trigger rate
- Always-on operation, continuously monitoring with no boot-up latency
- Pre-roll buffer stores up to 110 frames (480 x 384) / 28 frames (960 x 768); outputs pre-event footage on trigger
- On-chip ISP conditions frames for machine vision (NPU), not human viewing
- Interfaces: SDIO, SPI, I2C, UART, AO-Link
- Wakes host SoC / SerDes only on intended events for major power savings
- Secure boot, crypto, and OTP

Version 1.0, September 2026