iENSO VISION

Company Profile

Embedded Vision Systems Partner

We design and build
Edge AI camera solutions
tailored to meet your business needs

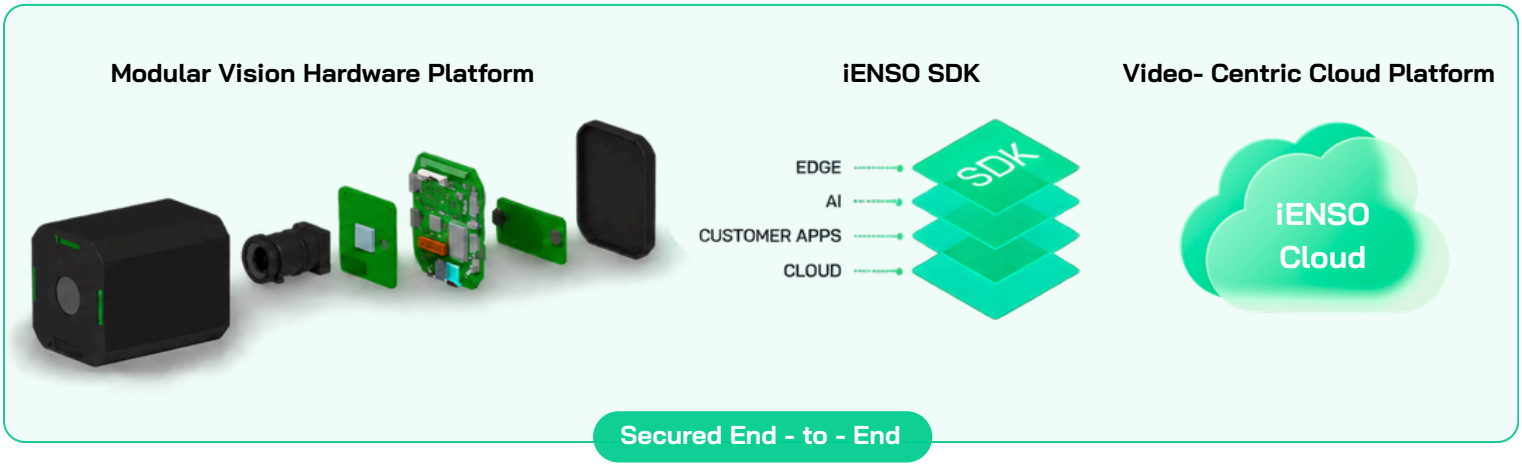
Canadian Owned
Global Presence

20+ years
of Vision Expertise

Pre-built Platform
Faster time to market

Introducing EVPaaS

Embedded Vision Platform-as-a-Service



A modular production-ready platform that combines camera hardware, Edge AI, software and cloud services to rapidly customise, deploy and manage intelligent vision solutions.

This platform is optimized around industry-leading vision SoCs, including solutions based on **Ambarella®,** enabling high-performance, energy-efficient, on-device intelligence.

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Launch Faster

With Pre-built Embedded Vision Platform as a Service

Accelerates Time to Market

- **Pre-Integrated Vision Stack:**
  Hardware, firmware, AI, SDKs, and cloud services
  No need to build from scratch.
- **Plug-and-Play AI:**
  Hardware, firmware, AI, SDKs, and cloud services
  No need to build from scratch.

Modular and Flexible Platform

- **Composable Architecture:**
  Mix compute, sensors, and cloud services
  to fit each application.
- **Cross-Vertical Ready:**
  One platform for consumer
  (IoT), industrial, smart city, defense, and more.

Market Verticals

- Industrial Automation
- Smart Infrastructure and Mobility
- Drones and Unmanned Systems
- Robotics and Autonomous Machines

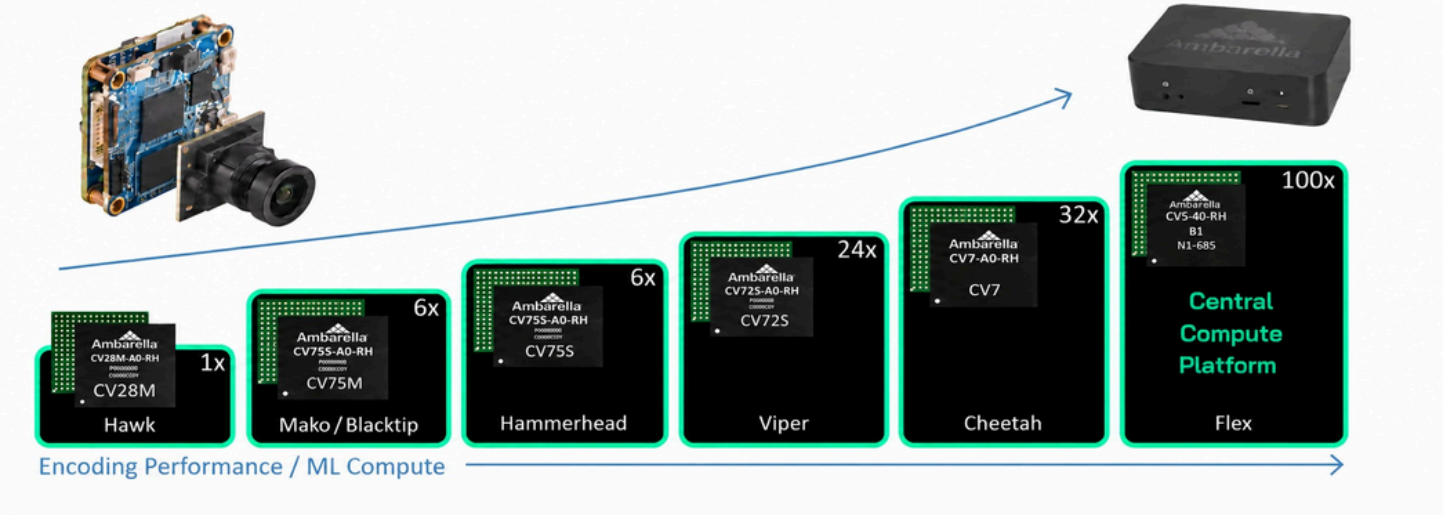
iENSO's EVPaaS

Same SDK - Same Code Base - Scalable Performance

iENSO's EVPaaS is based on the **Ambarella CV Series of AI SoC's** featuring CVflow technology for the cutting-edge image and data processing capabilities you need. This innovative ecosystem supports:

- Integrated AI and deep learning technologies that enable **on-device ML processing**
- **High-performance encoding** including H.264/H.265
- **Low latency Web RTSP (RTC)** based video transport protocol
- Compression, image enhancement, data analytics and advanced vision processing
- **Industry-leading power efficiency** for maximized battery life and reduced heat generation for improved reliability and longevity
- **Enhanced security features** including secure boot and encrypted storage, monitoring and threat detection, and compliance with security standards
- **Superior image quality** under low light, high dynamic range (HDR), and a wide range of temperature conditions
- **Multi-sensor, sensor fusion** & mission flexibility

Scalable Edge AI Vision Platform



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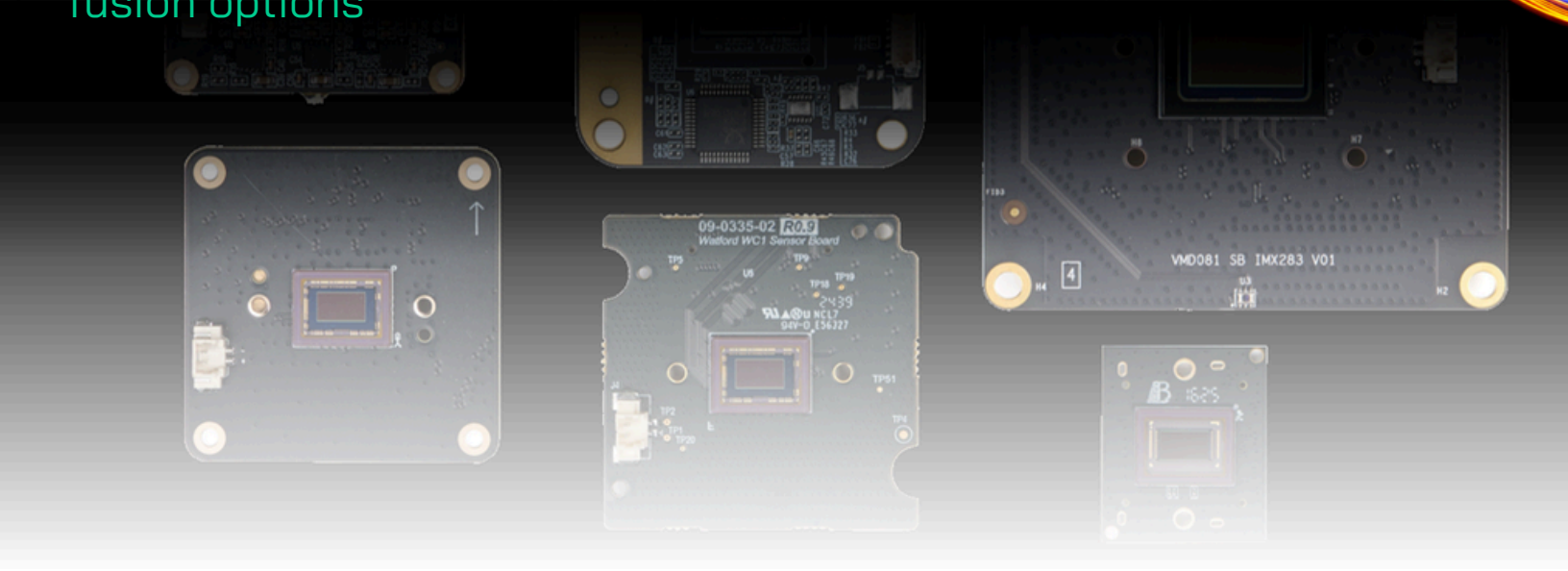
System on Module Flexibility

A comprehensive range of sensor modules & sensor fusion options



iENSO Sensor Modules:

- Sony, Onsemi and other sensor vendors
- Rolling or global shutter
- 1080p to 8K+ Resolution
- Range of optics available



Sensor Fusion Options:

Fusing data from different sensors, such as

- Daylight (RGB)
- LWIR
- SWIR

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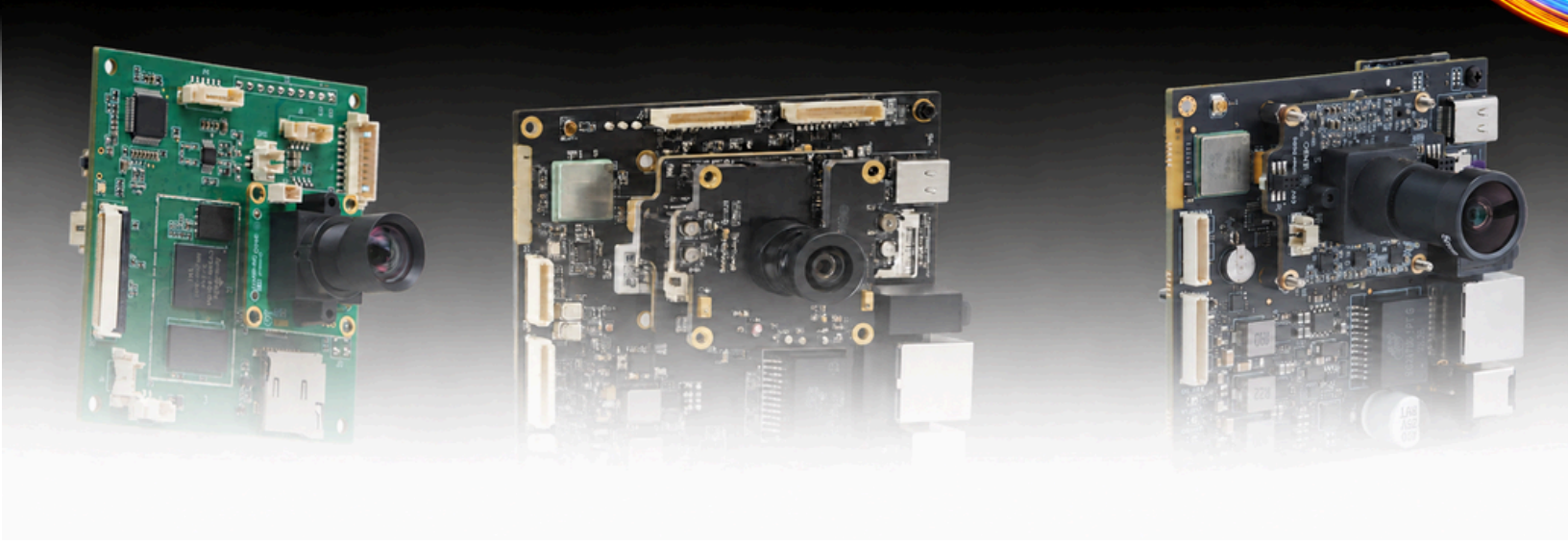
Project Development

Developer tools that speed up integration



Developer-First Enablement:

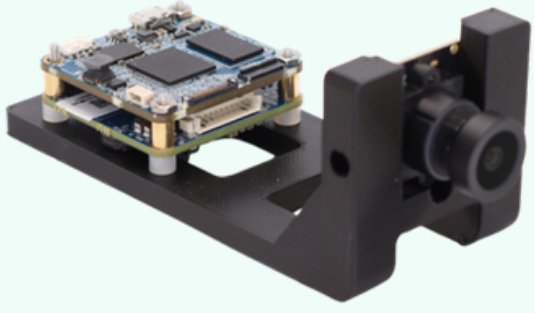
- **SDKs & APIs:** Standardized interfaces for fast app and system integration
- **AI Model Support:** Built-in pipelines for CNNs, transformers, and VLMs

ML Model Integration Options:

- **iENSO Comprehensive AI Service:** We develop or source and integrate your ML models, minimising your team's time and effort.
- **iENSO AI Integration Service:** You provide the ML models, and we integrate them into Ambarella CVflow.
- **Integrate ML Models Independently:** Your team integrates its own ML models using our toolchain, with optional support available.

Start your project with:

- Evaluation Kit (EVK)
- iENSO Developer Portal
- Additional Support



Manufacturing, Security & Certifications

Operations & Manufacturing Expertise



Manufacturing:

- Location-agnostic manufacturing - Quick setup anywhere in the world
- Standardized processes and procedures
- Unified Test Jig Controller (TJC) - Hardware-agnostic control layer
- iENSOWorks Centralized manufacturing framework

Secured End-to-End:

- Following latest cybersecurity practices
- Offering HW security with built-in Trustzone™, secure boot, encrypted FW, and secure memory
- Utilizing End-to-End Encryption (E2EE) for video and data
- Featuring Intellectual Property (IP) protection and user

Standard Platforms, Custom Designs:

- NDAA and TAA Compliant

Our Partners: VISION Stuttgart, 6-8 October 2026 · MACNICA · Ambarella™ · estigiti

Global Offices
North America | Europe | Middle East | Asia
(Toronto HQ)

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