

# Hailo-8™ AI Processor

Delivering data center class performance to edge devices



## Key Features & Benefits

Unprecedented AI compute power of 26 Tera-Operations Per Second (TOPS)

Best-in-class power efficiency with typical power consumption of 2.5W

Enabling real-time, low latency & high-efficiency AI inferencing on edge devices

Highest cost-efficiency (TOPS/\$) compared with existing solutions

Scalable:

- Enabling simultaneous processing of multi-streams & multi-models
- Supporting multiple Hailo-8™ devices

Commercial, Industrial & Automotive grades, supporting:

- Industrial: -40°C to 85°C
- Automotive: -40°C to 105°C

Easy hardware integration; Does not require external memory

## Key Benefits of High-Performance AI Analytics on the Edge

Advanced analytics algorithms can run on high-resolution & high-frame rate video, resulting in:

- High accuracy & ability to detect small objects
- Detection of fast-moving objects
- Significant reduction in false alerts
- Generation of comprehensive metadata

Low latency & real-time alerts

Efficiency & cost-savings

More robust capabilities & richer applications

## Hailo-8™ Offering

### Chip On Board (COB)



Hailo-8™

**Modules** enable fast time to market & easy HW integration



## Hailo-8™ Architecture

Unique, powerful and scalable structure-driven dataflow architecture that takes advantage of the core properties of neural networks. It enables edge devices to run deep learning applications at full scale more efficiently, effectively, and substantially than traditional solutions, while significantly lowering costs.

## Starter Kit

M.2 module with Hailo-8™ for development & prototyping of edge AI & specifically, video analytics solutions

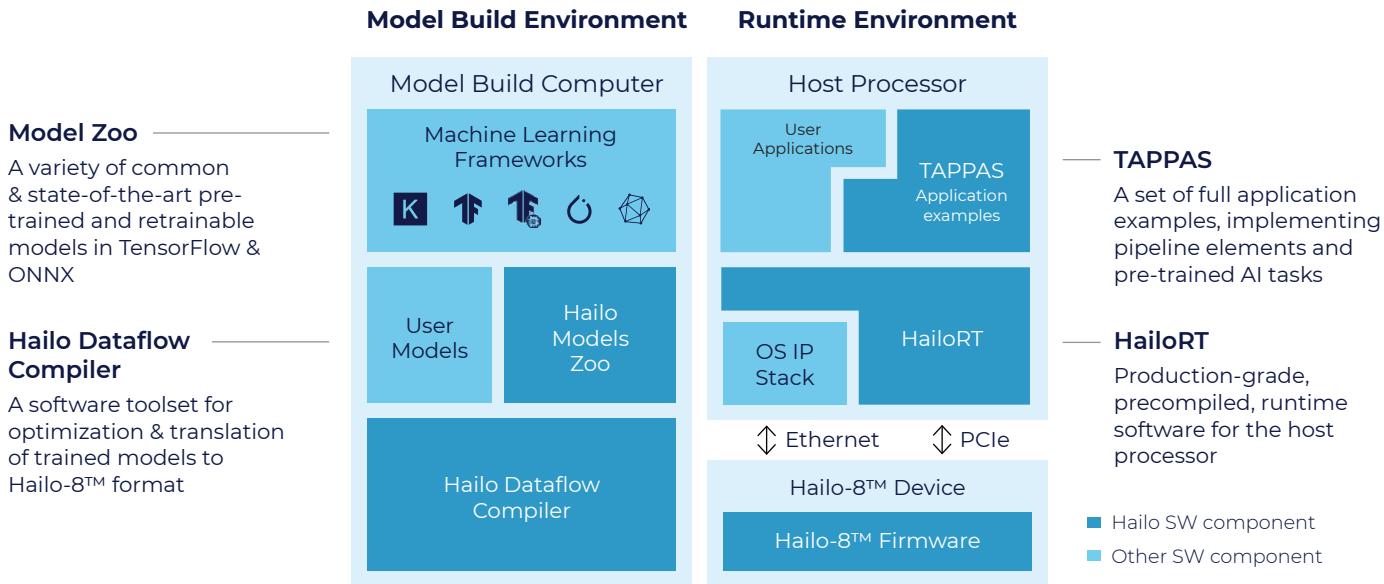
Click to order Hailo-8™ M.2 Starter Kit

[www.hailo.ai](http://www.hailo.ai)



## Comprehensive Software Suite

AI software suite which seamlessly integrates with existing deep learning development frameworks to allow smooth and easy integration in existing development ecosystems. The Hailo AI software suite includes:



## Neural Network Models & Application Support

AI frameworks: TensorFlow, TensorFlow Lite, Keras, PyTorch & ONNX

Host Architectures: X86, ARM  
OSs: Linux, Windows

Comprehensive dataflow compiler  
enables customer to port their neural  
network models easily & quickly

## Automotive Compliance

A-SPICE L2 development flow

AEC-Q100 Grade 2 compliant

ISO-26262 ASI-B (D) compliant

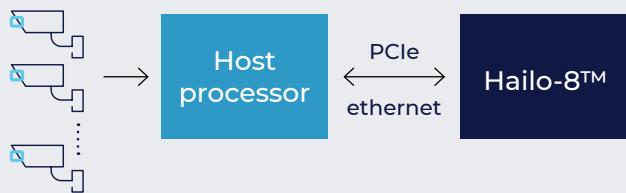
## Hailo Ecosystem

Hailo collaborates with partners globally to offer products for edge solutions — from small and fanless devices, to ruggedized industrial appliances, high capacity video analytics platforms, embedded computing platforms for automotive & robotics and more.

To select your Hailo-based AI platform [click here](#)

## System Usage

Co-processor connected to the various types of host processors via PCIe



## Industries



Automotive



Industrial  
Automation



Security



Retail