

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)



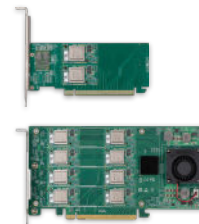
Hailo-8

Modules enable fast time to market & easy HW integration



Hailo-8 M.2 Key M B+M A+E Hailo-8R mPCIe

Hailo-8 Century High Performance PCIe Cards



Small form factor
52-104 TOPS
0802S, 0802, 0803, 0804

Wide host compatibility
104-208 TOPS

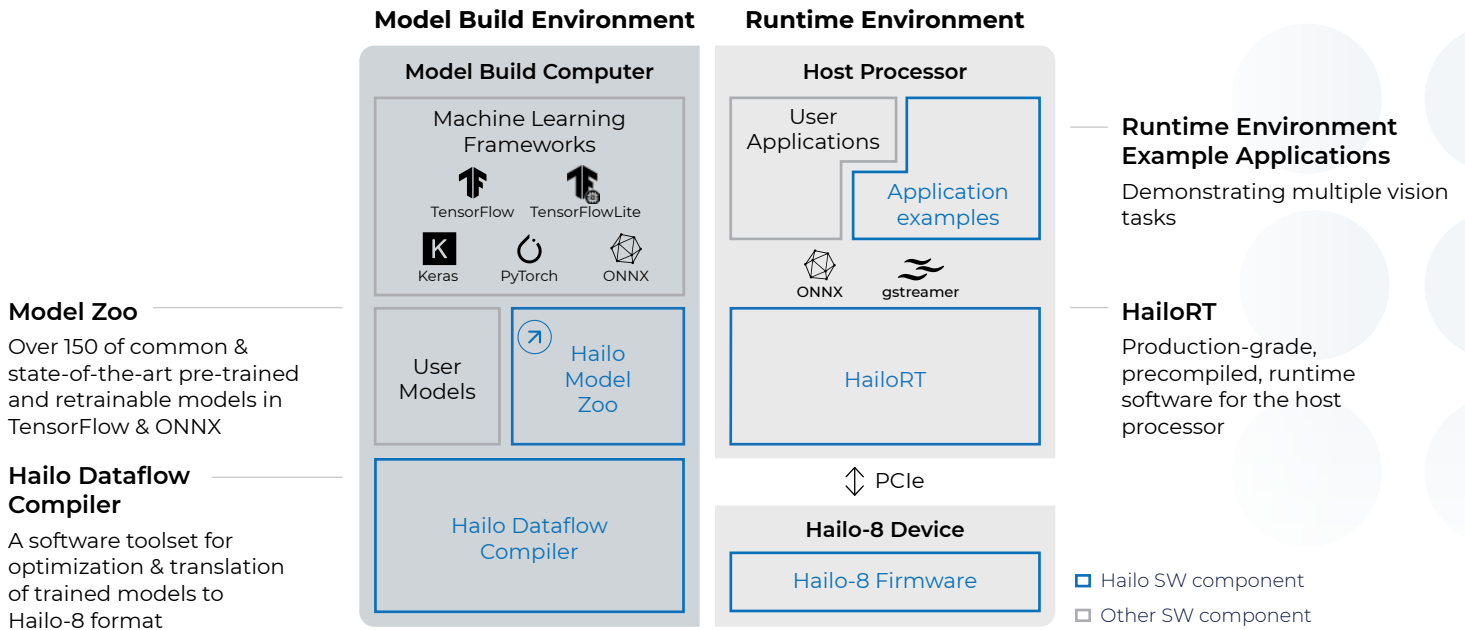
0804S, 0805S, 0806S, 0807S, 0808S

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.

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:



Model Zoo

Over 150 of common & state-of-the-art pre-trained and retrainable models in TensorFlow & ONNX

Hailo Dataflow Compiler

A software toolset for optimization & translation of trained models to Hailo-8 format

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 ASIL-B (D) compliant

Hailo Ecosystem

Hailo collaborates with leading partners to seamlessly integrate their products with ours, creating easy-to-use, dependable, and high-quality solutions that adhere to the industry's most rigorous standards. Our extensive network of trusted partners covers various regions and market segments, delivering innovative solutions to our customers.

To view our extensive network [click here](#)

System Usage

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



Part Number

Hailo-8 Industrial: HNC18BI11BH

