HAILO

Hailo-8R Mini PCIe AI Acceleration Module

Deliver server class performance to edge devices

Key Features & Benefits

- Provides 13 Tera-Operations Per Second (TOPS)
- Best-in-class power efficiency
- Enabling real-time, low latency, and high-efficiency AI inferencing on edge devices
- Highest cost-efficiency (TOPS/$) compared with existing solutions
- Scalable, enabling simultaneous processing of multi-streams & multi-models
- Robust software suite supports state-of-the-art deep learning models & applications out-of-the-box
- Supporting extended temperature range of -40°C to 85°C
- Fast time-to-market using a standard form factor module

Technical Specifications

Form factor
PCI Express Mini Card Full-Mini F1

Dimensions
30×50.95 mm

Interface
PCIe Gen 3.0, 1-lane

Supported OS
Linux & Windows

Supported AI Frameworks
TensorFlow, TensorFlow Lite, Keras, PyTorch & ONNX

Supported host architecture
X86 or ARM based

Certification
CE, FCC

Seamless Integration

Compatible with the PCI Express Mini (mPCIe) form factor, the module can be plugged into an existing edge device with an mPCIe Full-Mini socket to process deep learning inferencing in real time and with low power consumption.

Featuring the Hailo-8R AI Processor

Hailo-8R unique, powerful, and scalable structure-driven dataflow architecture 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

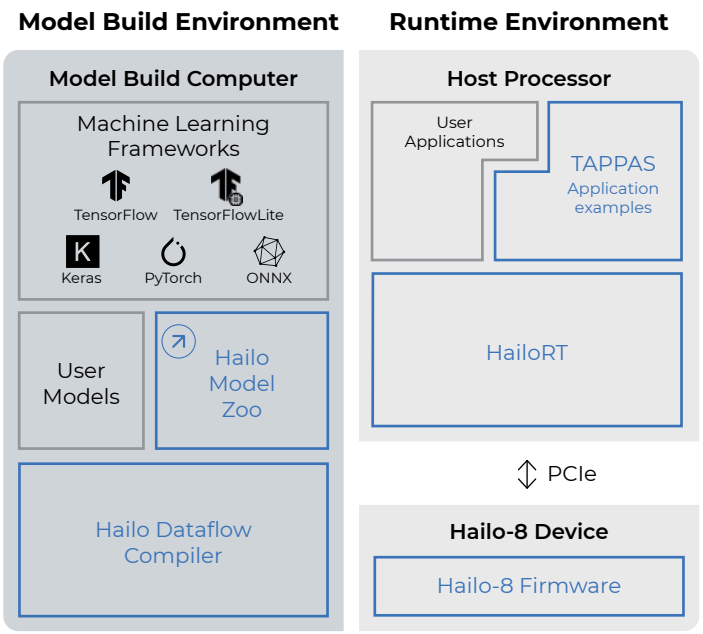
AI software suite which seamlessly integrates with existing deep learning development frameworks to allow smooth and easy integration in existing development ecosystems. The Hailo AI software suite includes:

Model Zoo

Over 100 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



TAPPAS

A set of full application examples, implementing pipeline elements and pre-trained AI tasks

HailoRT

Production-grade, precompiled, runtime software for the host processor

Hailo Ecosystem

Hailo collaborates with leading partners to seamlessly integrate their products with ours, creating easy-to-use, dependable, and highquality 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

mPCIe module connected to various types of host processors via PCIe.

Part Number

Hailo-8R mPCIe module Extended Temperature: HMP1RB1C2GAE

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