

Hailo-8 M.2 Starter Kit

Delivering data center class performance to edge devices



Key Features & Benefits

Powered by 26 Tera-Operations Per Second (TOPS) Hailo-8 Al Processor

Best-in-class power efficiency

Enabling real-time, low latency, and high-efficiency Al 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, with key M, key B+M & key A+E

→ Optional extensions for Key M & Key B+M

Technical Specifications

Form factor options M.2 key M, key B+M, key A+E

Dimensions

- → Key M, B+M: 22×80 mm with breakable extensions to 22×42 mm & 22×60 mm
- → Key A+E, 22×30 mm

Interface PCIe Gen-3.0, 2-lanes

(4-lanes in key M)

Supported host architectures
X86 or ARM based

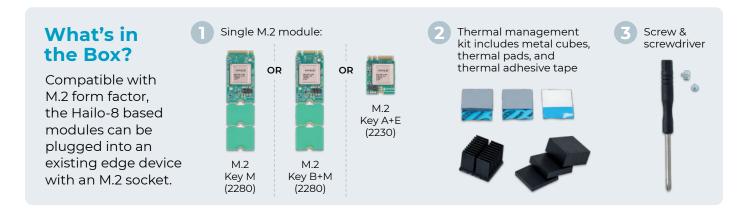
Supported OS Linux, Windows

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

Featuring the Hailo-8 AI Processor

The Hailo-8 AI processor, delivering up to 26 tera-operations per second (TOPS), significantly outperforms all other edge AI processors. Its area and power efficiency are far superior to other leading solutions by an order of magnitude.

Hailo-8 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

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

Model Build Environment Runtime Environment Model Build Computer Host Processor Machine Learning Applications Frameworks **TAPPAS TAPPAS** 作 Application A set of full application examples TensorFlow TensorFlowlite examples, implementing pipeline elements and K \dot{O} ⇎ PyTorch pre-trained AI tasks Hailo HailoRT **HailoRT** User OS IP Model Models Stack Production-grade, 700 precompiled, runtime software for the host ♠ PCIe processor Hailo Dataflow Hailo-8 Device Compiler Hailo-8 Firmware Hailo SW component Other SW component

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

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

M.2 module connected to the various types of host processors via PCle.



Part Numbers

Hailo-8 2280 M key M.2 module Starter Kit Extended Temperature: HM218B1C2XAE Hailo-8 2230 A+E key M.2 module Starter Kit Extended Temperature: HM218B1C2YAE Hailo-8 2280 B+M key M.2 module Starter Kit Extended Temperature: HM218B1C2ZAE

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