

Hailo-8L Entry-Level M.2 Al Acceleration Modules

Delivering data center class performance to edge devices



Key Features & Benefits

Powered by 13 Tera-Operations Per Second (TOPS) Hailo-8L Al processor

Enabling real-time, low latency, and high-efficiency Al inferencing on edge devices

Fast time to market using a standard M.2 form factor module, with key B+M & key A+E Best-in-class power efficiency

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

Supporting extended temperature range of -40°C to 85°C

Robust software suite supports state-of-the-art deep learning models & applications out-of-the-box

Scalable:

- → Enabling simultaneous processing of multi-streams & multi-models
- → Future-ready software compatibility when migrating to Hailo-8 for more powerful Al

Technical Specifications

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

Dimensions

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

Interface PCIe Gen-3.0, 2-lanes

Supported host architectures X86 or ARM based Supported OS Linux, Windows

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

Hailo-8L M.2 Al Acceleration Modules

Compatible with M.2 form factor, the Hailo-8L based modules can be plugged into an existing edge device with an M.2 socket to execute deep neural network inferencing in real-time utilizing low power for a broad range of market segments.



M.2 Key B+M (2242/2260/2280)



M.2 Key A+E (2230)

Featuring the Hailo-8L AI Processor

The Hailo-8L AI processor, delivering up to 13 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-8L 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 is future proof, supporting all Hailo-8 product lines, and includes:

Model Build Environment Runtime Environment Model Build Computer Host Processor Machine Learning User **TAPPAS** Applications Frameworks **TAPPAS** A set of full application Application examples, implementing examples pipeline elements and $^{\circ}$ K pre-trained AI tasks PyTorch **(** | (| **HailoRT** HailoRT Hailo User Production-grade, Model Models precompiled, runtime Zoo software for the host processor ↑ PCIe Hailo Dataflow Hailo-8L Device Compiler Hailo SW component Hailo-8L Firmware Other SW component

Model 700

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-8L 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 PCIe.



Part Numbers

Hailo-8L 2230 A+E Key M.2 Module Extended Temperature: HM21LB1C2KAE Hailo-8L 2280 B+M Key M.2 Module Extended Temperature: HM21LB1C2LAE

www.hailo.ai

Click here for more information & product inquiry



