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™ AI Processor
- 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, 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 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.

What's in the Box?

Compatible with M.2 form factor, the Hailo-8™ based modules can be plugged into an existing edge device with an M.2 socket.

1. Single M.2 module:
   - M.2 Key M (2280)
   - M.2 Key B+M (2280)
2. Thermal management kit includes metal cubes, thermal pads, and thermal adhesive tape
3. Screw & screwdriver

www.hailo.ai
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 and more.

To select your Hailo-based AI platform click here

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**
  A variety 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-™ format

- **Hailo-™ M.2 AI Acceleration Modules**
  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 Build Environment**
    - **Model Build Computer**
      - Machine Learning Frameworks
        - K
        - Hailo Models Zoo
      - User Models
    - Hailo Dataflow Compiler

  - **Runtime Environment**
    - **Host Processor**
      - User Applications
      - TAPPAS Application examples
      - OS IP Stack
    - Feed
  - **Hailo-™ Device**
    - Hailo-™ Firmware

- **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

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    - OS IP Stack
    - HailoRT
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- **System Usage**
  M.2 module connected to the various types of host processors via PCIe.

- **Industries**
  - Industrial Automation
  - Security
  - Retail

Click here for more information & product inquiry

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