



AIEH1000

PCIe x4 AI Acceleration Card
Hailo-8™ x1



Introduction

SUNIX PCIe x4 AI Acceleration Card, AIEH1000, enables Hailo-8™ AI Processor into Edge computers, provides an easily deployable solution for AI developers to offload CPU loading on low-latency deep learning inference and cost-effective Edge AI computing with higher processing capabilities and lower power consumption. And this card can deliver up to 26 TOPS, enabling it to handle the most demanding computer vision applications.

AIEH1000 also enables legacy computers such as NVRs, Edge AI boxes, Industrial PCs and robots to run video-intensive, mission-critical Edge AI applications such as video analytics, traffic management, access control.

Features

- Compliant with PCI Express 3.0 x4
- Supports Single PCIe Slot with low-profile Form-Factor
- Powered by Hailo-8™ AI inference processors
- Supports 26 TOPS AI performance
- Low power consumption
- Supports Software Development Kit
- Real-time, Low latency and High-performance AI inference acceleration to Edge AI

Specifications

Model	AIEH1000
Description	PCIe x4 AI Acceleration Card
AI Processors	Hailo-8™ AI Processor x1
AI Performance	26 TOPs (Tera-Operations Per Second)
Power Consumption	5W (TDP)
PCIe Interface	PCI Express Gen3 x4
AI Frameworks	TensorFlow, TensorFlow Lite, ONNX, Keras, Pytorch
Software Suites	■ Dataflow Compiler (Model conversion and compilation) ■ HailoRT (Runtime environment and driver) ■ Model Zoo (Pre-trained models) ■ TAPPAS (Deployment framework, examples and multi-network pipelines)
OS Support	Linux (e.g. Ubuntu, Yocto) & Windows 10/11 64bit
Environment	■ Operation temp. 0 to 50°C (32 to 122°F) commercial ■ Operation humidity: 5 to 95% RH ■ Storage temp. -20 to 85°C (-4 to 185°F)
Certification	CE/FCC/VCCI/BSMI
Green Environment	RoHS
PCB Dimension	79.3 x 68.5 mm The diagrams show the physical dimensions of the PCB. The side view shows a length of 79.30 mm and a width of 68.50 mm. The top view shows a central component area with various mounting holes and dimensions. Key dimensions include 10.20 mm for the central component width, 18.42 mm for the mounting hole spacing, and 53.90 mm for the overall width. The top view also shows a 2x HOLE 3.20 PAD 5.00 and a HOLE 3.00-NPTH.
Bracket	Standard 121mm / Low profile 80mm(Optional)

Package

- AIEH1000 / PCIe x4 AI Acceleration Card
- Quick installation guide

Applications



Image Processing

- Accelerate image-recognition
- Image segmentation
- Object detection



Video Meeting

- Face tracking
- Gesture control



Factory Productivity

- Predictive maintenance -
- Enhance productivity -
- Improve agility -



Edge Inference

- Smart city -
- Smart retail -
- Smart buildings -

