

# MiAi-H8

## Real-time & AI Inference Acceleration Xpansion PCIe Card



### Features

- Support up to 8 x Hailo-8™ AI Processor
- Support up to 208 TOPs
- Support Hailo-8™ Software Development Kit
- Passive and active cooling alternatives
- Industrial grade design with all solid capacitors and wide temperature support

## Specification

### General

- Application: Real-time AI Inference Acceleration
- Bus Type: PCI Express Gen3 x16
- Certification: CE, FCC
- Dimension: 111 x 200 x 14 mm (Passive Cooling)  
; 111 x 200 x 30.5 mm (Active Cooling)

### AI Processor

- 4~8 x Hailo-8™ AI Processor

### AI Performance

- 4 x Hailo-8™: 104 TOPs, 5,300 FPS of ResNet,  
and 900 FPS of YOLO v5m
- 8 x Hailo-8™: 208 TOPs, 10,600 FPS of ResNet,  
and 1,800 FPS of YOLO v5m

### Power Requirement

- Power Consumption:  
4 x Hailo-8™: Max. 42W; Typ. 20W  
8 x Hailo-8™: Max. 74W; Typ. 30W

### Accessory

- Pre-installed Full height PCIe bracket with  
venting holes

## Software

### ML Frameworks Support

- ONNX; TensorFlow; pyTorgc

### Runtime Support

- GStreamer; ONNX Runtime; Native C/C++

### Hailo Software Suites Support

- **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 Ubuntu 22.04
- Microsoft® Windows® 10 Pro/IoT 2021 LTSC,  
Windows® 11 Pro (only support PCIe driver and  
HailoRT tool in Windows)

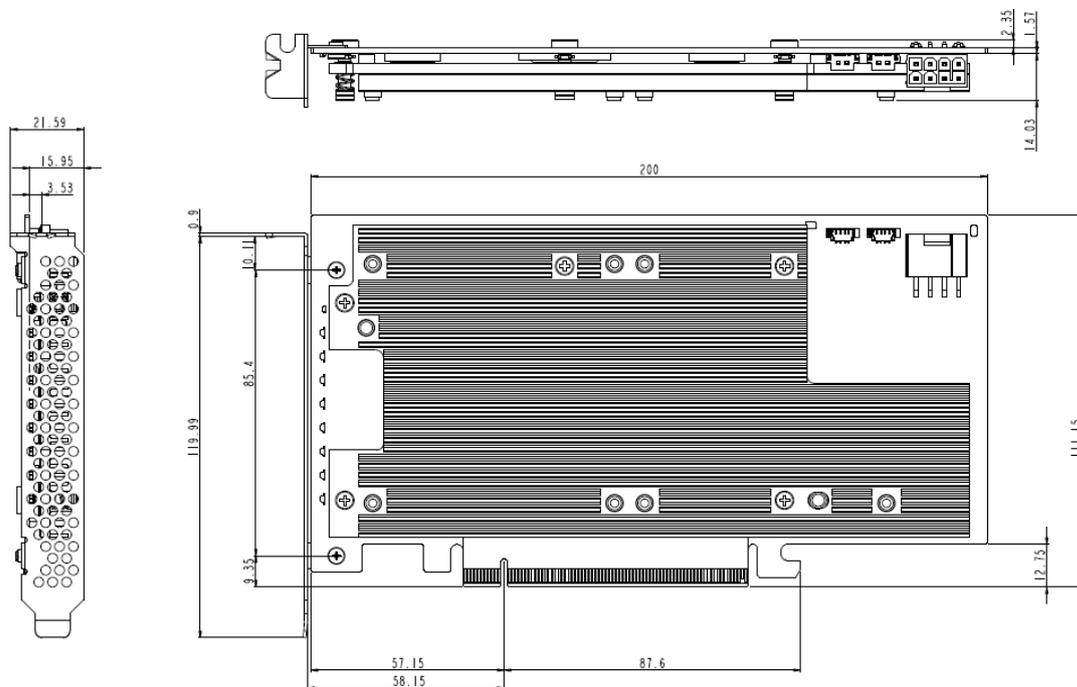
## Environmental

- Operating Temperature:
  - 4 x Hailo-8™: -40 ~ 60°C / 8 x Hailo-8™: -40 ~ 50°C (Passive cooling SKU)
  - 4 x Hailo-8™: -40 ~ 85°C / 8 x Hailo-8™: -40 ~ 75°C (Active cooling SKU)
- Storage Temperature: -40 ~ 85°C
- Operating Humidity: 10% ~ 95% R/H (Non-condensing)

## Dimension

Passive Cooling: 111mm (Width) x 200mm (Length) x 14mm (Height)

Active Cooling: 111mm (Width) x 200mm (Length) x 30.5mm (Height)



## Ordering Information

Model Number	AI Processor	Thermal Solution	Operating Temperature
MiAi-H8-C4-PC	4 x Hailo-8™ AI Core	Passive Heatsink Cooling	-40 ~ 60°C
MiAi-H8-C8-PC	8 x Hailo-8™ AI Core	Passive Heatsink Cooling	-40 ~ 50°C
MiAi-H8-C4-AF	4 x Hailo-8™ AI Core	Active Fan with Heatsink	-40 ~ 85°C
MiAi-H8-C8-AF	8 x Hailo-8™ AI Core	Active Fan with Heatsink	-40 ~ 75°C