



## Main Features

- Quad-core ARM® Cortex-A57 MPCore processor (AIGE101)
- 6-core NVIDIA Carmel ARM® v8.2 64-bit (AIGE102)
- NVIDIA Maxwell™ architecture with 128 CUDA cores (AIGE101)
- 384-core NVIDIA Volta GPU with 48 Tensor cores (AIGE102)
- 2 x NVDLA engines, 7-way VLIW vision (AIGE102)
- Based on NVIDIA® Jetson Nano™ (AIGE101) / Xavier NX (AIGE102)
- Support machine learning applications:
  - Tensorflow, Caffe, Paddlepaddle, Keras, TensorRT, JetPack SDK, DeepStream SDK
- Ubuntu 18.04
- 1 x M.2 2280 (Key M), 1 x M.2 3052 (Key B), 1 x Micro SD card
- 2 x USB 3.0, 2 x LAN ports, 2 x COM

## Product Overview

AIGE101/102 series, which is equipped with the NVIDIA® Jetson Nano/Xavier NX™ module. It is a small and powerful computer that can execute multiple neural networks at the same time and is suitable for image classification, object detection, segmentation and speech processing. Not only is it an easy-to-use platform, it only needs 5 watts to operate. This is a very ideal solution that can quickly produce artificial intelligence product prototypes and accelerate the time to market.

## Specifications

### CPU Support

- Quad-core ARM® Cortex-A57 MPCore processor (AIGE101)
- 6-core NVIDIA Carmel ARM® v8.2 64-bit (AIGE102)

### GPU

- NVIDIA® Maxwell architecture with 128 CUDA cores (AIGE101)
- 384-core NVIDIA® Volta GPU with 48 Tensor Cores (AIGE102)

### DL Accelerator

- 2 x NVDLA engines (AIGE102)

### Vision Accelerator

- 7-way VLIW vision processor (AIGE102)

### Main Memory

- 4GB 64-bit LPDDR4x (AIGE101)
- 8GB 128-bit LPDDR4x (AIGE102)

### Display Output

- 1 x HDMI

### I/O Interface - Front

- 2 x USB 3.0
- 2 x RJ45 LAN
- 1 x HDMI

- 1 x PWR indicator light
- 1 x SYS indicator light
- 1 x Line out
- 1 x Power switch
- 2 x Antenna reservation

### I/O Interface - Bottom

- 1 x Power connector
- 1 x GPIO (4DI & 4DO)
- 2 x COM (incomplete signal, 1 x DB9 form lead, COM1 RS-232/422/485; COM2 RS-232)
- 1 x OTG
- 1 x Recovery
- 1 x Ground screw hole

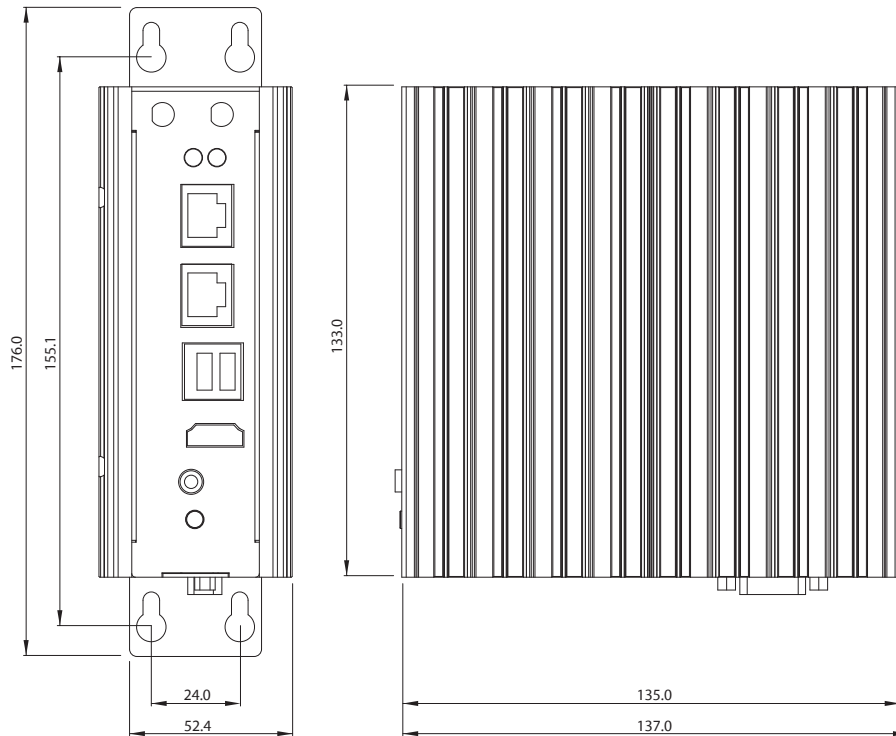
### Storage Device

- 16G eMMC

### Expansion

- 1 x Micro SD
- 1 x M.2 2280 Key M (1 x signal) (support PCIe interface)
- 1 x M.2 3052 Key B supports 5G and 4G modules
- 1 x mini-PCIe full-size slot, support mSATA
- 1 x CAN (AIGE102)

## Dimension Drawing



### Power Requirement

- DC 9~30V wide voltage

### Environment

- Operating temperature: -10°C to 60°C with air flow
- Storage temperature: -20°C to 80°C
- Working humidity: 40°C, 95% (relative humidity, non-condensing)

### Dimensions

- 137mm x 52.4mm x 176mm (L x W x H)

### Installation Method

- Wall mount, DIN-rail mount

### Certifications

- CE/FCC

### OS Support

- Linux Ubuntu v18.04

### Weight Information

- Net weight: 1.04kg

## Ordering Information

### ♦ AIGE101 (P/N: 10AIGE10100XR)

NVIDIA® Jetson Nano™ platform, Quad-core ARM Cortex-A57, 128-core NVIDIA Maxwell™ GPU

### ♦ AIGE102 (P/N: 10AIGE10200XR)

NVIDIA® Jetson Xavier™ NX platform, 6-core NVIDIA Carmel ARM®, 384-core NVIDIA® Volta GPU with 48 Tensor Cores, 2 x NVDLA engines