

# EAI-I131

Industrial Grade AI Inference System For 5G Edge  
With NVIDIA® Jetson Orin NX/Nano



## ■ Features

- NVIDIA® Jetson Orin NX/Nano
- AI Performance Up To 100 TOPS
- Up To 1024-core NVIDIA CUDA GPU With 32 Tensor Cores
- Support For 4G LTE/ 5G Sub6 & WiFi
- 2x GigE IEEE 802.3 af PoE/ at PoE+ LAN, 2x USB 2.0, 1x HDMI, 2x RS232/422/485 (Optional COM2 For CAN 2.0)
- Support NVIDIA SDK 6.2 & SuperMode (by SKU)
- TrustZone With Security Boot & OS Protected

## ■ Specifications

| Processor System    |                                                                                                                                                     |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU                 | 8-core 2.0GHz/6-core 1.5GHz<br>NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU                                                                             |
| GPU                 | Up To 1024-core NVIDIA Ampere Architecture<br>GPU With 16~32 Tensor Cores                                                                           |
| Memory              |                                                                                                                                                     |
| Technology          | 128-bit/64-bit LPDDR5                                                                                                                               |
| Capacity            | 16/8/4 GB (By SKU)                                                                                                                                  |
| Ethernet            |                                                                                                                                                     |
| Speed               | 10/100/1000 Mbps                                                                                                                                    |
| Interface           | 2x GbE RJ45                                                                                                                                         |
| PoE                 | GbE PoE LANs With Support For IEEE 802.3af/at<br>PoE(+) Under Max. 30W<br>(Surge Protection Up To 2KV)                                              |
| Storage             |                                                                                                                                                     |
| Type                | M.2                                                                                                                                                 |
| Installation        | 1x M.2 2280 M-Key NVMe (PCIe x4) default<br>128G                                                                                                    |
| I/O                 |                                                                                                                                                     |
| COM                 | 2x RS232/422/485                                                                                                                                    |
| CAN                 | Optional COM2 For CAN 2.0                                                                                                                           |
| Audio               | Line-in, Line-out                                                                                                                                   |
| USB                 | 2x USB2.0                                                                                                                                           |
| Display             | 1x HDMI 2.0A/B @ 4Kp60 With Screw Lock                                                                                                              |
| DIO                 | 4x DI (Support PNP/ NPN / Dry Contact) &<br>4x DO (Support Dry / Sink), IEC 61121-2,<br>24V With Maximum 200mA                                      |
| Reset/Power         | 1x Reset Button<br>1x Power Button                                                                                                                  |
| Expansion Interface |                                                                                                                                                     |
| M.2                 | 1x M.2 304(5)2 B-Key Socket (USB 3.0) or 5G<br>Sub-6 With Dual SIM Socket Reserved<br>1x M.2 2230 E-Key Socket (USB2.0 & PCIe) for<br>WiFi (By SKU) |
| Fanless             |                                                                                                                                                     |
|                     | Yes<br>(Fanless Design With Corrugated Aluminum)                                                                                                    |
| Cooling             |                                                                                                                                                     |
| Processor           | Passive CPU Heatsink                                                                                                                                |
| Power               |                                                                                                                                                     |
| Power Type          | ATX                                                                                                                                                 |

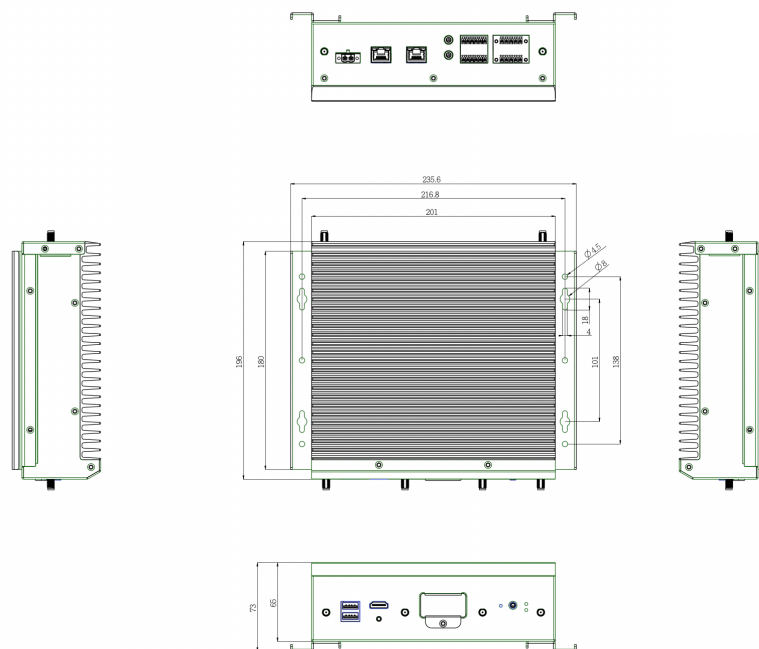
| Power Supply Voltage         | System Power Input Rated DC 12V                                   |
|------------------------------|-------------------------------------------------------------------|
| Connector                    | 1x 2-pin Terminal Block                                           |
| Environment                  |                                                                   |
| Operating Temperature        | -40°C~70°C                                                        |
| Storage Temperature          | -40°C~80°C                                                        |
| Relative Humidity            | 5%~90% Operating; 5%~95% Non-Operating                            |
| Miscellaneous                |                                                                   |
| Internal RTC with Li Battery | Yes                                                               |
| TPM                          | Onboard TPM 2.0                                                   |
| Mechanical                   |                                                                   |
| Dimension (W x D x H)        | 201 x 196 x 65mm                                                  |
| Weight                       | 2.6 kg                                                            |
| Mounting                     | Wallmount (Optional VESA mount),<br>Chassis With Intrusion Design |
| Driver Support               |                                                                   |
| Linux                        | Linux Open Source On NVIDIA SDK 6.2                               |
| Security                     |                                                                   |
| TrustZone & Security Boot:   | U-bootloader & OS Protected                                       |
| Certification                |                                                                   |
| EMC                          | CE/FCC Class A, UL                                                |

## Product I/O View



- |                        |                       |                           |                      |
|------------------------|-----------------------|---------------------------|----------------------|
| <b>A</b> 2x USB 2.0    | <b>D</b> Rest Button  | <b>G</b> DIO              | <b>J</b> Power Input |
| <b>B</b> 1x HDMI       | <b>E</b> Power on/off | <b>H</b> Line-in/Line-out |                      |
| <b>C</b> SIM Card slot | <b>F</b> 2x COM       | <b>I</b> 2x PoE           |                      |

## Dimensions (W x D x H) 201 x 196 x 65mm



## Ordering Information

- |                  |                                                                                                                                                                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EAI-1131A</b> | IPC With NVIDIA Jetson Orin NX (100 TOPs) With 16GB LPDDR5 Memory, 1x M.2 2280 M-Key (PCIe x4) with NVMe 128G, 2x GbE PoE LAN, 1x M.2 304(5)2 B-Key For 5G Sub6, 1x M.2 2230 E-Key For WiFi, 2x COM For RS232/422/485, 1x CAN 2.0 (Optional)                     |
| <b>EAI-1131B</b> | IPC With NVIDIA Jetson Orin NX (70 TOPs) With 8GB LPDDR5 Memory, 1x M.2 2280 M-Key (PCIe x4) with NVMe 128G, 2x GbE PoE LAN, 1x M.2 304(5)2 B-Key For 5G Sub6, 1x M.2 2230 E-Key For WiFi, 2x COM For RS232/422/485, 1x CAN 2.0 (Optional)                       |
| <b>EAI-1131C</b> | IPC With NVIDIA Jetson Orin Nano (40 TOPs) With 8GB LPDDR5 Memory, 1x M.2 2280 M-Key (PCIe x4) with NVMe 128G, 2x GbE PoE LAN, 1x M.2 304(5)2 B-Key For 5G sub6, 1x M.2 2230 E-Key For WiFi, 2x COM For RS232/422/485, 1x CAN 2.0 (Optional), supports SuperMode |
| <b>EAI-1131D</b> | IPC With NVIDIA Jetson Orin Nano (20 TOPs) With 4GB LPDDR5 Memory, 1x M.2 2280 M-Key (PCIe x4) with NVMe 128G, 2x GbE PoE LAN, 1x M.2 304(5)2 B-Key For 5G sub6, 1x M.2 2230 E-Key For WiFi, 2x COM For RS232/422/485, 1x CAN 2.0 (Optional), supports SuperMode |

V.2-2025.6.13

**Lanner**

© Lanner Electronics Inc. All rights reserved.  
All product specifications are subject to change without notice.  
[contact@lannerinc.com](mailto:contact@lannerinc.com) | [www.lannerinc.com](http://www.lannerinc.com)