

# IXH-AL35

Intel® Alder Lake/Raptor Lake U Series based Embedded Fanless Industrial PC



## Features

- CPU: Intel® Alder Lake/Raptor Lake U Series Processor
- Memory: Dual Channel SO-DIMM DDR4 up to 64 GB
- Display: Intel® Integrated Graphics, display via 2xHDMI®
- Ethernet: 10/100/1000Mbps
- Storage: SATA, M.2\_2242 for SATA/4G, M.2\_2280 for NVMe
- Expansion: M.2 for Wi-Fi
- Power: 9V-35V (2-Pin DC-IN Phoenix Connector)



IoT Solutions  
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Industrial Solution  
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## Introduction

The Maxtang IXH-AL35 is a compact, embedded industrial PC powered by the Intel® Alder Lake/Raptor Lake U series processor. It supports up to 64GB of dual-channel SO-DIMM DDR4 memory, providing enhanced performance and productivity. A rich I/O interface includes 2xHDMI®, 2xRJ45 gigabit network controllers, six serial ports (default 6\*RS232+COM1-2 can be set as RS485/RS422 under BIOS settings), and eight USB ports that suit various applications' requirements.

The IXH-AL35 includes a comprehensive I/O interface for easy integration and a rugged design for harsh environments. It has a long-lasting life cycle based on its stability and reliability. It is made with an aluminum enclosure that contains a fanless structure intended to protect internal components from dust and debris in a harsh industrial environment.



H/W Monitor



Watchdog

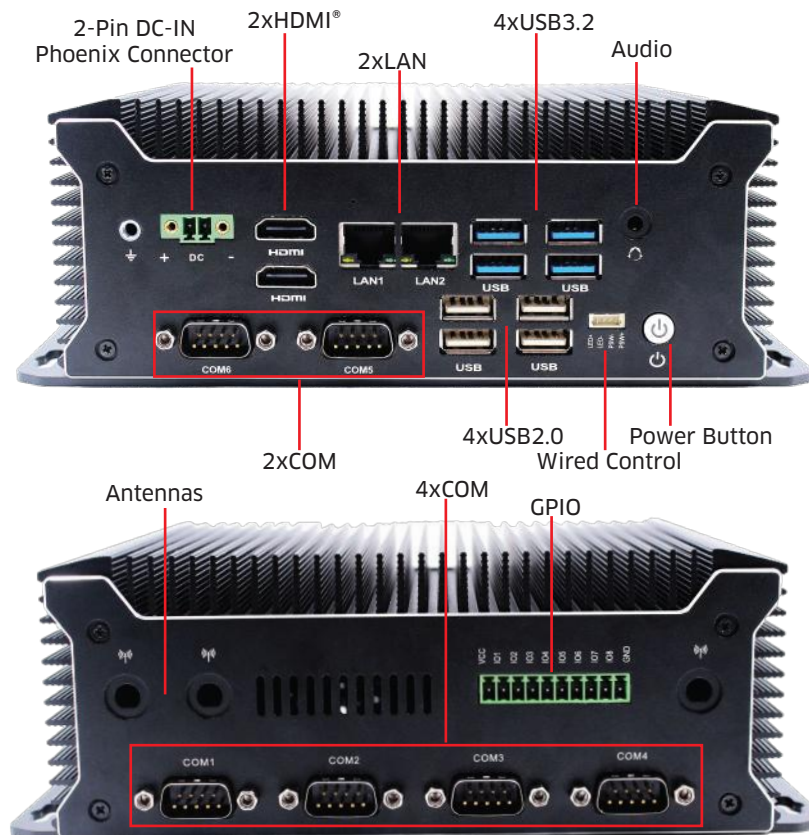


GPIO



Brightness

## I/O Interfaces

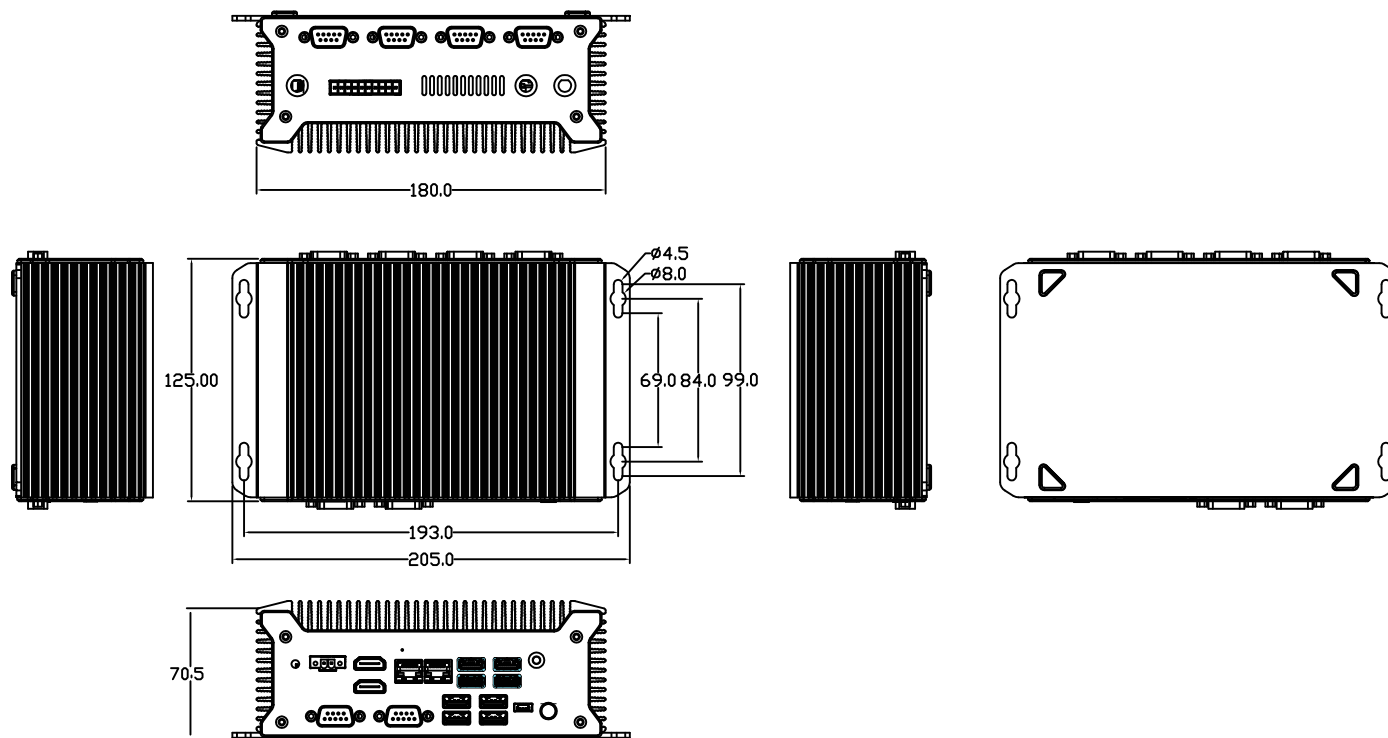


## Technical Specifications

|                  |  |  |          |          |
|------------------|--|--|----------|----------|
| Processor        | Intel® Core™ CPU   | i7-1255U   | i5-1235U | i3-1215U |
|                  | Total Cores/Threads  | 10C/12T  | 10C/12T  | 6C/8T    |
|                  | P-core Max Turbo Frequency                                   | 4.70GHz  | 4.40GHz  | 4.40GHz  |
|                  | E-core Max Turbo Frequency                                   | 3.50GHz  | 3.30GHz  | 3.30GHz  |
|                  | Intel® Smart Cache   | 12MB   | 12MB     | 10MB     |
| Memory           | BIOS   | AMI UEFI BIOS  |          |          |
|                  | Type   | Dual Channel SO-DIMM DDR4  |          |          |
| Display          | Max Capacity   | 64GB   |          |          |
|                  | GPU  | Integrated Intel® UHD Graphics/Iris® Xe Graphics eligible              |          |          |
| Ethernet         | Display via  | 2xHDMI2.0  |          |          |
|                  | Speed  | 10/100/1000Mbps  |          |          |
| Audio            | Controller   | 1x Intel® i210+1x Intel® i219  |          |          |
|                  | Interface  | 2x RJ45  |          |          |
|                  | Wake on LAN  | Yes  |          |          |
| Hardware         | Audio Codec  | Realtek HD   |          |          |
|                  | Interface  | 1xCTIA 2-in-1 Audio Jack   |          |          |
| Storage          | System temperature, Onboard voltage, Watchdog, Auto power on |  |          |          |
|                  | M.2  | 1x M.2_2242 for SATA SSD/4G Module                                     |          |          |
|                  | M.2  | 1x M.2_2280 for NVMe SSD   |          |          |
| Expansion        | SATA   | 1x SATA3.0 FPC Interface   |          |          |
|                  | M.2  | 1x M.2 for Wi-Fi, support PCIE & Intel® Integrated Connectivity (CNVi) |          |          |
| I/O Interface    | COM  | 6xCOM: default 6*RS232. The COM1_2 can be set as RS485/RS422 in BIOS   |          |          |
|                  | The COM5, COM6 are 2-wire serial communication               |  |          |          |
|                  | USB2.0   | 4x USB2.0  |          |          |
|                  | USB3.0   | 4x USB3.2  |          |          |
|                  | GPIO   | 8-bit  |          |          |
|                  | Wired Control  | 1  |          |          |
| Dimension        | Size   | 205mm x 125mm x 70.5mm   |          |          |
| Power            | Standard Input   | 9V-35V. 2-Pin DC-IN Phoenix Connector                                  |          |          |
|                  | Peripheral Input   | For Fan and SATA   |          |          |
|                  | LED Indicator  | Power indicator  |          |          |
| Temperature      | Operating Temp.  | -20°C to 60°C  |          |          |
|                  | Storage Temp.  | -40°C to 80°C  |          |          |
| Cooling          | Passive  |  |          |          |
| Operating System | Win10/11 64bit, Linux 64 bit                                 |  |          |          |

\*All specifications and photos are subject to change without notice.

## Dimensions



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