# EAI-V330

**Fanless In-vehicle AI Inference System with Intel® Atom™ X6000 series Processors**

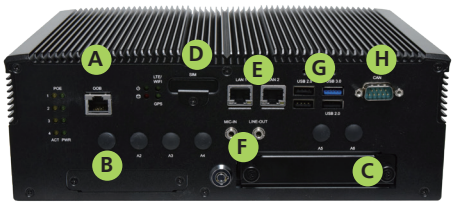
## Features

- Intel® Atom™ X6000 Series Processor (codename: Elkhart Lake-I)
- 1x SODIMM DDR4, Up to 32GB
- eMMC 128GB, 1x SATA
- 1x PGN Series Removable Caddy, 1x M.2 304(5)2 B Key socket (USB 3.0/PCIe x1) for 4G LTE/ 5G sub6, 1x M.2 2230 E key socket for Wi-Fi
- 7x RJ45 ports (2x GbE LAN w/I210IT, 4x PoE+w/1x i210IS, 1x OOB (by SKU)
- 3x USB 2.0, 1x USB 3.0, 2x HDMI, 1x TPM 2.0

## Specifications

| | |
|---|---|
| **Processor System** | |
| CPU | Intel® Atom™ x6425E/x6413E/x6211E Processors, 12W/9W/6W (codename: Elkhart Lake-I) |
| Frequency | 2.0 GHz/1.5 GHz/1.3 GHz |
| Core Number | Quad-core |
| BIOS | AMI SPI Flash BIOS |
| Chipset | SoC |
| Graphic Processor | Intel® UHD Graphics |
| **Fanless** | |
| | Yes |
| **Memory** | |
| Technology | 1x SODIMM DDR4/x 3200MT/s |
| Max. Capacity | Up to 32GB (Default 16G/8G/4G by SKU) |
| Socket | 1x 260pin SODIMM |
| **Ethernet** | |
| Controller | Intel® i210IT |
| Interface | 6x RJ45, 1x OOB Port (By SKU) |
| PoE | 4x IEEE 802.3af PoE Ports/ 2x at PoE+ Ports (Under Max. 60W Power Budget) |
| **Audio** | |
| Controller | 92HD73E1 |
| Interface | 1x Mic-in & 1x Line-out |
| **Storage** | |
| Type | SATA |
| Installation | 1x SATA (removable 2.5” storage bay) |
| Type | eMMC |
| Installation | Onboard eMMC 128GB |
| **I/O** | |
| Display | 2x HDMI with screw lock |
| LAN | 7x RJ45 Ports (2x GbE LAN w/ i210IT, 4x PoE+ w/ 1x i210IS, 1x OOB by SKU) |
| CAN | 1x CAN 2.0 |
| COM | 2x RS-232/422/485 |
| USB | 3x USB 2.0 Type A, 1x USB 3.0 Type A |
| GNSS/G-sensor | u-blox NEO-M9N/ ADXL 345 |
| Digital I/O | 12V, 4x DI (support PNP/NPN/dry contact) & 24V, 2x DO (support dry/ sink), 1x IGN_DI to MCU |
| Antenna | 5x SMA antenna hole (includes GNSS) |
| **Expansion** | |
| M.2 | 1x M.2 304(5)2 B Key socket (USB 3.0/ PCIe x1) for 4G LTE/ 5G sub6, (In/Out-of-Band Management by SKU)<br>1x M.2 2230 E key Socket for Wi-Fi |
| **Cooling** | |
| Processor | Passive CPU heatsink |
| System | Fanless design with corrugated aluminum |
| **Environment** | |
| Operating Temperature | -40~70°C / -40~158°F |
| Storage Temperature | -40~85°C / -40~185°F |
| Relative Humidity | 5%~90% Operating; 5%~95% Non-Operating |
| **Miscellaneous** | |
| Hardware Monitoring | Yes |
| Internal RTC with Li Battery | Yes |
| **Mechanical** | |
| Dimension (W x D x H) | 273.8 x 185 x 98 mm |
| Weight | 4.5 kg |
| Mounting | wall mount kit |
| **Power** | |
| Connector | 3-pin terminal block (+,-,ignition) |
| Input | Supports DC 12~48V |
| **Driver Support** | |
| Microsoft Windows | Windows 10/11 IoT |
| Linux | inux kernel 2.6.X or later, Ubuntu 20.04 or later, Debian 10 |
| **Certification** | |
| EMC | FCC/CE Class A, UKCA, E13, RoHS |
| Certified | UL/cUL (UL-62368-1) & CB (DC 24V~60V only), MIL-STD-810G |
| RoHS | RoHS 3 |

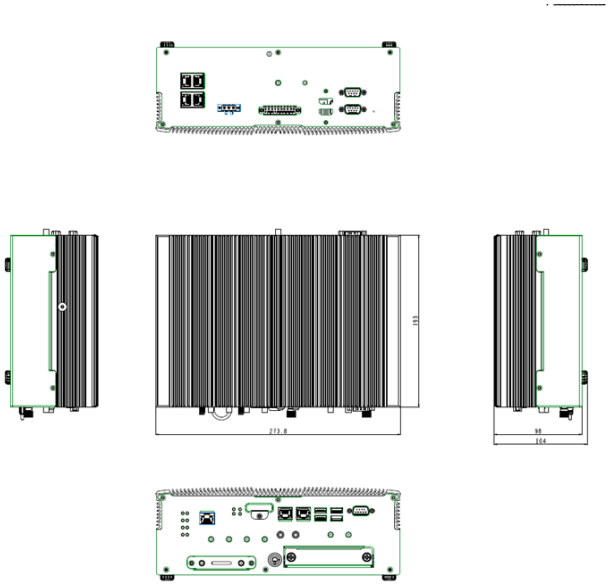
# Product I/O View





| | | | | |
|---|---|---|---|---|
| A OOB | D SIM | G USB | J COM | M Power input |
| B PGN caddy | E RJ45 LAN | H CAN | K HDMI | N PoE |
| C Removable Drive Bay | F Audio | I Reset button | L DIO | O GPS |

# Dimensions 273.8 x 185 X 98 mm



# Ordering Information

| | |
|---|---|
| **EAI-V330A** | Intel Atom® x6425E 4C/4T 2.0GHz 12W, LPDDR4/x 3200MT/s 16GB (up to 16GB), In/Out-of-Band Management<br>Default "USB 3.0" for M.2 304(5)2 B Key socket x1 (USB 3.0/PCIe x1) for 4G LTE/ 5G sub6 with dual SIM socket reserved. |
| **EAI-V330B** | Intel Atom® x6413E 4C/4T 1.5GHz 9W, LPDDR4/x 3200MT/s 8GB (up to 16GB)<br>Default "USB 3.0" for M.2 304(5)2 B Key socket x1 (USB 3.0) for 4G LTE/ 5G sub6 with dual SIM socket reserved. |
| **EAI-V330C** | Intel Atom® x6211E 2C/2T 1.3GHz 6W LPDDR4/x 3200MT/s 4GB (up to 16GB)<br>Default "USB 3.0" for M.2 304(5)2 B Key socket x1 (USB 3.0) for 4G LTE/ 5G sub6 with dual SIM socket reserved. |
| **EAI-V330H** | Intel Atom® x6425E 4C/4T 2.0GHz 12W, LPDDR4/x 3200MT/s 16GB (up to 16GB), In/Out-of-Band Management<br>Default "PCIe x1" for M.2 304(5)2 B Key socket x1. |
| **PGN-300** | 4G LTE Radio Modem with LTE Cat-6 embedded module, certified with PTCRB, AT&T, Verizon |
| **PGN-600** | 4G LTE-Advanced Pro Radio Modem with LTE Cat-12 embedded module, certified with PTCRB, AT&T |
| **PGN-750B** | Swappable 5G Quectel RM500Q-AE module with antenna/cable kit |
| **CAN Bus** | CAN Bus 77MT36478 |



V.1-2025.4.24



contact@lannerinc.com | www.lannerinc.com