



FANLESS MINI COMPUTER

## BCO-1000-ADLN\_2L

Basic Fanless Embedded Computer with Intel 12th<sup>®</sup> CPU, 1x DP, 2x COM, 2x LAN, 1x 2.5" Drive Bay

## Features

- Support 12th Gen Intel<sup>®</sup> IoTG Alder Lake-N Processor N97, QC, 12W
- DDR5 SODIMM. Max. up to 16GB (Default: 8GB)
- Dual Independent Display by 1x Display Port, 1x HDMI
- 2x Intel<sup>®</sup> I225-V 2.5GbE LAN
- 1x 2.5" Drive Bay
- 1x M.2 (B Key, (2242/ 2280/ 3042) (Default: 128GB M.2 SSD)
- 2x COM, 2x USB 3.2 Gen2, 2x USB 3.2 Gen1, 2x USB 2.0
- 9 to 36VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature 0°C to 50°C (12W CPU)
- TPM 2.0 Supported
- CE, FCC Class A



## Specifications

System	
Processor	Support 12th Gen Intel <sup>®</sup> IoTG Alder Lake-N Processor N97, QC, 12W
System Chipset	SoC integrated
LAN Chipset	2x Intel <sup>®</sup> I225-V 2.5GbE LAN
Audio Codec	Realtek ALC897
System Memory	DDR5 4800MT/s SODIMM. Max. up to 16 GB (Default: 8GB)
Graphics	Intel <sup>®</sup> UHD Graphics
BIOS	AMI UEFI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0
Display	
Display Port	1x DisplayPort 1.4a Max Resolution 4096 x 2304 @60Hz
HDMI	1x HDMI 1.4b Max Resolution 3840 x 2160 @30Hz
Multiple Display	2x Independent Displays
Storage	
M.2 B-Key	Default: 128GB SSD through M.2 B Key slot
SATA	1x 2.5" Drive Bay (7mm or 9mm)
Expansion	
M.2 B-Key	1x M.2 B key Type: 2242/3042/2280 • Support PCIe x1/SATA 3.0 signal, Auto detect • Support B+M Key for AI/Storage
M.2 E-Key	1x M.2 E Key slot (2230) (Support PCIe x1 & USB 2.0; Support CNVi) Devices Supported: Intel <sup>®</sup> AX210 Wi-Fi 6E & BT-5.1 (vPro Supported)
I/O	
Audio	Line-in/Line-out/Mic-in
COM	2x DB9 COM1: RS232/422/485 COM2: RS232"
GPIO	8x GPIO
LAN	2x RJ45 (2.5GbE)
USB	2x USB 3.2 Gen2 2x USB 3.2 Gen1 2x USB 2.0 Type-A
Others	2x Antenna Holes 1x Power button 1x HD LED 1x Power LED
Operating System	
Windows	Windows 10/11
Linux	Linux Kernel
Power	
Power Adapter	Optional AC/DC 24V/9.2A, 60W
Power Mode	AT, ATX (Default ATX)
Power Supply Voltage	9~36VDC
Power Connector	3-pin Terminal Block

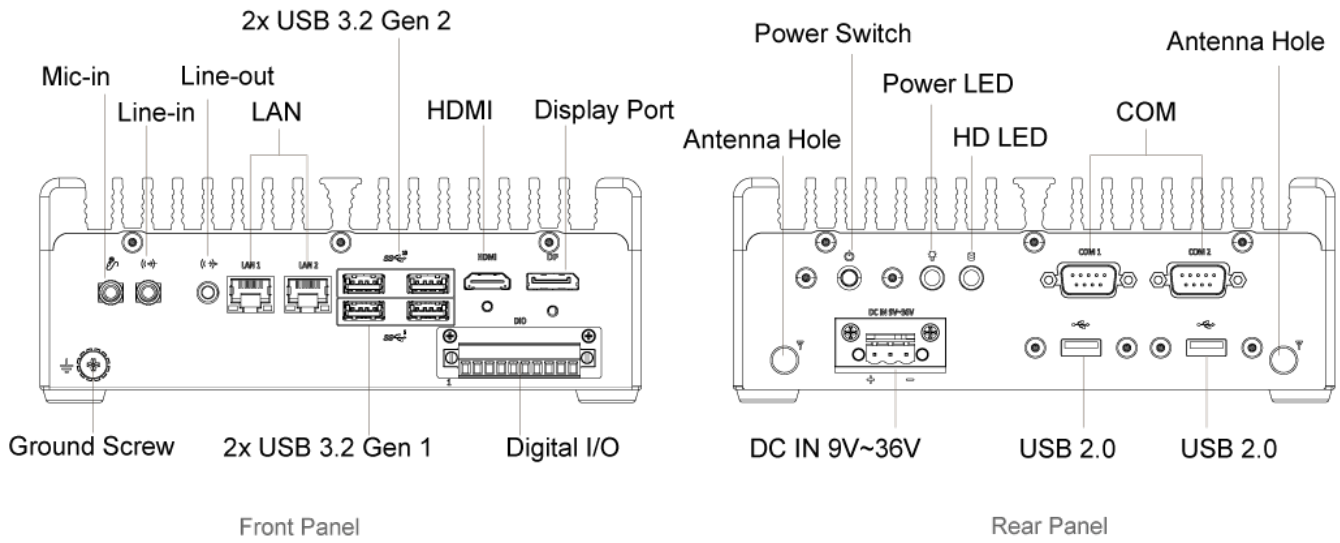
## Environment

Operating Temperature	0°C to 50°C (12W CPU) Tested according to: IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
Storage Temperature	-30°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Certification	EMC: • CE • FCC Class A (47 CFR part 15.109 and part 15.107) • ICES-003 • UKCA Green Product: • RoHS 3.0 (Directive 2015/863/EU) • REACH
Vibration	IEC60068-2-64:2008 With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) Designed to comply with MIL-STD-810G Method 514.7 Procedure I
Shock	IEC60068-2-27:2008 With SSD: 50G half-sin 11ms Designed to comply with MIL-STD-810G Method 514.7 Procedure I Package Drop Test: ISTA 2A

## Physical

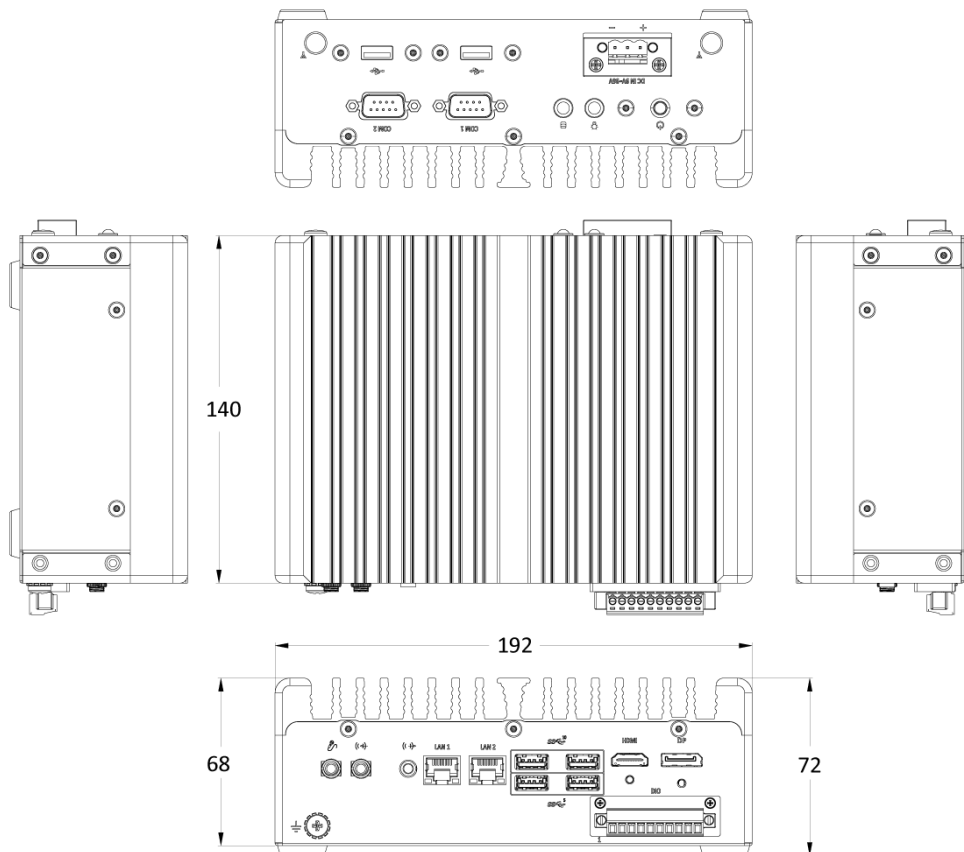
Dimensions (WxDxH)	192 x 140 x 68mm
Weights	1.5kg
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting DIN-Rail Mounting (Optional)

## External I/O Mechanical Layout



## Dimension

Unit: mm



## Available Models

Model No.	Description
BCO-1000-ADLN_2L	Basic Fanless Embedded Computer with Intel 12th® CPU, 1x DP, 2x COM, 2x LAN, 1x 2.5" Drive Bay

## Optional Accessories

Model No.	Description
1-E09A06008	Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch
1-TPCD00005	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm
3-DINR-0004	Din Rail-2 Mounting Kit

## Packing List

1x BCO-1000-ADLN\_2L Fanless Mini Computer  
1x Wall Mount Kit  
1x Accessory Kit