

# IBOX-601-9L2C4P



- Equipped with desktop-class high-performance CPU
- Full aluminum alloy anti-interference structure
- Modular parts design with strong scalability
- Fully enclosed with fanless cooling system
- Cable-free design for better vibration resistance
- Scientific and reasonable interface layout
- Double board design with diverse interfaces



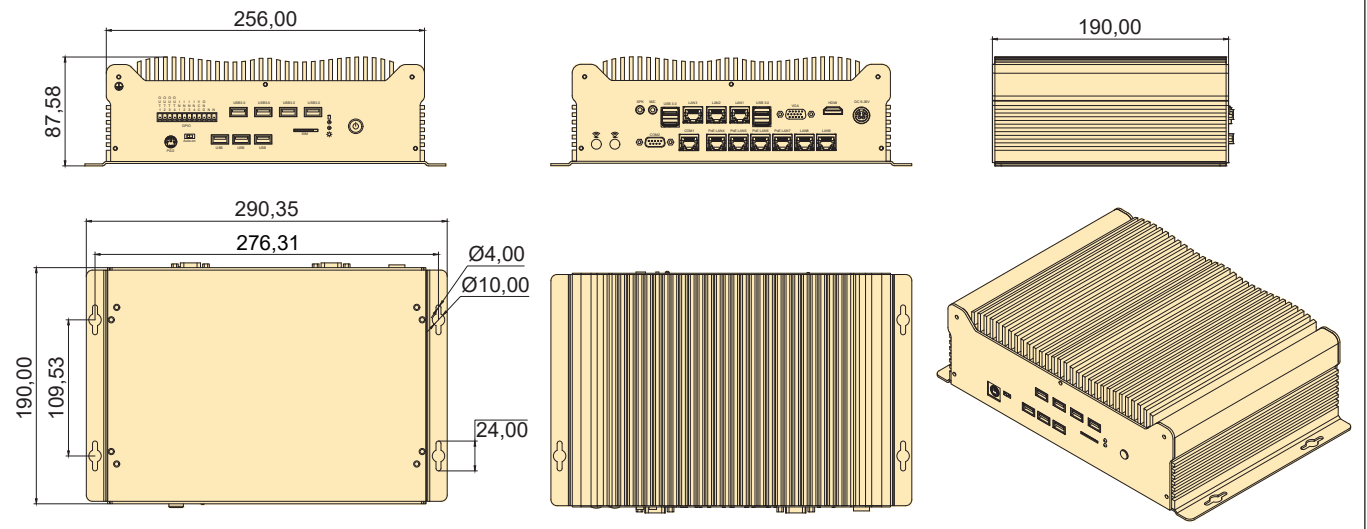
The actual appearance is subject to the final configuration.

## Specifications

|                                 |   |  |                                 |
|---------------------------------|---|--|---------------------------------|
| <b>Model</b>                    | IBOX-601-9L2C4P   |  |                                 |
| <b>Supported OS</b>             | Win 7, Win 8, Win 10, Win 11, Linux (Ubuntu, Debian, Kali, CentOS, etc.); WES 7; Win 10 IoT |  |                                 |
| <b>Chipset</b>                  | Intel® Z370 Chipset   |  |                                 |
| <b>CPU</b>                      | Processor Socket  | Intel® Desktop Processors Socket LGA1151   |                                 |
|                                 | Series  | 6th Gen. Intel® Core™ Processor  | Intel® Celeron® G4900 Processor |
|                                 | TDP   | Up to 65W  | 54W                             |
|                                 | Graphic   | Intel® HD Graphics 530   | Intel® UHD Graphics 610         |
| <b>RAM</b>                      | Type&Qty  | 2* SO-DIMM Socket  | 2* SO-DIMM Socket               |
|                                 | Frequency   | DDR4-1866/2133 MHz   | DDR4-2400 MHz                   |
|                                 | Capacity  | Up to 32GB   | Up to 32GB                      |
| <b>Storage Device</b>           | SATA  | 1* 2.5" SATA3.0 Bay on board (6Gb/s); 3* SATA3.0 connectors (6Gb/s), Support RAID (0/1/5)  |                                 |
|                                 | MSATA   | 1* mSATA3.0 slot on board (6Gb/s)  |                                 |
|                                 | M.2   | 1* M.2 (NGFF) 2280 M-key slot, support PCIe4 Gen.3 NVMe/ SATA3.0 SSD   |                                 |
| <b>I/O Interface</b>            | COM   | 1* RS232/485 with RJ45 connector, 1* RS232/485 with DB9 connector, switchable by jumper  |                                 |
|                                 | Ethernet  | 4* Intel® i211 GbE PoE LAN, RJ45 connector;<br>5* Intel® i211 GbE LAN, RJ45 connector (One of GbE LAN is shared with Mini-PCIe's PCIe signal)  |                                 |
|                                 | USB   | 8* USB 3.0; 3* USB2.0; 1* Internal USB2.0  |                                 |
|                                 | Video   | 1* HDMI, Support 4096x2304@24Hz, (Optional 1* DP, Support 4096 x 2304@60Hz);<br>1* VGA, Support 1920x1200@60Hz;  |                                 |
|                                 | Audio   | 1* MIC, 1* SPK; With 5.1 channels HD Audio Codec Realtek ALC662  |                                 |
|                                 | SIM   | 1* External SIM card slot connected to Mini-PCIe   |                                 |
|                                 | Power Supply  | 9V-36V DC; 1* 4-Pin DC Power Jack (Circular DIN Connectors, Full-Shield)   |                                 |
|                                 | Other   | 1* 8-bit GPIO (4-Inputs/4-Outputs, 0-5V Input Range) and 1* Remote Switch on Terminal Block (12-Pin, 3.81mm).<br>1* PS/2 for keyboard/ mouse; 1* Auto-On Switch; 1* TPM header (2*8-pin) |                                 |
| <b>Extended Capabilities</b>    | Additional Internal Interface   | 1* Full Size Mini-PCIe with SIM card slot; (PCIe+USB2.0, PCIe signal is shared with a LAN port);<br>1* M.2 2230 E-key Slot (PCIe+USB2.0, support WiFi+BT)                                |                                 |
| <b>Environment</b>              | Operating Temperature   | -10 ~ 55 °C w/ 0.7m/s Airflow  |                                 |
|                                 | Storage Temperature   | -40 ~ 85 °C (-40~185 °F)   |                                 |
|                                 | Relative Humidity   | 40 °C @ 95%, Non-Condensing  |                                 |
| <b>Physical Characteristics</b> | Dimensions  | 290.35* 87.58* 186 mm (W* H* D)  |                                 |
|                                 | Net Weight  | 3.9 KG   |                                 |
| <b>Regulation</b>               | EMC   | CE/FCC Class B, CCC  |                                 |
|                                 | Safety  | CE-LVD, RoHS, CCC  |                                 |

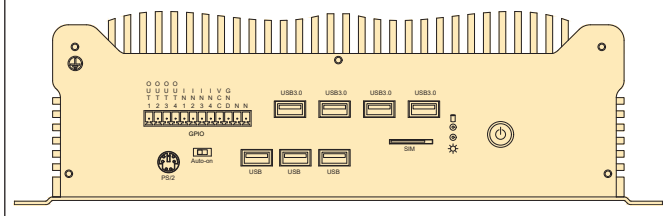
Dimension

Unit:mm

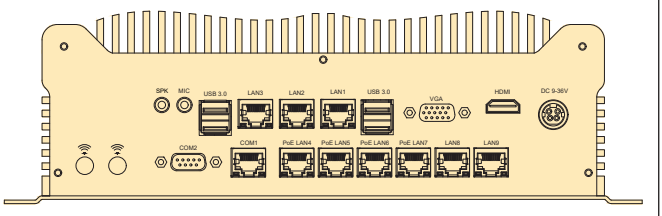


The actual appearance and dimensions are subject to the final configuration

Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

| SO-DIMM Socket | M.2 2280 M-key Slot | mSATA3.0 Slot   | SATA3.0 Connector | Full Size Mini-PCle | M.2 2230 E-key Slot | COM | PoE GbE LAN            | GbE LAN |            |                |              |
|----------------|---------------------|-----------------|-------------------|---------------------|---------------------|-----|------------------------|---------|------------|----------------|--------------|
| 2              | 1                   | 1               | 4                 | 1                   | 1                   | 2   | 4                      | 5       |            |                |              |
| USB 2.0        | USB 3.0             | Internal USB2.0 | HDMI Or DP        | VGA                 | MIC                 | SPK | External SIM Card Slot | PS/2    | 8-bit GPIO | Auto-On Switch | Power Supply |
| 3              | 8                   | 1               | 1                 | 1                   | 1                   | 1   | 1                      | 1       | 1          | 1              | DC 9-36V     |

Processors Info & Available List

| CPU                   | Code Name   | Total Cores | Total Threads | Max Turbo Frequency | Base Frequency | Cache                    | TDP  | Memory Types | Integrated Graphics     |
|-----------------------|-------------|-------------|---------------|---------------------|----------------|--------------------------|------|--------------|-------------------------|
| Intel® Core™ i3-6100  | Skylake     | 2           | 4             | -                   | 3.70 GHz       | 3 MB Intel® Smart Cache  | 51 W | DDR4         | Intel® HD Graphics 530  |
| Intel® Core™ i5-6500  | Skylake     | 4           | 4             | 3.60 GHz            | 3.20 GHz       | 6 MB Intel® Smart Cache  | 65 W | DDR4         | Intel® HD Graphics 530  |
| Intel® Core™ i7-6700  | Skylake     | 4           | 8             | 4.00 GHz            | 3.40 GHz       | 8 MB Intel® Smart Cache  | 65 W | DDR4         | Intel® HD Graphics 530  |
| Intel® Celeron® G4900 | Coffee Lake | 2           | 2             | -                   | 3.10 GHz       | 2 MB Intel® Smart Cache  | 54 W | DDR4         | Intel® UHD Graphics 610 |
| Intel® Core™ i3-7100  | Kaby Lake   | 2           | 4             | -                   | 3.90 GHz       | 3 MB Intel® Smart Cache  | 51 W | DDR4         | Intel® HD Graphics 630  |
| Intel® Core™ i5-7400  | Kaby Lake   | 2           | 4             | 3.50 GHz            | 3.00 GHz       | 6 MB Intel® Smart Cache  | 65 W | DDR4         | Intel® HD Graphics 630  |
| Intel® Core™ i7-7700  | Kaby Lake   | 4           | 8             | 4.20 GHz            | 3.60 GHz       | 8 MB Intel® Smart Cache  | 65 W | DDR4         | Intel® HD Graphics 630  |
| Intel® Core™ i3-8100  | Coffee Lake | 4           | 4             | -                   | 3.60 GHz       | 6 MB Intel® Smart Cache  | 65 W | DDR4         | Intel® UHD Graphics 630 |
| Intel® Core™ i5-8500  | Coffee Lake | 6           | 6             | 4.10 GHz            | 3.00 GHz       | 9 MB Intel® Smart Cache  | 65 W | DDR4         | Intel® UHD Graphics 630 |
| Intel® Core™ i7-8700  | Coffee Lake | 6           | 12            | 4.60 GHz            | 3.20 GHz       | 12 MB Intel® Smart Cache | 65 W | DDR4         | Intel® UHD Graphics 630 |
| Intel® Core™ i3-9300  | Coffee Lake | 4           | 4             | 4.30 GHz            | 3.70 GHz       | 8 MB Intel® Smart Cache  | 62 W | DDR4         | Intel® UHD Graphics 630 |
| Intel® Core™ i5-9400  | Coffee Lake | 6           | 6             | 4.10 GHz            | 2.90 GHz       | 9 MB Intel® Smart Cache  | 65 W | DDR4         | Intel® UHD Graphics 630 |
| Intel® Core™ i7-9700  | Coffee Lake | 8           | 8             | 4.70 GHz            | 3.00 GHz       | 12 MB Intel® Smart Cache | 65 W | DDR4         | Intel® UHD Graphics 630 |
| Intel® Core™ i9-9900  | Coffee Lake | 8           | 16            | 5.00 GHz            | 3.10 GHz       | 16 MB Intel® Smart Cache | 65 W | DDR4         | Intel® UHD Graphics 630 |

All products and company name listed are trademarks or trade names of their respective companies.

!!! Note: For more interface configuration or available processors, please consult the sales.

## Packing list

| Default Items           | Qty |
|-------------------------|-----|
| IBOX-601-9L2C4P Unit    | 1   |
| AC-to-DC Adapter        | 1   |
| Power cable 3-pin 150cm | 1   |

## Options for default items

| Optional Items                    | Qty |
|-----------------------------------|-----|
| Power cable 3-pin 150cm, USA type | -   |
| Power cable 3-pin 150cm, EU type  | -   |
| Power cable 3-pin 150cm, UK type  | -   |
| Swappable hard-drive bracket kit  | -   |

## Optional accessories or internal modules for unit

| Optional Items                                  | Max Qty | Description  |
|---|---------|--|
| Isolated 8-bit GPIO, 9-24V                      | 1       | Digital signal, Phoenix Terminal connector, connected by non-standard M.2 interface          |
| Isolated 8-bit GPIO with current loading, 9-26V | 1       | Digital signal, Phoenix Terminal connector, connected by non-standard M.2 interface          |
| Isolated 15-bit GPIO, 0-5V                      | 1       | Digital signal, Phoenix Terminal connector, connected by non-standard M.2 interface          |
| Isolated 15-bit GPIO with 7-in & 8-out, 12-24V  | 1       | Digital signal, Phoenix Terminal connector, connected by non-standard M.2 interface          |
| 4G Module                                       | 1       | Connected by Mini-PCIe interface   |
| WiFi Module without AP mode                     | 1       | Connected by Mini-PCIe interface, M.2 interface or internal USB interface                    |
| WiFi Module with AP mode                        | 1       | Connected by Mini-PCIe interface   |
| Dual channel CAN-Bus Module                     | 2       | Connected by Mini-PCIe or M.2 interface  |
| Ignition Switch Module                          | 1       | Phoenix Terminal connector, connected by internal power switch and 4-pin ATX power connector |

!! Note: As this product has expansion slots, please consult sales for the specific maximum number of expandable interfaces.