

# iSBX-TS1010-J6412A

Intel® Elkhart Lake J6412 Quad-core processor,  
Fanless Embedded Computer with 2x HDMI / 6x  
USB / 2x GIGA LAN



## FEATURES

- Rugged & compact sealed aluminum box design
- Onboard Intel® Elkhart Lake J6412 Quad-core processor
- 2x Intel® GLAN, expansional with 3G/ 4G/ LTE, Wi-Fi/Bluetooth wireless
- No Serial port
- 3x USB3.0, 3x USB2.0 high speed interfaces
- DC 12V power range, with over-current and over-voltage and polarity reverse protection
- I/O: 2x GLAN, 3x USB3.0, 3x USB 2.0, 2x HDMI, Mic-in/Line-out

## Introduction

iSBX-TS1010-J6412A is a new palm-sized fanless Box PC model, it adapts Intel® Elkhart Lake J6412 Quad-core CPU, having advanced computing performance and low power consumption. iSBX-TS1010-J6412A storage can support 1x M.2 NVMe SSD; The design has rich IO interfaces, with 2x LAN ports, 3x USB3.0, 3x USB2.0, 2\*HDMI and 1x Audio ports; The power input is DC 12V voltage, and has over-current, over-voltage and reverse-polarity protection.

iSBX-TS1010-J6412A operating temp. is -20°C~+60°C, can be suitable for longer-time operating and harsh environment industrial application projects. iSBX-TS1010-J6412A can be compatible with Windows10, Windows 11, Linux Operating system and embedded Operating system, and it is also compatible with application software based on those operating systems.

## Specification

System	
Processor	<ul style="list-style-type: none"> <li>• Intel Elkhart Lake J6412, Quad-core 2.0Ghz processor, burst to 2.6Ghz</li> <li>• TDP 10W</li> </ul>
BIOS	<ul style="list-style-type: none"> <li>• SPI AMI EEI BIOS</li> </ul>
Memory	<ul style="list-style-type: none"> <li>• SO-DIMM, DDR4-2666/2933/3200 Mhz, Max. up to 32GB</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• 1x M.2 2280 M-Key slot (PCIe Gen-IV x4, NVMe) SSD</li> </ul>
Graphic	<ul style="list-style-type: none"> <li>• Intel Iris Xe Graphics (Up to 96EUs, 1.40Ghz)</li> </ul>
Network	<ul style="list-style-type: none"> <li>• 1x Intel i219V, 1x Intel i226V, optional support 3G/4G/5G/Wi-Fi/BT Wireless</li> </ul>
Audio	<ul style="list-style-type: none"> <li>• On-board Realtek ACL897 Audio controller</li> </ul>
Expansion	<ul style="list-style-type: none"> <li>• 1x M.2 3052 B-key slot (4G/5G), 1x M.2 2230 E-Key (Wi-Fi/BT)</li> </ul>
TPM	<ul style="list-style-type: none"> <li>• Intel® PTT TPM2.0</li> </ul>
Watchdog	<ul style="list-style-type: none"> <li>• 0~255 seconds programmable</li> </ul>
Operating system	<ul style="list-style-type: none"> <li>• Windows 10/11, Linux</li> </ul>

IO Interface	
COM	<ul style="list-style-type: none"> <li>• No COM</li> </ul>
Network	<ul style="list-style-type: none"> <li>• 2x RJ45, 10/100/1000 Mbps</li> </ul>
Audio	<ul style="list-style-type: none"> <li>• 1x Mic-in/Line-out (2-in-1 Jack)</li> </ul>
USB	<ul style="list-style-type: none"> <li>• 3x USB3.0, 3x USB2.0</li> </ul>
Display	<ul style="list-style-type: none"> <li>• 2x HDMI</li> </ul>
Power Input	<ul style="list-style-type: none"> <li>• DC Jack, lockable 5.5 * 2.5</li> </ul>
GPIO	<ul style="list-style-type: none"> <li>• Optional GPIO</li> </ul>

Structure	
Structure and surface	<ul style="list-style-type: none"> <li>• Aluminium alloy, anodizing and anti-scratch treatment</li> </ul>
Cooling System	<ul style="list-style-type: none"> <li>• Finned aluminium heatsinks</li> </ul>
Color	<ul style="list-style-type: none"> <li>• Black</li> </ul>
Indicator	<ul style="list-style-type: none"> <li>• Power Switch/ Power LED/ HDD LED</li> </ul>
Mounting	<ul style="list-style-type: none"> <li>• Desktop, wall mount, optional with Din-rail mount</li> </ul>
Dimension	<ul style="list-style-type: none"> <li>• 168.4 x 110 x 45 (mm)</li> </ul>
Net weight	<ul style="list-style-type: none"> <li>• About 0.85 Kg</li> </ul>

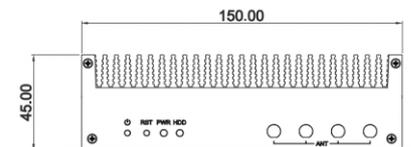
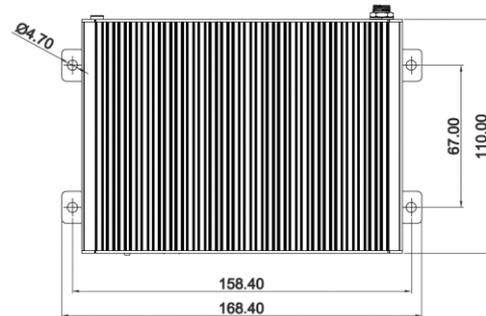
Mechanical & Environment	
Voltage Input	<ul style="list-style-type: none"> <li>• DC 12V</li> </ul>
Power Consumption	<ul style="list-style-type: none"> <li>• 20W</li> </ul>
EMC	<ul style="list-style-type: none"> <li>• CE/FCC/RoHS</li> </ul>
Working temperature	<ul style="list-style-type: none"> <li>• -20 ~ + 60 (°C)</li> </ul>
Storage temperature	<ul style="list-style-type: none"> <li>• -40 ~ + 70 (°C)</li> </ul>
Relative humidity	<ul style="list-style-type: none"> <li>• 10~95%@10°C (No condensation)</li> </ul>
Vibration	<ul style="list-style-type: none"> <li>• 50~500Hz,1.5G,0.15mm peak to peak</li> </ul>
Shock	<ul style="list-style-type: none"> <li>• 10G/Peak (11 ms)</li> </ul>

## Ordering Information

iSBX-TS1010-J6412A	Intel® Elkhart Lake J6412 Quad-core processor, Fanless Embedded Computer with 2x HDMI / 6x USB / 2x GIGA LAN / DC 12V Input
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Rear View



Dimension