

# SBOX-2321

Intel Atom® x6416RE Quad-core Processor w/ 2x LAN/ 1x DP / 1x DVI-D/ 2x COM/ DC-IN 9-36V Embedded Computer

## Features

- Intel® Atom® x6416RE Quad-core Processor
- Dual Display Output (1 x DP / 1 x DVI-D)
- 2 x 2.5GbE for Embedded IoT Connection
- 3 x M.2 & 1 x mPCIe Slots for Wi-Fi / WWAN / GPS / CAN Expansion
- Wide Operating Temperature -40 ~ 70°C
- Dual SIM for Network Redundancy
- Industrial Fanless Design



## Introduction

The SBOX-2321 is a state-of-the-art embedded computer system, fueled by the robust Intel Atom® x6416RE Quad-core Processor. With dual display output capabilities, including 1 x DisplayPort and 1 x DVI, it promises consistent and efficient computing, tailored for real-time operations pivotal in Industrial IoT setups.

The system is also equipped with 2 x 2.5GbE Ethernet ports, ensuring optimal connectivity, and is TSN (Time-Sensitive Networking) hardware-ready, indicating its preparedness for synchronized operations across devices. Its design also boasts three M.2 and one mPCIe slots, enhancing its versatility for Wi-Fi, WWAN, GPS, and CAN expansions. Its reputation as a comprehensive solution for varied industrial needs.

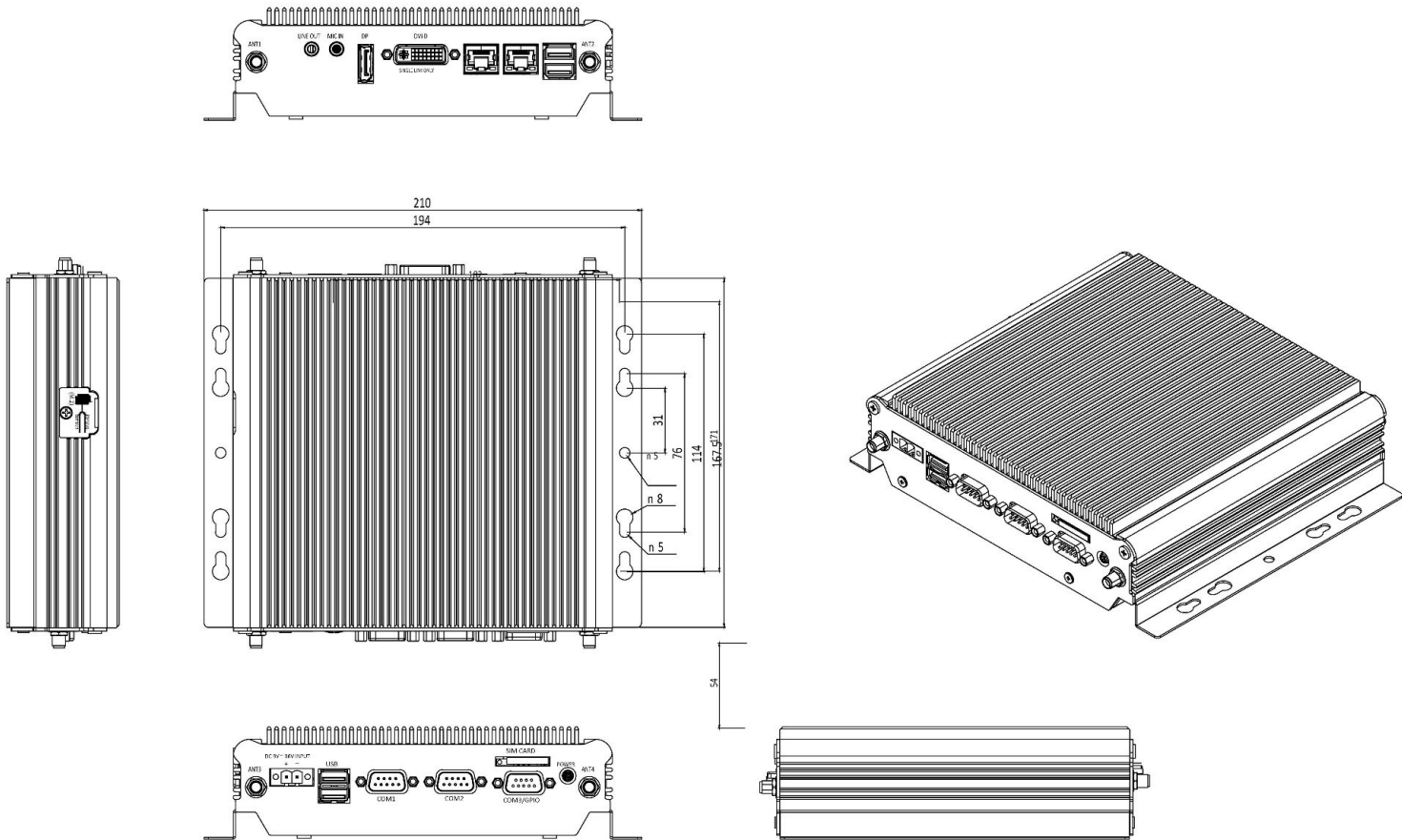
## Specifications

System	
CPU	Intel® Atom® x6416RE Quad-core Processor
Memory	1 x SO-DIMM-260 Socket supports DDR4-3200 up to 32 GB
Graphics	Integrated Intel® UHD up to 16 EUs
Ethernet	2 x Intel® 2.5GbE support 10/100/1000/2500BASE-T (TSN H/W Ready)
Watchdog	1 ~ 255 Level Reset Setting
Security	Infineon® TPM 2.0
I/O	
Ethernet	2 x RJ-45 for 2.5GbE
USB	2 x USB 3.2 10 Gbps 2 x USB 2.0
Video Output	1 x DP / 1 x DVI-D (*Single-link cable only)
Audio	2 x 3.5mm TRS Jack for Stereo MIC-in and Line-out
Serial Port	2 x RS-232/422/485 (the 3rd for optional)
GPIO Port	1 x DB-9 for 4 x DI / 4 x DO (5V / 100mA)
Expansion	1 x M.2 2230 Key E Slot 1 x M.2 3042/52 Key B Slot 1 x mPCIe Slot
Telecom Support	2 x SIM Card Slots 4 x Pre-cutting SMA Antenna Holes

Software	
OS Support	Windows 10 IoT LTSC 64-bit, Windows 11 IoT 64-bit, Ubuntu 22.04 LTS 64-bit
Environmental	
Operating Temp.	- 40 ~ 70°C w/ 0.6m/s Airflow
Storage Temp.	- 40 ~ 85 °C
Relative Humidity	10% RH ~ 90% RH (Non-condensing)
Certifications	CE, FCC Part-15 Class A
Storage	
Type	1 x SATA 6Gb/s for 2.5" SATA storage 1 x M.2 2280 Key M slot for NVMe/SATA SSD
Power Input	
DC	9 ~ 36VDC Terminal Block w/ OCP and OVP Protection (The 9VDC is tested under 60 seconds of the use case.)
Mechanical	
Construction	Aluminum Alloy
Mounting	Wall-mounting
Thermal Design	Fanless Passive Cooling Design
Weight	1,480g
Dimensions	182 (L) x 171 (W) x 54 (H) mm (w/o Mounting bracket)
Packaging	> 98% of Sustainable/Recyclable Packaging

All specifications are subject to change without notice.

## Dimensions



## Ordering Information

Part Number	SBOX-2321-zz; zz=A4=Atom x6416RE
Description	Intel® Atom® x6416RE w/ 2x LAN/ 1x DP/ 1x DVI-D/ 2x COM/ DC-IN 9-36V Embedded Computer
State of Origin	Made in Taiwan

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