

SINTRONES

Embedded Computing

SBOX-2321

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



- 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 / CAN Expansion
- Wide Operating Temperature -40 ~ 70°C for Harsh Environment
- Dual SIM for Network Redundancy
- Industrial Fanless Design

EVSE HMI Applications



1 x DVI for Infotainment Display
For advertisements or information displayed on the EVSE.



1 x DP for EVSE HMI Touch Display
To display charging status and payment information



2 x M.2 + 1 x mPCIe for WWAN or WLAN
3 x expansion slots for various wireless or LTE modules to provide EV owners with a variety of services or CPO server communication.



2 x 2.5GbE for EVSE Control System
To connect to the PLC control system. Standard Industrial Ethernet controller that complies with OCPP protocol connection.

Support EVSE Controller Communication



Power Module

ISO 15118

Overvoltage/current Protection

Specifications

System

- Processor**
- Intel Atom® x6416RE Quad-core Processor 1.7 GHz
 - Intel Atom® x6214RE Dual-core Processor 1.4 GHz
- Graphics**
- Intel® UHD Graphics
- Memory**
- 1 x DDR4-3200 SO-DIMM up to 32 GB
- Security**
- Infineon® TPM 2.0
- Watchdog**
- 1 ~ 255 Level Reset Setting

Interface

- Ethernet**
- 2 x Intel® 2.5GbE Support TSN H/W Architecture
- USB**
- 2 x USB 3.2 10 Gbps
 - 2 x USB 2.0
- Video**
- 1 x DP 1.4 / 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**
- 1 x DB-9 for 4 x DI / 4 x DO (12VDC / 100mA)
- SIM Card**
- 2 x SIM card slots
- Antenna**
- 4 x Pre-cutting SMA antenna holes

Internal Expansion

- M.2**
- 1 x M.2 2230 Key E slot
 - 1 x M.2 3042/52 Key B slot
- mPCIe**
- 1 x mPCIe slot

Storage

- Type**
- 1 x SATA 6Gb/s for 2.5" SATA storage
 - 1 x M.2 2280 Key M slot for NVMe/SATA SSD

Software

- Operating System 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)
- Certification / Standard**
- CE, FCC Part-15 Class A

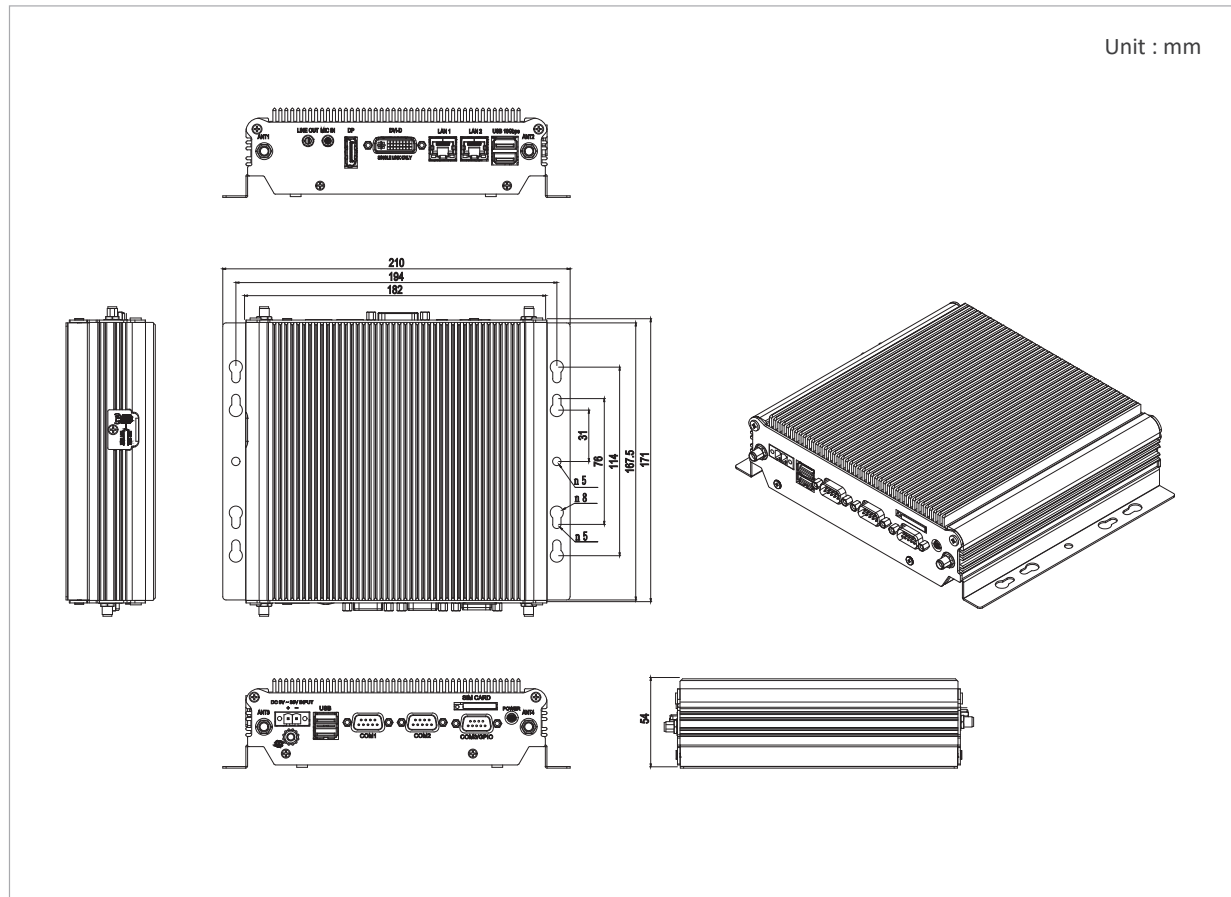
Power

- Power Input**
- 9 ~ 36VDC Terminal Block w/ OCP and OVP protection

Mechanical

- Construction**
- Aluminum Alloy
- Thermal Design**
- Fanless Passive Cooling Design
- Mounting Method**
- Wall-mounting
- Weight**
- 1.48kg
- Dimensions**
- 182 (L) x 171 (W) x 54 (H) mm (w/o Mounting bracket)
- Packaging**
- 98% of Sustainable/Recyclable Packaging

Dimensions



Ordering Information

Model Number	SBOX-2321-zz; zz=A4=Atom x6416RE, zz=A2=Atom x6214RE
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

Optional Accessories

Memory	DDR4 SO-DIMM 3200, 8GB~32GB (-40~85°C)
SSD	M.2 2280 Key B+M SATA SSD TLC 64GB~1TB (-40~85°C)
NVMe SSD	M.2 2280 Key M NVMe TLC 256GB~1TB (-40~85°C)
Wi-Fi / Bluetooth	M.2 2230 Key A+E Module
CAN Bus	mPCIe CAN Bus Module
5G / LTE	M.2 3042/3052 Key B Module

All specifications are subject to change without notice.

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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