iSBX-TS2002-J3455

Intel® Apollo Lake J3455 processor Fanless Embedded Computer with 1x HDMI/ 1x VGA / 6x USB / 6x COM/ 2x GIGA LAN

FEATURES

- Rugged & compact sealed aluminum box design
- Intel® Apollo lake J3455 1.5Ghz, burst to 2.3Ghz processor
- DDR3 memory, max. up to 8GB
- Support 1x 2.5" SATA and 1x mSATA storage
- DC 12V input, with over-current, over-voltage protection
- Dimension: 236.5 x 150 x 60 (mm)
- I/O: 6x USB, 2x GLAN, 6x COM, 1x HDMI, 1x VGA, Audio
- Expansional with 3G/4G/LTE, Wi-Fi/BT wireless

Introduction

The SINETIC iSBX-TS2002-J3455 is a high-performance, fanless industrial Box PC powered by the Intel® Apollo Lake J3455 processor. It delivers advanced computing performance with low power consumption, making it ideal for demanding industrial and embedded applications.

The system supports flexible storage options, including 1 × mSATA and 1 × 2.5-inch SATA SSD/HDD. It features a wide range of communication interfaces: 2 × LAN ports, 2 × USB 2.0 ports, 4 × USB 3.0 ports, and 6 × RS232 ports (with optional 1 × RS485). The unit operates on DC 12V input and includes over-current, over-voltage, and reverse-polarity protection for reliable operation.

Designed with a fully sealed enclosure, the iSBX-TS2002-J3455 prevents dust ingress and ensures system integrity in harsh environments. Its large aluminum fin heat sink efficiently dissipates heat, enhancing system stability, reliability, and lifespan. With an operating temperature range of –20°C to +70°C, this Box PC is well-suited for long-term operation in industrial applications such as intelligent transportation systems, machine vision, medical devices, textile machinery, rail transportation, and industrial automation.

The SINETIC iSBX-TS2002-J3455 is compatible with Windows® 10, Linux, and embedded operating systems, as well as application software developed for these platforms, providing flexible deployment across a wide variety of industrial scenarios.

Specification

System

Processor	• Intel® Apollo Lake, Celeron J3455 processor Quad-core 1.5Ghz, burst to 2.3Ghz TDP: 10W
BIOS	• SPI AMI EEI BIOS
Memory	• SO-DIMM, DDR3L-1333/1600/1866 Mhz, Max. up to 8GB
Storage	• 1x mSATA slot (Optional support 1x 2.5" SATA slot)
Graphic	• Intel® HD Graphics 500
Network	• 2x Intel® I210AT, optional support 3G/4G/Wi-Fi wireless
Audio	• On-board Realtek ACL 269 Audio controller
Expansion	• 1x Mini-PCIe expansional slot
TPM	• -
Watchdog	• 0~255 seconds programmable
Operating system	• Win10, Linux

IO Interface

COM	• 6x RS232 (Optional 1x RS485)
Network	• 2x RJ45, 10/100/1000 Mbps
Audio	• Mic-in/Line-out
USB	• 4x USB3.0, 2x USB2.0
Display	• 1x HDMI, 1 VGA
Power Input	• 1x 2 pin, phoenix terminal
GPIO	• 8x GPIO (Optional via 1x DB9)

Structure

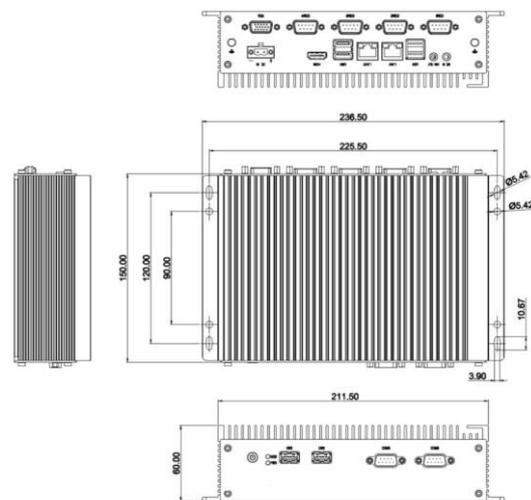|	
Structure and surface	• Aluminium alloy, anodizing and anti-scratch treatment
Cooling System	• Finned aluminium heatsinks
Color	• Silver
Indicator	• Power Switch/ Power LED/ HDD LED
Mounting	• Desktop, wall mount, optional with Din-rail mount
Dimension	• 236.5 x 150.0 x 60.0 (mm)
Net weight	• About 1.4 KG

Mechanical & Environment

Voltage Input	• DC 12V (Optional wide DC 9 to 36V)
Power Consumption	• 20W
EMC	• CE/FCC/RoHS
Working temperature	• -20 ~ + 70 (°C)
Storage temperature	• -40 ~ + 80 (°C)
Relative humidity	• 10~95%@10°C（No condensation）
Vibration	• 50~500Hz,1.5G,0.15mm peak to peak
Shock	• 10G/Peak (11 ms)

Ordering Information

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Front View

Dimension