NISE 70-T01 (Preliminary)

Main Features

- Onboard Intel® Celeron® 6305E Processor
- 4 x HDMI
- 3 x USB 3.0, 1 x USB 2.0
- 1 x RS232/422/485, 1 x RS232
- 3 x GbE LAN ports; support WoL, teaming and PXE

- Support TPM2.0 chip (by project)
- 1 x M.2 socket for storage/4G LTE/5G modules
- 1 x mini-PCIe socket support optional mSATA/Wi-Fi/BT/4G LTE module
- Support operating temperature from-5 to 55 Celsius degree
- Support+12V to 24VDC input; support ATX power mode

Product Overview

Powered by the latest generation of Intel® Celeron® 6305E processor (formerly codenamed "Tiger Lake-UP3"), NISE 70 is fanlsess PC designed for industrial applications which demand low power consumption and abundant I/O interfaces but with limited installation space.

NISE 70 supports a wide range of operating temperature from-5~55 Celsius degree and wide range DC power input from 12V to 24V. NISE 70 is also the first system in the slim NISE 50 series to support 4 independent displays and DDR4 3200MHz memory up to 32GB. The NISE 70 have strong connectivity - Ethernet-based LAN port and traditional serial port, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 1 x mini-PCIe socket and 1 x M.2 socket which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 4G LTE, 5G modules as well as storage module. NISE 70 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support
- Onboard Intel® Celeron® processor 6305E

Main Memory
- 1 x DDR4 3200 SO-DIMM socket, support up to 32GB

Display Option
- 4 x HDMI ports, only support full HD(2K) monitor

I/O Interface-Front
- ATX power on/off switch
- 4 x HDMI port, only support full HD(2K) monitor
- 2 x Intel® I210 and 1 x Intel® WGI219LM GbE LAN ports; support WoL, teaming and PXE
- 1 x Antenna hole

I/O Interface-Rear
- 3 x USB 3.0 ports (900mA per each)
- 1 x USB2.0 (500mA per each)
- 2 x DB9 for COM1 & COM2
    - COM1: RS232/422/485 auto flow control

    - COM2: full RS232 signal
- 1 x 2-pin remote power on/off switch
- 2 x Antenna hole
- Support+12V to 24V DC input

I/O Interface-Internal
- 4 x GPI and 4 x GPO (programmable to GPI or GPO)

Expansion Slot
- 1 x mini-PCIe socket for optional Wi-Fi/BT/4G LTE/mSATA
- 1 x M.2, support B & B+M Key module for optional 4G LTE/5G/SATA storage (SATA/PCIe/USB, 2242/3042)
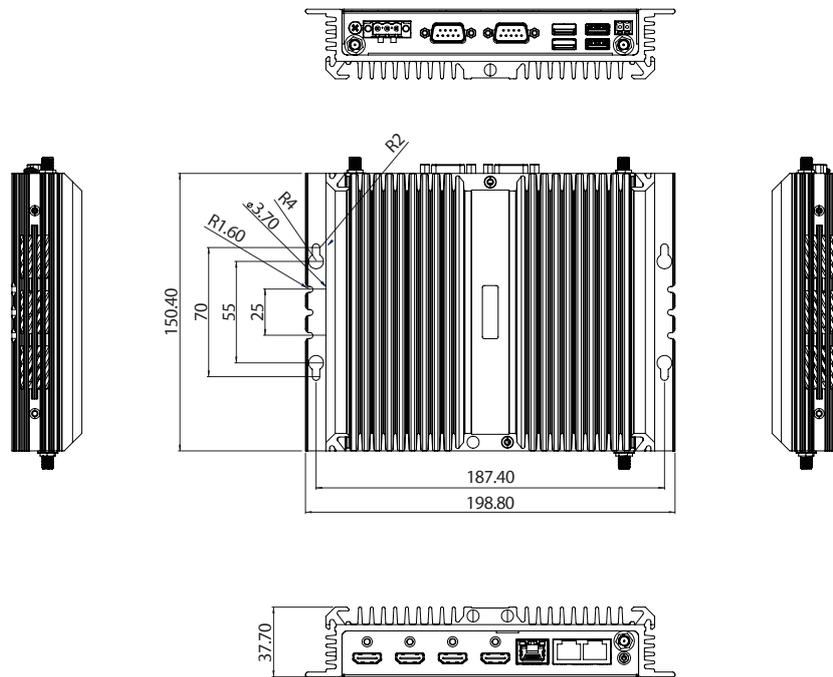
Power Requirements
- Power input: +12 to +24V DC
- 1 x Optional 24V, 60W power adapter

Support OS
- Windows 10 64-bit
- Linux Kernal

Dimension Drawing

Dimensions
- 198.8mm (W) x 150.4mm (D) x 37.7mm (H) with wall mount bracket

Construction
- Aluminum and metal chassis with fanless design

Environment
- Operating temperature: Ambient with air flow: -5°C to 55° (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - M.2/mSATA: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with mSATA & M.2 condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2
  - 64- Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE
- FCC Class A

Ordering Information
- **NISE 70 (P/N: TBC)**
  Intel® Celeron® Tiger Lake-UP3 processor fanless system

- **24V, 60W AC /DC power adapter w/o power cord (P/N: TBC)**

Last update: 05/13/2021