

NDiS B561/561-PoE

Visual Edge Computer Powered by
12th Gen Intel® Core™ Processor



Main Features

- Support 12th Gen Intel® Core™ i9/i7/i5/i3 LGA socket type embedded processor, up to 35W
- Intel® Q670E
- Intel® integrated UHD graphic engine driven by X^e architecture
- Support 3 independent 4K2K@60Hz display output. HDMI 2.1 resolution can be up to 8K@60Hz
- 1 x HDMI 2.1, 2 x HDMI 2.0
- 8 x USB 3.2, 4 x COM,
- 1 x GbE LAN, 2 x 2.5G GbE LAN (PoE for B561-PoE)
- Support M.2 Key B/E/M
- Support extended temperature -20~60°C (B561 only)
- Fanless design

Product Overview

Powered by the 12th Gen Intel® Core™ processor series and Intel® 600 series chipset integrated graphics controller, the NDiS B561 fanless visual edge computer can handle powerful multimedia content. It can be operated in an extended operating temperature range between -20 to 60°C. Moreover, to fully satisfy customers' expectations, there are three 4K2K independent display outputs or up to 8K@60Hz in one display output and rich connectives including 8 x USB 3.2, 3 x LAN ports (including 2 x PoE ports), Wi-Fi 6E and 4G, 5G support. The NDiS B561 can be used for both in-door and out-door applications such as visual edge computing, public transportation, security surveillance, outdoor bus station, and even smart stadium.

Specifications

CPU Support

- 12Gen Intel® Core™ i9/i7/i5/i3 LGA socket type processor, up to 35W
- Core™ i9-12900TE, 16 Core, 1.1GHz, 30M Cache
- Core™ i7-12700TE, 12 Core, 1.4GHz, 25M Cache
- Core™ i5-12500TE, 6 Core, 1.9GHz, 18M Cache
- Core™ i3-12100TE, 4 Core, 2.1GHz, 12M Cache

Chipset

- Intel® PCH Q670E

Graphics

- Intel® UHD graphics 730 series

Main Memory

- 2 x 262-pin SO-DIMM sockets, support DDR5 4800 MHz non-ECC, unbuffered memory up to 64G (single socket max 32GB)

I/O Interface-Front

- 1 x Power button
- 1 x Power LED, 1 x HDD LED
- 1 x Reset switch
- 2 x USB 3.2

- 4 x DB9 for COM1~ COM4
 - COM1: RS-232/422/485
 - COM2~4: RS232
- 3 x Antenna hole

I/O Interface-Rear

- +12~24V DC-in
- 1 x HDMI 2.1, 2 x HDMI 2.0
- 6 x USB 3.2
- 1 x RJ45 with LED for 10/100/1000Mbps
- 2 x RJ45 with LED for 10/100/1000/2500Mbps
- 1 x Mic-in, 1 x Line-out (optional)
- 1 x SIM card
- 3 x Antenna hole

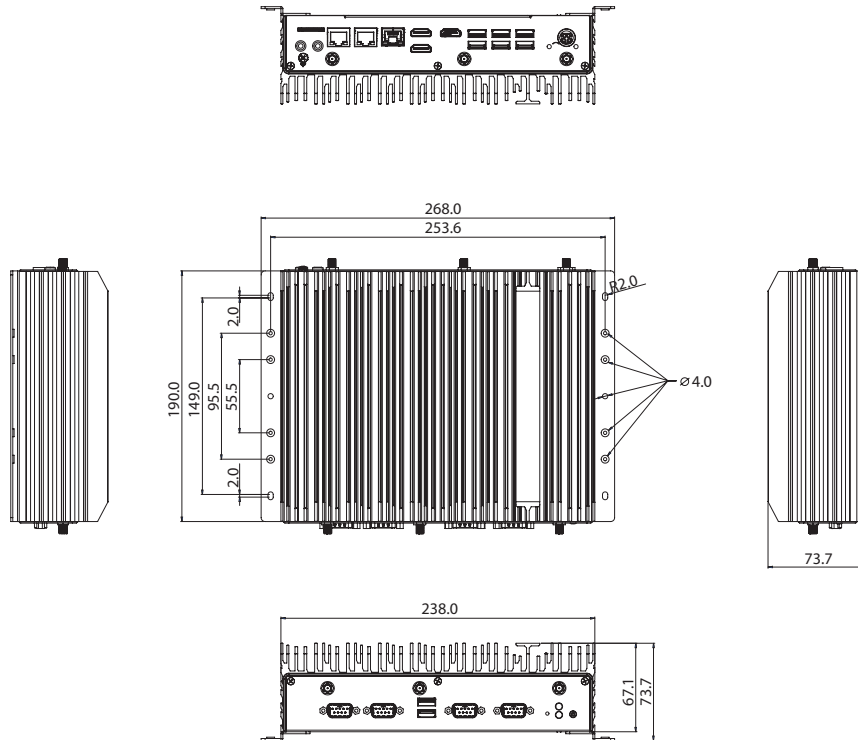
I/O Interface-Internal

- 8CH GPIO support 4 x GPO and 4 x GPI
- Onboard TPM 2.0
- Support iAMT (not for i3)

Storage

- 1 x M.2 2280 (SATA, PCIe x4) Key M socket
- 1 x M.2 2280 (PCIe x4) Key M socket

Dimension Drawing



Expansion

- 1 x M.2 2230 Key E (PCIe x2, USB), support optional Wi-Fi modules
- 1 x M.2 3042/3052 Key B (PCIe x1, USB 3.2), support optional 3G, 4G or 5G modules
- 1 x SIM slot

Power Supply

- 1 x External AC/DC power adapter (120W for B561, 180W for B561-PoE)
- Input: 100VAC to 240VAC
- Output: DC+12 or +24VDC

Environment

- Operating temperature: -20°C to 60°C (for B561), 0°C to 40°C (for B561-PoE)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 95% (non-condensing)

Certification

- CE Approval
- FCC Class A

Dimensions

- 238mm (W) x 192mm (D) x 67.29mm (H)

Operating System Support

- Win10/Linux

Ordering Information

- **NDiS B561 (P/N: TBD)**
12th Gen Intel® Core™ processor (up to 35W) fanless system, Intel® Q670E chipset
- **NDiS B561-PoE (P/N: TBD)**
12th Gen Intel® Core™ processor (up to 35W) fanless system, Intel® Q670E chipset, PoE