

NES-3900E2/P2/P2E

Industrial Fanless Systems Series



NES-3900E2/P2/P2E

PRODUCT HIGHLIGHTS

- ▶ Supports 8th generation Intel® Core™ i7/i5/i3 LGA embedded processors
- ▶ Intel® Q370 PCH chipset
- ▶ Choice of 2 x PCIe slots or 2 x PCI slots or 1 x PCIe/1 x PCI slots
- ▶ Supports 1 x 2.5" SATA HDD
- ▶ 1 x DVI-D, 1 x DP, and 1 x HDMI with independent display support
- ▶ Three Intel® GbE LAN ports; supports WoL, teaming and PXE
- ▶ 1 x External M.2 (M-key 2242) socket and 1 x SIM card socket
- ▶ 6 x USB 3.0, 4 x USB 2.0, 2 x RS232/422/485 with auto flow control
- ▶ 1 x Internal mini-PCIe socket
- ▶ Supports +9V to 30VDC input; ATX power mode



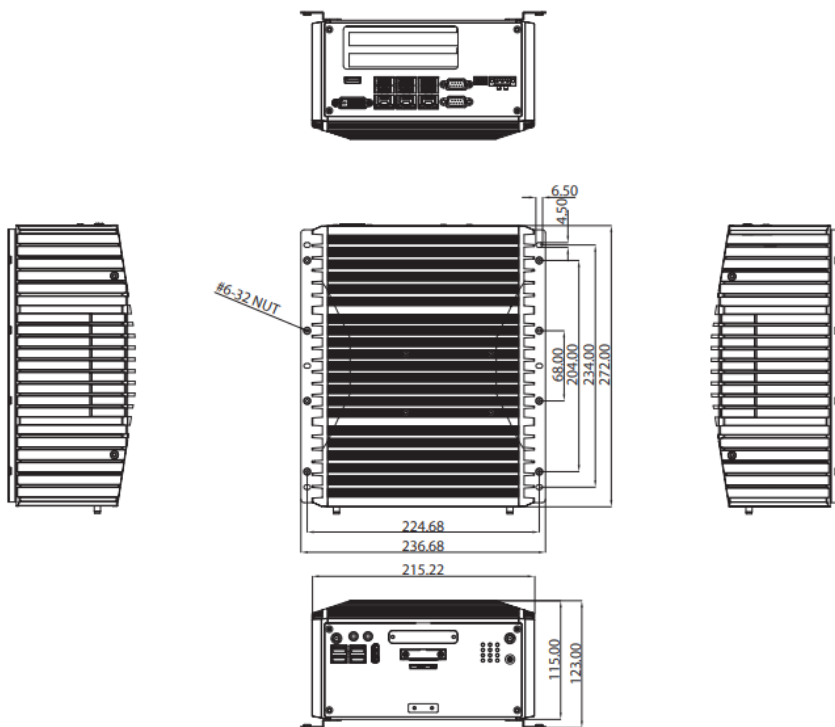
TECHNICAL INFORMATION

PROCESSOR	Supports 8th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor - Core™ i7-8700T, 6 Core, 2.4GHz, 12M Cache - Core™ i5-8500T, 6 Core, 2.1GHz, 9M Cache - Core™ i3-8100T, 4 Core, 3.1GHz, 6M Cache Turbo-boost disabled by default
SYSTEM MEMORY	2 x DDR4 2400/2666 SO-DIMM socket, supports up to 16GB unbuffered
DISPLAY	Three independent displays - HDMI + DP+ DVI-D Dual independent displays - HDMI + DP or HDMI + DVI-D or DP + DVI-D
FRONT I/O INTERFACE STATUS LEDS	3 x LAN active LEDs 2 x GPO status/COM1/2 TX/RX LEDs 1 x HDD access LEDs 1 x Battery low 1 x M.2
I/O INTERFACE-FRONT	1 x ATX power on/off switch 1 x DP 1 x Line-out and 1 x Mic-in 2 x Antenna holes 1 x External M.2 socket (M-key) 1 x SIM card holder 4 x USB 2.0 ports (500mA per each)
I/O INTERFACE - REAR	2 x DB9 for COM1 & COM2 - COM1: RS232/422/485 auto flow control - COM2: RS232/422/485 auto flow control 6 x USB 3.1 ports (900mA per each) 1 x DVI-D port & 1 x HDMI port 2 x Intel® I210-IT GbE LAN ports; supports WoL, teaming and PXE 1 x Intel® I219-LM GbE LAN port 1 x 3-pin remote power on/off switch +9V to 30V DC input
STORAGE DEVICE	1 x External M.2 SATA 3.0 (M-key 2242) socket 1 x mSATA (SATA 3.0) & 1 x 2.5" HDD (SATA 3.0)
INTERNAL I/O	COM3/COM4: internal box header, supports RS232 only 8CH GPIO: internal pin header, support 4 x GPO and 4 x GPI, TTL 5V level On-board TPM2.0 (SLB9665) for data encryption purpose 1 x Internal M.2 (B-key) support optional LTE
EXPANSION SLOT	NES-3900E2: Two PCIe x4 expansion slots - Add-on card length: one 169mm max, and one 240mm max. - Power consumption: 10W/slot max NES-3900P2: two PCI expansion slots - Add-on card length: one 169mm max, and one 240mm max. - Power consumption: 10W/slot max NES-3900P2E: one PCIe x4 and one PCI expansion slot - Add-on card length: one 169mm max for PCIe x4, and one 240mm max for PCI - Power consumption: 10W/slot max 1 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/Fieldbus

▶ TECHNICAL INFORMATION (CONTINUED)

POWER REQUIREMENTS	AT/ATX power mode (default: ATX power mode) Power input: +9 to +30V DC Power adapter: optional AC to DC power adapter (24V DC, 120W)
DIMENSIONS	215 mm(W) x 272mm (D) x 115mm (H)without wall mount bracket (8.5"x10.7"x4.5")
MECHANICAL CONSTRUCTION	Aluminium 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: - HDD: 20G, half sine, 11ms, IEC60068-2-27 - M.2: 50G, half sine, 11ms, IEC60068-2-27 Vibration protection with HDD condition: - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64 - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6 Vibration protection with SSD & M.2 condition: - Random: 2Grms @ 5~500 Hz, IEC60068-2-64 - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6
SUPPORTED OS	Windows 10 64-bit Linux Kernel 4.9
CERTIFICATIONS	CE approval- EN61000-6-2- EN61000-6-4 FCC Class A
WEIGHT	Gross weight: 6.84kg Net weight: 5.3kg

MECHANICAL DRAWING



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