

NISE 3800E2/P2/P2E

6th Generation Intel® Core™ i7/i5/i3 LGA
Fanless System with Expansion



Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q170 PCH
- Support 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; support WoL, teaming and PXE
- 1 x External M.2 socket and 1 x SIM card socket
- 4 x USB 3.0, 2 x USB 2.0, 2 x RS232/422/485 with auto flow control
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/Fieldbus
- Support +9V to 30VDC input; ATX power mode
- 2 x PCI or PCIe x4 expansions

Product Overview

Integrated with 6th generation Intel® Core™ i7/i5/i3 processors, NISE 3800 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3800 supports up to 16G DDR4 memory and have several options on storage devices like M.2, HDD, mSATA or SSD. NISE 3800 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3800 also designed two internal mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
 - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache
 - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache
 - Core™ i3-6100TE, Dual Core, 2.7GHz, 4M Cache
 - Intel® Pentium® Processor G4400TE 2.4GHz, 3M Cache
 - Intel® Celeron® Processor G3900TE 2.3GHz, 2M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 SO-DIMM socket, support up to 16GB with un-buffered and non-ECC

Display Option

- Three independent display
 - HDMI + DP+ DVI-D
- Dual independent display
 - HDMI + DP
 - HDMI + DVI-D
 - 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

Front I/O Interface

- 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
- 1 x SIM card holder

Rear I/O Interface

- 2 x DB9 for COM1 & COM2
 - COM1: RS232/422/485 auto flow control
 - COM2: RS232/422/485 auto flow control
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x HDMI port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switch
- +9V to 30V DC input

Storage Device

- 1 x M.2 (SATA 3.0)
- 1 x mSATA (SATA 3.0)
- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- NISE 3800E2: two PCIe x4 expansion slots
 - Add-on card length: one 169mm max, and one 240mm max.
 - Power consumption: 10W/slot max
- NISE 3800P2: two PCI expansion slots
 - Add-on card length: one 169mm max, and one 240mm max.
 - Power consumption: 10W/slot max

