NuPRO-E43

PICMG® 1.3 Full-Size LGA1151 with 6th/7th Generation Intel® Core™ i7/i5/i3 Processor-based SHB

Features

- 6th/7th Gen Intel® Core™ i7/i5/i3 processor
- Intel® Q170 Express chipset supporting PCI Express 3.0
- Two DIMM socket support up to 32 GB DDR4 2133/2400 MHz
- Four SATA 3.0 onboard with RAID support
- Four COM ports (including RS-232/422/485)
- Built-in ADLINK SEMA management solution
- Intel PCIe slot bifurcation support



Specifications

Core System

CPU

Intel® Core™ i7-6700, 3.4 GHz, 8M Cache, 14nm, 65W TDP, LGA1151 (4C/8T)
Intel® Core™ i7-6700TE, 2.4 GHz 8M Cache, 14nm, 35W TDP, LGA1151 (4C/8T)
Intel® Core™ i5-6500, 3.2 GHz, 6M Cache, 14nm, 65W TDP, LGA1151 (4C/4T)
Intel® Core™ i5-6500TE, 2.3 GHz, 6M Cache, 14nm, 35W TDP, LGA1151 (4C/4T)
Intel® Core™ i3-6100, 3.7 GHz, 3M Cache, 14nm, 51W TDP, LGA1151 (2C/4T)
Intel® Core™ i3-6100TE, 2.7 GHz, 4M Cache, 14nm, 35W TDP, LGA1151 (2C/4T)
Intel® Pentium® G4400, 3.3GHz, 3M Cache, 14nm, 54W TDP, LGA1151 (2C/2T)
Intel® Pentium® G4400TE, 2.4GHz, 3M Cache, 14nm, 35W TDP, LGA1151 (2C/2T)
Intel® Celeron® G3900, 2.8GHz, 2M Cache, 14nm, 51W TDP, LGA1151 (2C/2T)
Intel® Celeron® G3900TE, 2.3GHz, 2M Cache, 14nm, 35W TDP, LGA1151 (2C/2T)
Intel® Core™ i7-7700, 3.6GHz, 8M Cache, 14nm, 65W TDP, LGA1151 (4C/8T)
Intel® Core™ i7-7700T, 2.9GHz 8M Cache, 14nm, 35W TDP, LGA1151 (4C/8T)
Intel® Core™ i5-7500, 3.4GHz, 6M Cache, 14nm, 65W TDP, LGA1151 (4C/4T)
Intel® Core™ i5-7500T, 2.7GHz, 6M Cache, 14nm, 35W TDP, LGA1151 (4C/4T)
Intel® Core™ i3-7101E, 3.9GHz, 3M Cache, 14nm, 54W TDP, LGA1151 (2C/4T)
Intel® Core™ i3-7101TE, 3.4GHz, 3M Cache, 14nm, 35W TDP, LGA1151 (2C/4T)

Chipset

Intel® Q170 Express Chipset

Memory

Dual-channel DDR4 2133/2400 MHz, up to 32 GB

BIOS

AMI® UEFI BIOS
128 Mbit SPI Flash Memory

TPM

1x box header for TPM module (Optional)
INFINEON TPM SLB 9665XT2.0

Watchdog Timer

1 to 65536 sec. software programmable and can be generate system reset

Hardware Monitor

CPU temperature, System temperature, System voltage, CPU fan speed

Operation Systems

Microsoft® Windows® 7 32/64-bit (Only for 6th Gen CPU)
Microsoft® Windows® 8.1 64-bit
Microsoft® Windows® 10 64-bit
Ubuntu 15.10

I/O Interfaces

Serial ATA

4x SATA 3.0 onboard with RAID support
2x RS-232 via onboard 2.0 pitch box header
2x RS-232/422/485 with auto flow control via onboard 2.0 pitch box header

PCIe/PCI Bus (Via backplane)

1x PCIe x16 with Intel PCIe slot bifurcation support and can be configured to:
1x PCIex 16 or 2x PCIe x8 or 1x PCIe x8 + 2x PCIe x4 to backplane (based on backplane)
1 x PCIe x4 to backplane
4 x PCI to backplane

USB

8x USB 3.0 (2 on rear I/O& 6 onboard box header)
4x USB 2.0 to backplane

LPT Port

1x LPT port via onboard box header

Audio

1x box header for audio module DB-Audio2

KB/MS

1x pin header for PS/2 keyboard& Mouse

Audio

Audio Codec

Realtek® ALC262 support by DB-Audio2 daughter board

Interface

Intel® High Definition Audio via onboard box header

Display

Graphics

Integrated Intel® HD Graphics series, based on CPU for different GPU

VGA

1x VGA on rear I/O, resolution up to 1920 x 1200 @60Hz

DVI-D

1x DVI-D via onboard pin header, resolution up to 1920 x 1200@60Hz

Specifications

- **Ethernet**

  Controller
  LAN1: Intel® I219LM PHY via RJ45
  LAN2: Intel® I211-AT via RJ45

  Interface
  PCIe x1 bus

  iAMT
  Support iAMT 11

  Wake On LAN
  Support on LAN1

- **Manageability**

  SEMA
  SEMA support with BMC

- **Mechanical and Environmental**

  Form Factor: Full-sized PICMG® 1.3 system Host Board
  Dimension: 338 mm x 126 mm (L x W)

  Operating Temperature
  0˚C to 60˚C

  Storage Temp.
  -40˚C to 80˚C

  Certifications
  CE & FCC Class A

  Relative Humidity
  5% to 95%, non-condensing

Ordering Information

- **NuPRO-E43**
  PICMG® 1.3 Full-Size LGA1151 with 6th/7th Generation Intel® Core™ i7/i5/i3 Processorbased SHB
  Note: CPU, Memory module and Cooler kit are not included

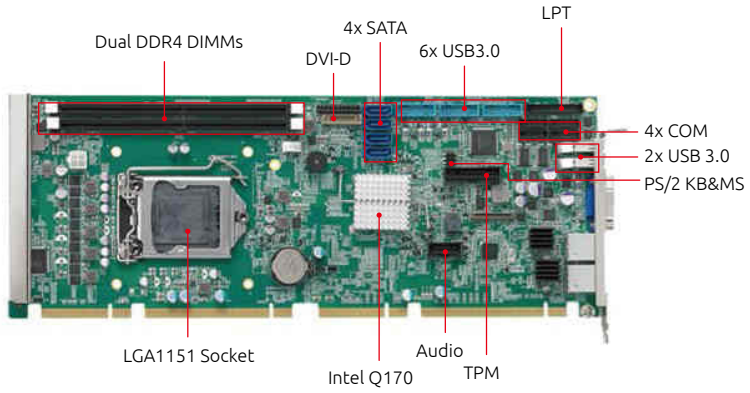
Packing Lists

- **NuPRO-E43**
- **2x SATA data cable**
- **1x 2 port USB 3.0 cable with bracket**
- **User Manual**
- **1x 2 ports COM cable with bracket**
- **Driver DVD**

Accessories

- **TPM Module**
  TPM module, Atmel AT97SC3204 TIS 1.2
- **DB-Audio 2**
  DB-Audio 2, High definition audio daughter board with mic-in/line-in/line-out
- **LGA-1151 1U CPU Cooler**
  LGA-1151 1U Thermal Module
- **LGA-1151 2U CPU Cooler**
  LGA-1151 2U Thermal Module
- **LGA-1151 3U CPU Cooler**
  LGA-1151 3U Thermal Module
- **PS/2 cable with bracket for keyboard/mouse**
- **DVI-D Cable with Bracket**
- **2 Port COM Cable with Bracket**
- **2 Port USB 3.0 right angle With Bracket**
- **1 Port COM Cable with Bracket**
- **Print Port Cable with Bracket**

Product Illustration





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