

NEX 616

Mini-ITX, On-board Intel® Atom™ Processor E3800 Product Family
2 x DDR3L SO-DIMM, 2 x HDMI, 2 x GbE, 2 x SATA2.0, 6 x USB, 6 x COM, mPCIe, PCIeX1



Main Features

- On-board Intel® Atom™ processor E3800 product family
- 2 x 204-pin SO-DIMM sockets support up to 8GB DDR3L 1066/1333 MHz SDRAM
- Display: 2 x HDMI
- 1 x Mini-PCIe (full size), 2 x SATA2.0, 1 x PCIeX1
- 2 x Intel® i210 PCI Express Gigabit Ethernet
- 1 x USB3.0, 5 x USB2.0, 4-in/4-out GPIO, Mic-in, Speak out, Line-out
- Serial ports: 5 x RS232, 1 x RS232/485
- Support AT/ATX mode and DC +12VDC input

Product Overview

NEX 616 is Mini-ITX form factor with onboard Intel® Atom™ processor E3800 product family, which support 2 x DDR3L 1066/1333MHz memory, along with Intel® Gen. 7 Graphics Engine Enhanced Gfx & Video, support DX 11*, OGL3.2, Full HD decode (MPEG2, VC1, AVC, H.264), along with integrated graphics for large display applications to support multiple displays.

Intel® Atom™ processor E3800 product family provides 2 x SATA 2.0, 6 x USB (1 x USB3.0/5 x USB2.0) ports, 6 x COM (1 x RS-232/485, 5 x RS232), 1 x Mini-PCIe (full size), 2 x GbE. NEX 616 could be integrated into 1U/2U/4U rack mounted chassis or Desktop Towers as completed system solution for widely industrial applications in the new era of digital infrastructure with NEXCOM.

Specifications

CPU Support

- Support Intel® Atom™ processor E3800 product family

Main Memory

- 2 x 204-pin SO-DIMM sockets support up to 8GB DDR3L 1066/1333 MHz SDRAM

BIOS

- AMI System BIOS
- Plug and play support
- Advanced Power Management and Advanced Configuration & Power

Display

- Integrated Intel® Gen.7 Graphics Engine, supports 2 x HDMI
- HDMI interface: 2 x HDMI connectors, resolution up to 1920 x 1200

Audio

- Realtek ALC886 CODEC for High Definition
- Phone Jack (Green): Line-out
- Phone Jack (Pink): Mic-in
- Phone Jack (Blue): Line-In

On-board LAN

- 2 x Intel® i210 Gigabit Ethernet
- Support PXE boot from LAN, wake on LAN function

I/O Interface

- Serial port: 4 ports
- COM2: RS232/485 with RJ45 connector on edge I/O
- COM1/3/4/5/6: RS232 with 2 x 5/2.54mm box header
- USB2.0/3.0: 6 ports
- 1 x USB3.0 and 2 x USB2.0 ports by edge connector
- 3 x USB2.0 ports by 2 x 5-pin header pitch 2.54mm
- GPIO: support 4 x GPI and 4 x GPO with TTL level (0/5V)
- Onboard power LED and HDD Active LED pin Header
- 1 x 4-pin fan connector (for CPU)
- 1 x Dual-Stack PS/2 Connector on edge I/O
- Onboard buzzer/reset SW/on & Off switch button

Power Requirements

- Power requirement: Dual +12VDC input
- One 4-pin power connector

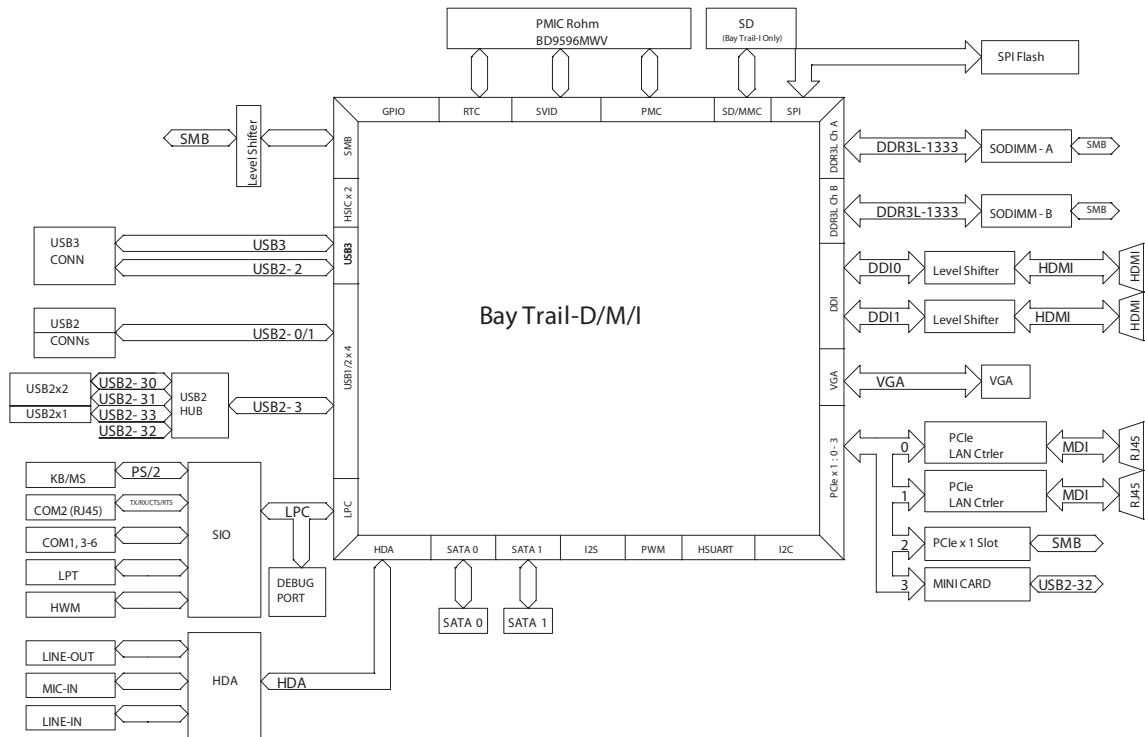
Dimensions

- 170mm (L) x 170mm (W)

Environment

- Board level operating temperatures: 0°C to 50°C
- Storage temperatures: -20°C to 85°C

Block Diagram



- Relative humidity:
10% to 90% (operating, non-condensing)
5% to 95% (non-operating, non-condensing)

Certifications

- Meet CE
- FCC Class A

Ordering Information

◆ NEX 616-E3845 (P/N:TBD)

Mini ITX, Intel® Atom™ processor E3845 and based on Intel® integrated graphics engine w/ 2 x HDMI, 1 x USB3.0, 5 x USB2.0, 6 x COMs, 1 x Mini-PCIe, 2 x Gigabit LAN, 2 x SATA, 1 x PCIe x1

◆ NEX 616-E3826 (P/N:TBD)

Mini ITX, Intel® Atom™ processor E3826 and based on Intel® integrated graphics engine w/ 2 x HDMI, 1 x USB3.0, 5 x USB2.0, 6 x COMs, 1 x Mini-PCIe, 2 x Gigabit LAN, 2 x SATA, 1 x PCIe x1