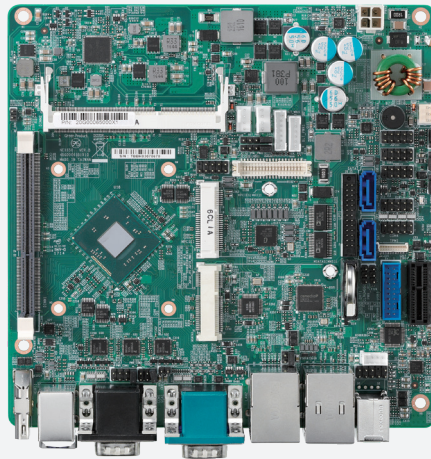




Main Features

- ♦ Intel® Celeron® processor J1900
- ♦ Integrated Intel® Gen7 Intel® Graphics DX 11*, OGL3.2
- ♦ Supports dual channel DDR3 1333MHz, 2 x SO-DIMM, up to 8GB system memory
- ♦ 3 x COM (RS-232/422/485), 2 x COM (RS-232); 1 x HDMI, 1 x D-Sub,
- ♦ 1 x Dual channel 24-bit LVDS; 4 x USB 3.0, 6 x USB 2.0, 2 x SATA2;
- ♦ Gigabit LAN : 2 x Realtek LAN
- ♦ 12~24 V DC-in power support

Product Overview

NEX 650-ADU is the NEXCOM most advanced flagship Mini-ITX form factor powered by onboard 4-core Intel® Celeron® J1900 processor (codenamed Bay Trail) that integrates with 24/48-bit LVDS & upto 8GB DDR3/L memory & rich I/Os.

NEX 650-ADU represents a powerful model for intensive multi-media & high computing base application which can be embedded into fan-less or 1U/2U rack mounted chassis as customized system-ready PBOX solution. The wide range 12~24V DC-in.

Specifications

Form Factor

- ♦ Dimensions: Mini-ITX (6.7-in x 6.7-in)

Processor System

- ♦ CPU: Intel® Celeron® processor J1900
- ♦ Core number: 4
- ♦ Max speed: (by CPU)
- ♦ L3 cache: 2MB
- ♦ Chipset: N/A
- ♦ BIOS: UEFI

Expansion Slot

- ♦ mini-PCIe: 1 (full size)
- ♦ mSATA: 1
- ♦ PCIe: 1

Memory

- ♦ Technology: dual channel DDR3L 1333 MHz SDRAM
- ♦ Max.: 8GB
- ♦ Socket: 2 x SO-DIMM

Graphics

- ♦ Controller: Intel® Gen7 Intel® graphics DX 11*, OGL3.2
- ♦ VRAM: shared memory
- ♦ VGA: supports max. resolution 1920 x 1200
- ♦ LVDS: dual channel 24-bit, max resolution 1920 x 1200@60Hz
- ♦ HDMI: supports HDMI 1.3a, max resolution 1920 x 1200

Ethernet

- ♦ Ethernet: 10/100/1000 Mbps
- ♦ Controller: GbE LAN: 2 x Realtek RTL8111G-CG
- ♦ Connector: 2 x RJ-45

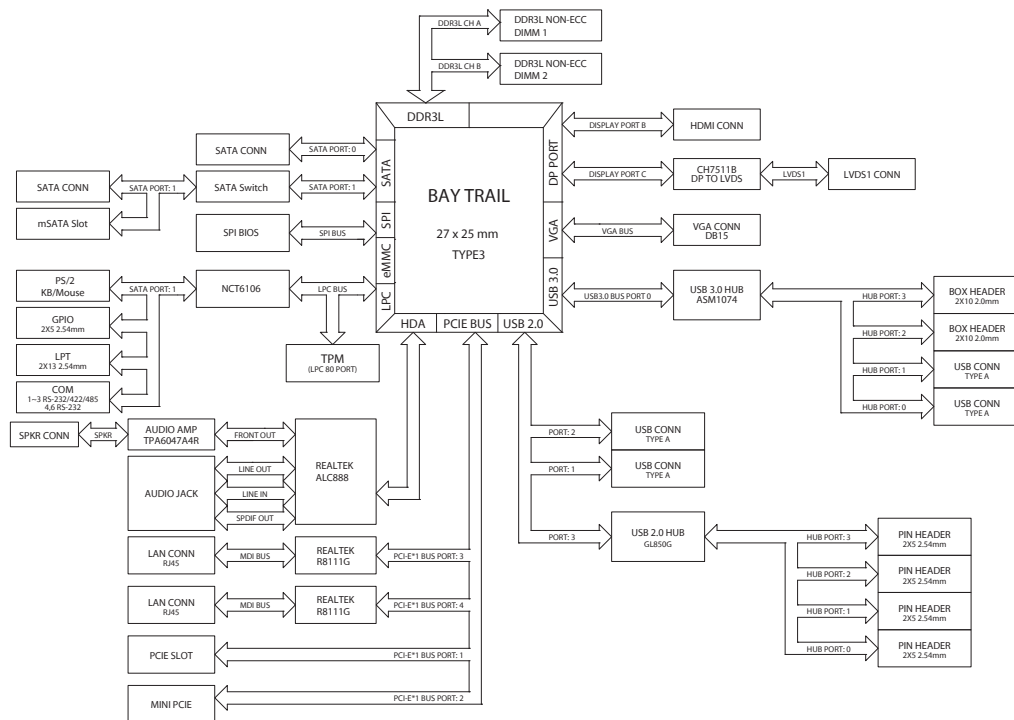
I/O Interface

- ♦ Max. data transfer rate: SATA2 (3.0 Gb/s)
- ♦ Rear I/O
- ♦ VGA: 1
- ♦ HDMI: 1
- ♦ Ethernet: 2
- ♦ USB: 4 (2 x USB 3.0, 2 x USB 2.0)
- ♦ Audio: 2 (Mic-in, Line-out)
- ♦ Serial: 3 (RS-232/422/485)
- ♦ PS2: 2 (1 x keyboard, 1 x mouse)

Internal Connector

- ♦ USB: 6 (2 x USB 3.0, 4 x USB 2.0)
- ♦ LVDS/inverter: 1/1
- ♦ VGA: 1 (shared with rear I/O VGA COM)
- ♦ Serial: 2 (RS-232)
- ♦ SATA: 2 x SATA2 (3.0Gb/s)
- ♦ mPCIe: 1
- ♦ Parallel: 1
- ♦ mSATA: 1 (shared)
- ♦ GPIO 8-bit: 4 x GPI + 4 x GPO
- ♦ SATA PWR output con: 1
- ♦ Speaker header: 1

Block Diagram



Watchdog Timer

- Output: from super I/O to drag RESETCON#
- Interval: 256 segments, 0, 1, 2...255sec/min

Power Requirements

- Input PWR: 12~24V DC-in (4-pin ATX PWR Con)
- Power on: AT/ATX supported
- AT: directly PWR on as power input ready
- ATX: press button to PWR on after power input ready

Environment

- Temperature: 0°C~60°C

Ordering Information

♦ NEX 650 (P/N: 10G00065007X0)

Mini-ITX form factor powered by onboard 4-core Intel® Celeron® J1900 processor that integrates with 24/48-bit LVDS & up to 8GB DDR3/L memory & Rich I/Os