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# Datasheet

## NEXCOM

### X100

**3.5" Single-Board Computer, Intel® Celeron® J3455 Apollo Lake Processor HDMI/LVDS/DDR3L/mini-PCIe/M.2**



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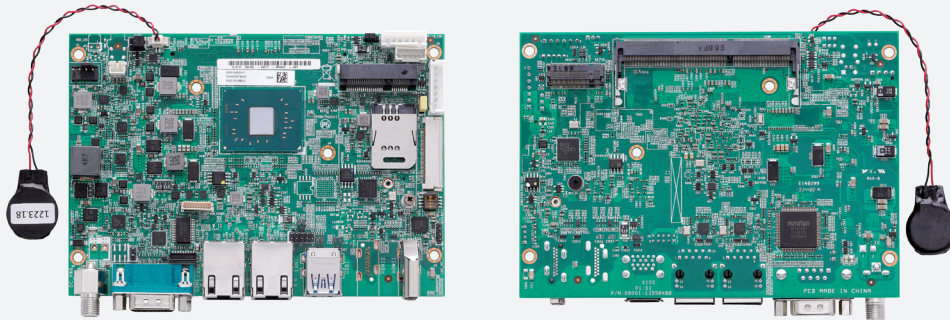
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# X100-J3455-P

3.5" Embedded Board, Intel® Celeron® J3455 Processor

HDMI/LVDS/DDR3L/mini-PCIe/M.2



## Main Features

- Onboard Intel® Celeron® J3455 processor
- 1 x 204-pin SO-DIMM DDR3L
- Two display: 1 x HDMI and LVDS
- 1 x M.2 2242 Key M
- 2 x RJ45 LAN with LED for Gigabit Ethernet
- 2 x USB 3.0, 2 x USB 2.0, Line-out
- Serial port: 1 x RS232, 1 x RS232/422/485 port
- Support AT/ATX mode and 19Vdc/12Vdc input

## Product Overview

X100 series is under the 3.5" SBC series which is based on multi-core SoC Intel® Celeron® processor (formerly codenamed "Apollo Lake"). X100 series operates with low power consumption. This series of 3.5-inch board is aimed at embedded applications. It supports a maximum memory of 8GB DDR3L SDRAM. Also, it offers two display outputs of dual 4K HDMI and LVDS in order to provide the flexibility of supporting a range of peripherals. The X100 series is ideal for battery-powered portable devices, multimedia HDMI panels, home automation and thin clients.

## Specifications

### CPU Support

- Intel® Celeron® processor J3455 (F1 stepping), type 3 BGA, 31mm x 24mm, TDP: 10W

### Main Memory

- Single DDR3L/SO-DIMMs, up to 8GB

### BIOS

- AMI system BIOS
- Plug and play support

### Display

- 1 x HDMI connector (resolution up to 4096 x 2160 @60Hz)
- LVDS interface: 1 x single (18/24-bit) LVDS panel, resolution up to 1920 x 1200. (dual channel)

### Storage

- 1 x M.2 2242 Key M

### Audio

- Realtek ALC3236 HD codec
- 1 x 4 2.0 pitch pin header for Line-out

### Onboard LAN

- 2 x Realtek RTL8111H GbE controller
- Support wake on LAN function

### Expansion Slot

- 1 x mini-PCIe full-size connector, support Wi-Fi and LTE
- 1 x SIM slot onboard (full size)

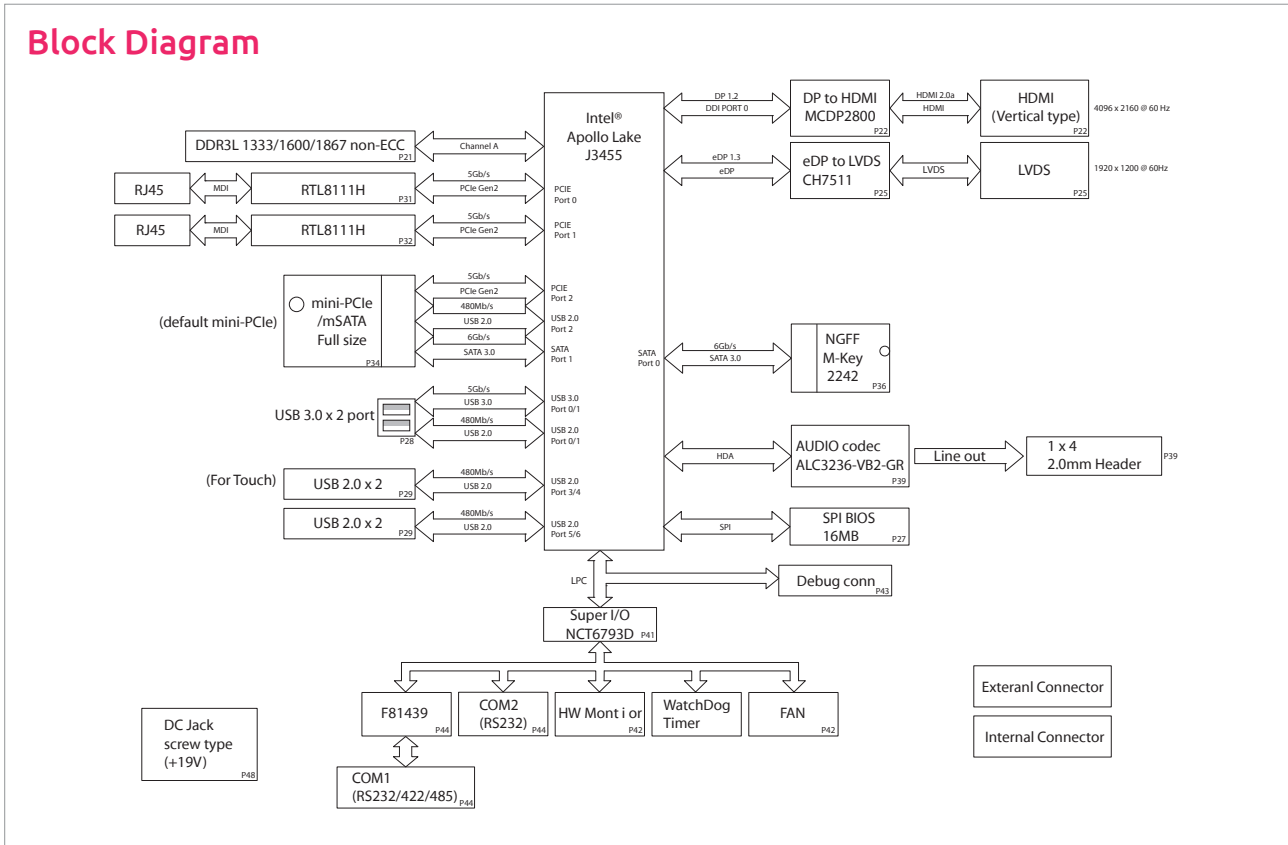
### Power Requirements

- AT/ATX mode (by jumper setting default-AT)
- Support 19Vdc/12Vdc input

### I/O

- Serial port x 2
  - COM1: RS232/422/485, D-SUB 9P
  - COM2: RS232 1 x 9-pin 1.0mm JST connector
- LVDS inverter connector: WtoB connector 1 x 7-pin, 2.5mm
- LVDS power: 1 x 3P, S/T, 2.54mm, header
- Back light control: 1 x 3P, S/T, 2.0mm, header
- LVDS resolution switch: 1 x 4 switch
- LED connector: WtoB connector 1 x 5-pin, 2.0mm

## Block Diagram



### Dimensions

- 146mm (L) x 102mm (W) (5.7" x 4.0")

### Environment

- Ambient operating temperature: 0~60°C

### Relative Humidity

- 10%~90% (operating, non-condensing)
- 5%~95% (non-operating, non-condensing)

### Certifications

- CE
- FCC Class A

## Ordering Information

### ♦ X100-J3455-P (P/N: 10W10X10005X0)

Embedded board with Intel® Celeron® processor J3455 with HDMI/LVDS, 2 x USB 3.0, 2 x USB 2.0, 2 x COMs, 1 x M.2 Key M, 2 x Gigabit LAN, 1 x mini-PCIe

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