

FEATURES

- Intel Quad-core Celeron N3450 or Intel Dual-core Celeron N3350
- Dual Gigabit Ethernet Ports, One Support PoE Module
- SO-DIMM DDR3L Up to 8GB, Micro SD Slot, SATA and M.2 SATA Ports
- LVDS, eDP, MIPI DSI for LCD Panel Support, Built-in Touch Controller
- Ultra Small Form Factor and Ultra Slim Configuration Option
- Rich I/O with RS232/RS485, I²C, and USB Ports

The EMB-7610 is a industrial motherboard based on Intel Celeron N3350 or N3450 Apollo Lake processor. The board features a Power over Ethernet (PoE) ready Ethernet port, two M.2 sockets, multiple LCD panel display interfaces support, and full set of I/Os including RS232/RS485, digital IO and more.

SPECIFICATIONS

SYSTEM

Processor	Intel Quad-core Celeron N3450 @2.2GHz or Intel Dual-core Celeron N3350 @2.4GHz
Platform	Apollo Lake
Memory	1 x 204-Pin SO-DIMM DDR3L Up to 8GB
Storage	1 x M.2 2230 B-Key SATA Slot, 1 x SATA Port, 1 x Micro SD Slot
OS	Support Windows 10, Windows 10 IoT, Ubuntu Linux

DISPLAY

Display Interface	1 x Micro HDMI
LCD Interface	1 x LVDS/eDP and 1 x MIPI DSI for 7", 8", 10.1" and other Size LCD Panel
Display Resolution	HDMI - 1920 x 1080, LVDS/eDP/MIPI DSI - 1920 x 1200

COMMUNICATIONS

Ethernet	1 x 10/100/1000 Mbps RTL8111F GbE, 1 x 10/100 Mbps RTL8111F Ethernet Support PoE (Optional Module)
Wireless	M.2 2230 E-Key Expansion Slot, Optional WiFi Module

POWER

Power Input	12V DC Header or PoE
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I/O INTERFACE

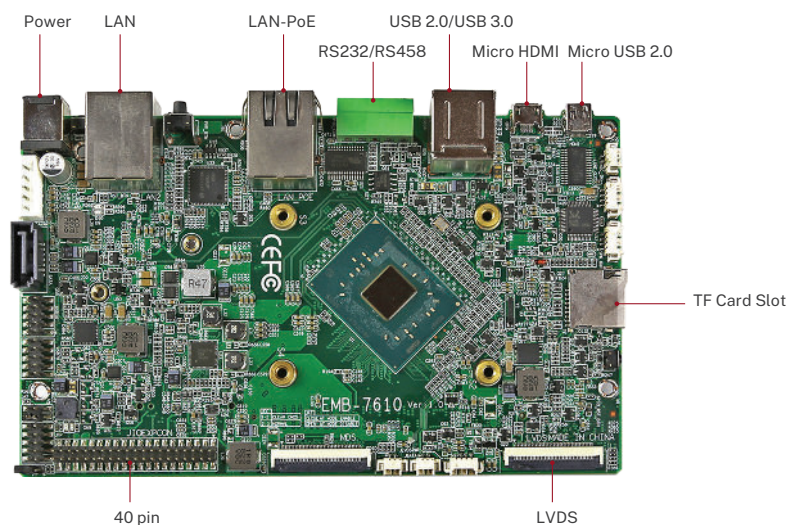
Audio	ALC662, 1 x Mic-in, 1 x Line Out, 1 x Speaker Out (Up to 6W/ch)
Watchdog Timer	Programmable Timer System Reset
I/O Ports	1 x RS232/RS485 Terminal Block, 1 x RS232 Header 1 x USB 2.0 Type A 1 x USB 2.0/3.0 Type A 1 x USB 2.0 Header 1 x Micro USB 2.0 4+ GPIO, 2 x I ² C (for TP and MIPI CSI) 1 x MIPI CSI
Expansion	1 x 40 pin Connector with PCIe x1, GPIO, Front Panel Control, PoE Power Input

MECHANICAL

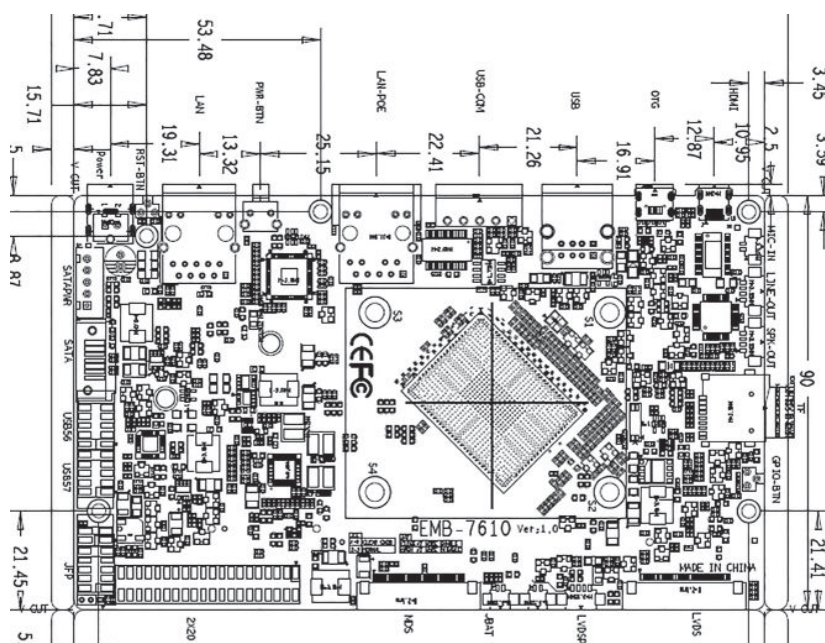
Form Factor	Embedded Proprietary
Dimensions	160 x 90mm (6.3" x 3.54")
Cooling	Fanless

ENVIRONMENTAL

Temperature:	
- Operation	0°C to 60°C (32°F to 140°F)
- Storage	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% @ 40°C Non-condensing



Unit: mm



Part No.	Description
EMB-7610-N3450	EMB-7610 Embedded Board with N3450 Processor
EMB-7610-N3350	EMB-7610 Embedded Board with N3350 Processor
HB-PoE4210	12V PoE Add-on Module