

## FEATURES

- NXP i.MX6 1GHz Dual-Lite or Quad Core
- One Gigabit Ethernet Port, One WiFi / Bluetooth Module
- Build-in PoE (Power over Ethernet) Option
- On-board RAM, iNAND Flash and Micro SD Slot
- LVDS, MIPI DSI for LCD Panel, Built-in I<sup>2</sup>C Touch Panel Support
- Ultra Small Form Factor and Ultra Slim Configuration Option
- Rich I/O with RS232/RS485, I<sup>2</sup>C, GPIOs and USB 2.0 Ports

The EMB-2230 is a Pico-ITX (100 x 72mm) industrial motherboard based on NXP i.MX6 ARM application processor. The board features a Power over Ethernet (PoE) ready Gigabit Ethernet port, on-board WiFi/BT, multiple LCD panel display interfaces support, and full set of I/Os including RS232/RS485, CAN bus, digital IO and more.

## SPECIFICATIONS

### SYSTEM

<b>Processor</b>	NXP i.MX6 1GHz Dual Lite or Quad-core
<b>Platform</b>	ARM Cortex A9
<b>Memory</b>	On-board 1GB DDR3
<b>Storage</b>	On-board iNAND Flash (8GB Default), 1 x Micro SD Slot

### I/O INTERFACE

<b>Audio</b>	Line-out, MIC-in, Headphone, Speaker Out Header (Up to 2.1W/CH)
<b>Watchdog Timer</b>	Programmable Timer System Reset
<b>I/O Ports</b>	1 x RS232/RS485 Terminal Block 1 x RS232 Header 2 x USB 2.0 Type A 2 x USB 2.0 Header 1 x Micro USB 2.0 OTG 4+ GPIO, 2 x I <sup>2</sup> C (for TP and MIPI CSI) 1 x MIPI CSI 1 x CAN Via Terminal Block
<b>Expansion</b>	1 x 40 pin Connector with PCIe x1, GPIO, Front Panel Control, PoE Power Input

### POWER

<b>Power Input</b>	5V DC Header or PoE
--------------------	---------------------

### DISPLAY

<b>Display Interface</b>	1 x Micro HDMI
<b>LCD Interface</b>	1 x 24bit LVDS and 1 x MIPI DSI for 7", 8", 10.1" and other Size LCD Panel
<b>Display Resolution</b>	HDMI - 1920 x 1080, LVDS - 1920 x 1080

### COMMUNICATIONS

<b>Ethernet</b>	1 x 10/100/1000 Mbps GbE with <b>PoE Option</b> , 1 x 10/100/1000 Mbps PCIe GbE <b>(Option with Add-on Card)</b>
<b>Wireless</b>	1 x WiFi / Bluetooth Module

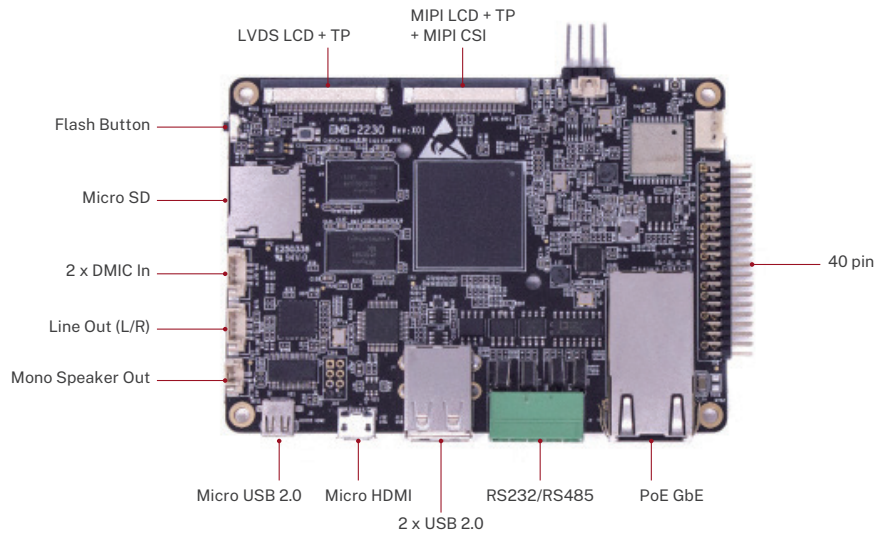
### MECHANICAL

<b>Form Factor</b>	Embedded Pico-ITX Standard
<b>Dimensions</b>	100 x 72mm (3.94" x 2.83")
<b>Cooling</b>	Fanless

### ENVIRONMENTAL

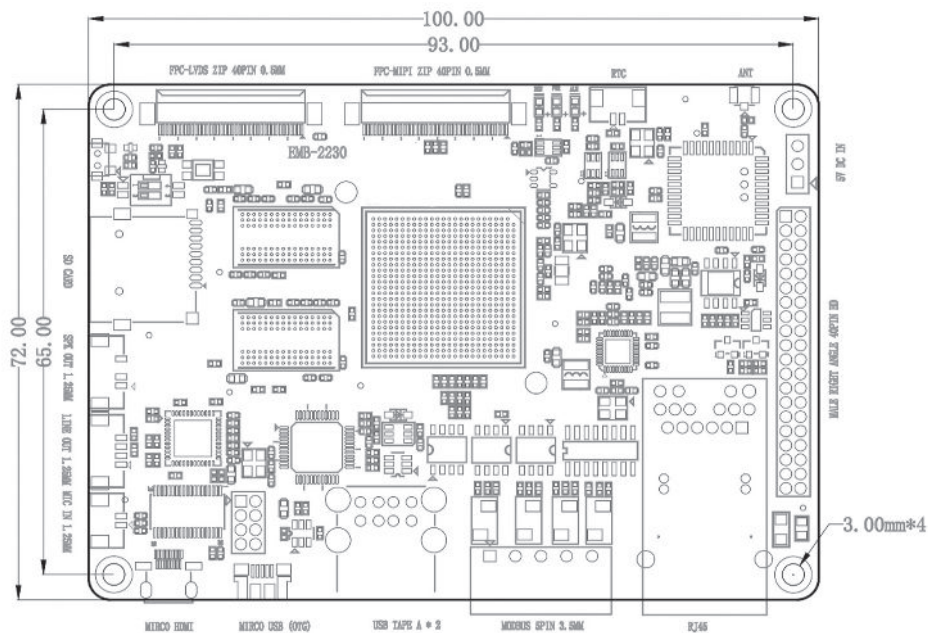
<b>Temperature:</b>	
- <b>Operation</b>	0°C to 60°C (32°F to 140°F)
- <b>Storage</b>	-40°C to 85°C (-40°F to 185°F)
<b>Humidity</b>	5% to 95% @ 40°C Non-condensing

## SYSTEM LAYOUT



## PRODUCT DIMENSIONS

Unit: mm



## ORDER INFORMATION

Part No.	Description
EMB-2230DL	NXP i.MX6 Dual-lite with Single NIC
EMB-2230Q	NXP i.MX6 Quad-core with Single NIC
IOB-4210	Second NIC Add-on Module with DC in
PoE-4210	PoE Add-on Module
PPC-4210	10.1" Touch Panel PC Development Kit with EMB-2230DL