

# NXP i.MX6 ARM Cortex A9 Pico-ITX Embedded Board with CAN bus, POE, LVDS, WiFi, BT, MIPI DSI and CSI Support



#### INTRODUCTION

The EMB-2230 is a Pico-ITX (100x 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 RS-232/485, CAN bus, digital IO and more.

### **FEATURES**

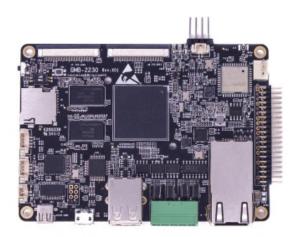
- NXP i.MX6 1 GHz Dual-Lite or Quad Core
- One Gigabit Ethernet ports, one WiFi/Bluetooth module
- Build-in POE (Power over Ethernet) option
- On-board RAM, iNAND flash and micro SD slot
- LVDS, MIPI DSI for LCD panel, built-in I2C touch panel support
- Ultra small form factor and ultra slim configuration option
- Rich I/O with RS-232/485, I2C, GPIOs and USB 2.0 ports

#### **SPECIFICATIONS**

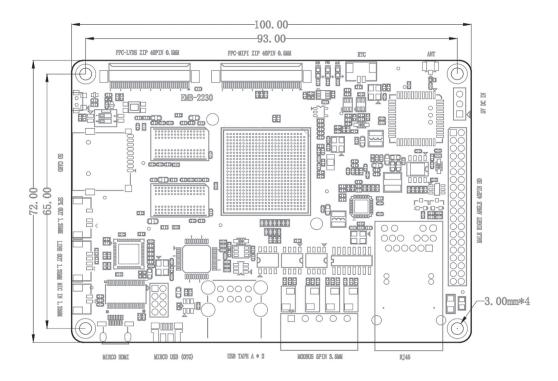
Model	EMB-2230
Platform	ARM Cortex A9
Processor	NXP i.MX 6 Dual Lite or Quad-core @1GHz
System Memory	Onboard 1GB DDR3
Ethernet	$1 \times 10/100/1000$ Mbps GbE with POE option, $1 \times 10/100/1000$ Mbps PCIe GbE (option with add-on card)
Storage	Onboard iNAND flash (8GB default), 1x micro SD slot
Wireless	1x WiFi/Bluetooth module
Display Interface	1x micro HDMI
LCD Interface	1x 24bit LVDS and 1x MIPI DSI for 7", 8", 10.1" and other size LCD panel
Display Resolution	HDMI - 1920 x 1080, LVDS - 1920 x 1080
Expansion	1x 40pin connector with PCle x1, GPIO, font panel control, POE power input
I/O	1x RS-232/RS-485 terminal block, 1x RS-232 header 2x USB2.0 Type A, 2x USB2.0 header, 1x micro USB 2.0 OTG 4+ GPIO, 2x I2C (for TP and MIPI CSI) 1x MIPI CSI 1x CAN via terminal block
Audio	Line-out, MIC-in, headphone, speaker out header (up to 2.1W/CH)
Watchdog timer	Programmable timer system reset
Cooling	Fanless
Power Input	5V DC header or POE
Form Factor	Embedded Pico-ITX standard
Operating Temperature	0 ~ 60°C (32 ~ 140°F)
Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
Operating Humidity	5% ~ 95% @ 40°C (Non-Condensing)
Dimensions	100 x 72 mm (3.94" x 2.83")



# **LAYOUT**



**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

## estonetech.com