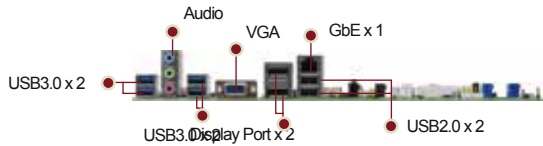
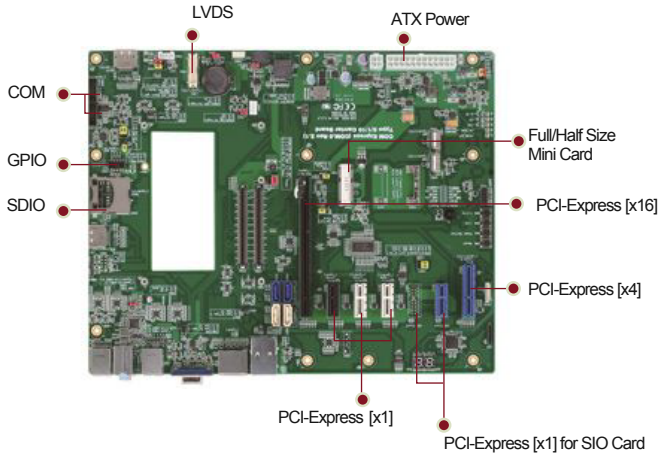


# Onyx Single Board Computer Unit

# ECB-920A

Universal Type 1/6/10 Carrier Board



## Features

- Supports COM Express Module Rev. 2.1 Pin-out Type 1/6/10
- Supports Gigabit Ethernet, RJ-45
- Up to 24-bit Dual Channel LVDS Connector, DP, VGA
- High Definition Audio
- SATA Port x 4
- USB 2.0 x 8, USB3.0 x 4
- ATX Power Input
- LPC Connector x 1, ATX Form Factor

## Specifications

### Main Specifications

Form Factor	ATX
COM Express Connect	X2
I/O Chipset	N/A (Legacy support)
Front Panel Control	10-pin (5x2) header
Expansion Interface	PCI-Express [x1] slot x4 (3 by PCI-E[x1] x1 pin-out, 1 by SIO pin-out) PCI-Express [x4] slot x1, PCI-Express [x16] slot x1, Mini Card slot x1
BIOS	-
Power Supply Type	ATX
CMOS Battery	RTC battery socket x 1

### I/O

USB	Type A connector x 4 (USB3.0) for Type 6, USB2.0 port x 4
Serial Port	2-wire RS-232 port x 2 (10-pin (5x2) box header x 2)
Ethernet	10/1000/1000Base-TX, RJ-45 x 1 (From CPU module)
Storage	SATA x 4
Audio	Audio Jack, supports Line-in, Line-out, Microphone
I2C	1
Debug LED	80 PORT
DVI/CRT	DB15 connector x 1
LVDS	30-pin (15 x 2) Dual-Channel LVDS connector x 1
DDI	DP connector x 4 (Dual x 1, Single x 2)
PS/2 Port	-

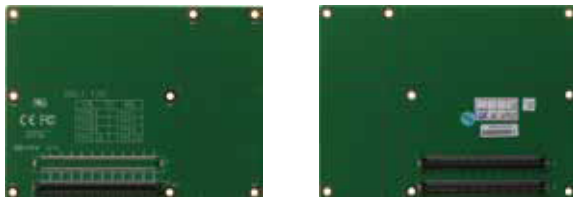
### Mechanical and Environmental

Operating Humidity	0% ~ 90% relative humidity, non-condensing
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40 °F ~ 185 °F (-40 °C ~ 85 °C) by E3815
Gross weight	1.32 lb (0.6 Kg)
Dimensions(W x D x H)	12" x 9.6"(304mm x 244mm)
MTBF (Hours)	75,000

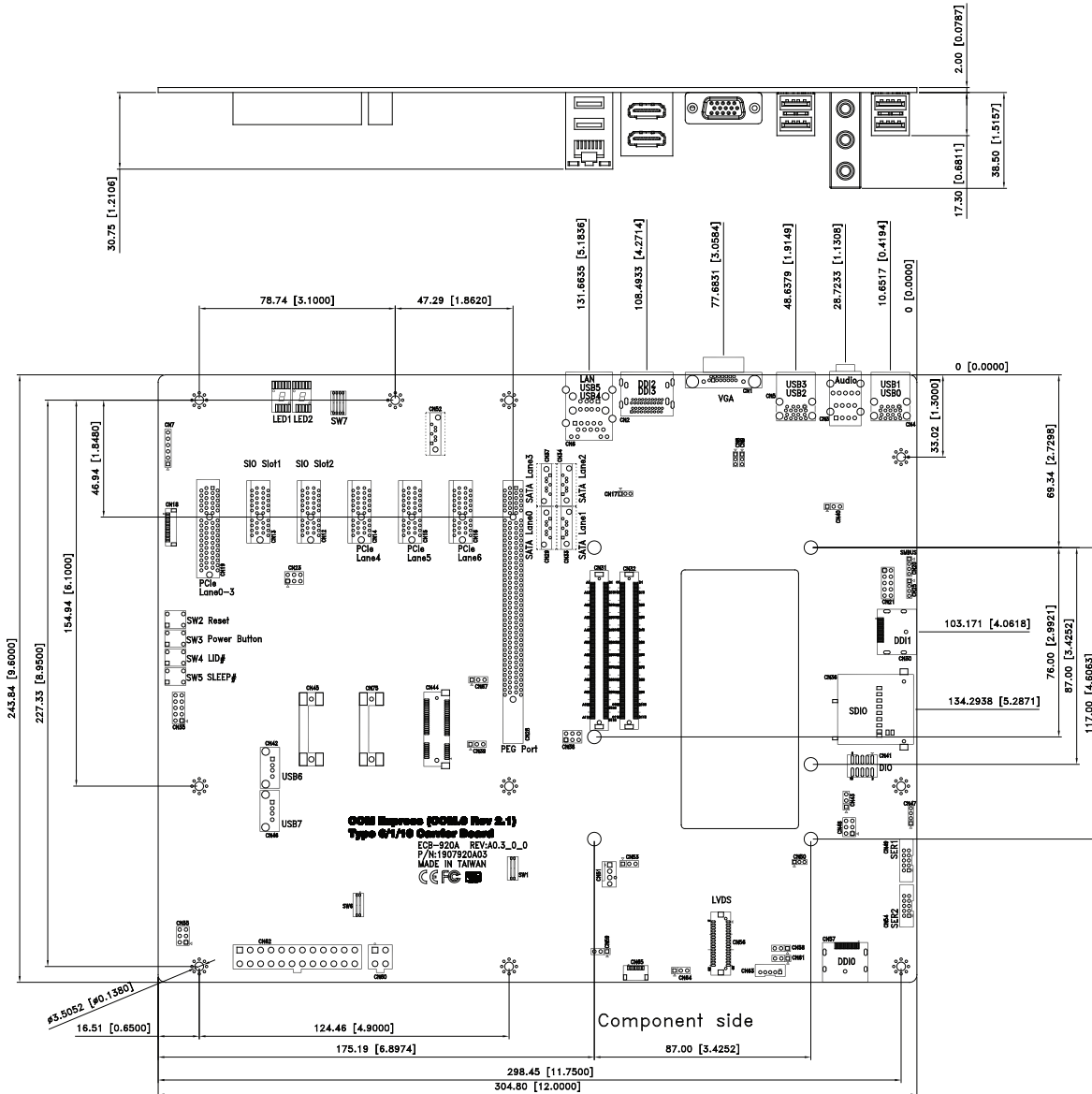
## PER-T289



## PER-253



Dimension / Unit: mm



### Type 1/6/10 Function Table

COM Type	PCI-E [x16]	PCI-E[x4]	PCI-E[x1]	VGA	DDI	LVDS	LAN	mSATA	Mini PCIe	SATA	Serial	USB 3.0	USB2.0	SDIO
Type 1	—	1 (Lane 0~3)	2 (Lane 4~5)	1	—	1	1	1 Share with SATA Lane 0	—	4 (Lane 0~3)	—	—	8	—
Type 6	1	1 (Lane 0~3)	2 (Lane 4~6)	1	3 (DDI 1~3)	1	1	1 Share with SATA Lane 0	1 (Lane 7)	4 (Lane 0~3)	2	4 (Lane 0~3)	8	1
Type 10	—	1 (Lane 0~3)	—	—	1 (DDI 0)	1	1	—	—	2 (Lane 0~1)	2	2 (Lane 0~1)	8	1