

# APC-2334

23.8" 7th Gen Intel® Core™ Kaby Lake i5-7300U Processor  
Multi-Touch Fanless Panel PC

## Quick Reference Guide

1<sup>st</sup> Ed – 17 December 2020

### Copyright Notice

Copyright © 2020 BCM Advanced Research, ALL RIGHTS RESERVED.

## FCC Statement



THIS DEVICE COMPLIES WITH PART 15 FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS "A" DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES.

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

## A Message to the Customer

### ***Customer Services***

Each and every our product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new device is destined for the laboratory or the factory floor, you can be assured that your product will provide the reliability and ease of operation.

Your satisfaction is our primary concern. Here is a guide to our customer services. To ensure you get the full benefit of our services, please follow the instructions below carefully.

### ***Technical Support***

We want you to get the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult the user's manual first.

# Content

<b>1.</b>	<b>Getting Started .....</b>	<b>5</b>
1.1	Safety Precautions .....	5
1.2	Packing List.....	5
1.3	System Specifications .....	6
1.4	System Overview .....	9
1.4.1	Front View.....	9
1.4.2	Rear View .....	10
1.5	System Dimensions .....	11
<b>2.</b>	<b>Hardware Configuration .....</b>	<b>12</b>
2.1	VESA Mounting.....	13
2.2	Cabling.....	15
2.3	Cleaning and Disinfecting .....	16
2.4	Turn ON/OFF the System .....	18
3.1.1	Turn ON the System.....	18
3.1.2	Turn OFF the System .....	18
2.5	Using LCD Display and Touch Screen.....	19
3.2.1	Adjust System Volume .....	19
3.2.2	Adjust LCD Display Brightness.....	19
3.2.3	LED reading light & Touch function.....	19
2.6	HID-2334 Main Board Overviews.....	20
2.7	HID-2334 Main Board Jumper and Connector list.....	21
2.8	HID-2334 Main Board Jumpers & Connectors settings.....	23
2.8.1	Clear CMOS (JCOMS1) .....	23
2.8.2	LCD backlight brightness adjustment (JSBKL1) .....	23
2.8.3	AT/ATX auto power on select (JAT1).....	24
2.8.4	Front Audio connector (FAUD1).....	24
2.8.4.1	Signal Description –Front Audio connector (FAUD1) .....	24
2.8.5	On-board header for USB2.0 (JUSB3).....	25
2.8.6	On-board header for USB2.0 (JUSB4).....	25
2.8.7	Battery connector (BT1) .....	26
2.8.8	Display Port connector (EDP1).....	26
2.8.9	Speaker connector (SPK1).....	27
2.8.10	Power connector (PWR1).....	27
2.8.11	SPI connector (JSPI1) .....	28

## APC-2334

2.8.12	EC Debug connector (JEC_SPI) .....	28
2.8.13	LCD Inverter connector (JBKL1) .....	29
2.8.14	Reading Light connector (JLED_LIGHT).....	29
2.8.15	SATA Power connector (SPWR1) .....	30
2.8.16	I2Cconnector (I2C1) .....	30
2.8.17	General purpose I/O connector (DIO1) .....	31
2.8.18	Fan connector (FAN1) .....	31
2.8.19	Front Panel connector 1 (JFPT1) .....	32
2.8.20	Front Panel connector 2 (JFPT2) .....	32
2.8.21	Serial port 1 connector (COM1).....	33
2.8.22	Serial port 2 connector (COM2).....	33
2.8.23	LPC connector (JLPC).....	34
2.8.24	Touch Panel connector (JTOUCH).....	34
2.8.25	LVDS connector (LVDS1).....	35
2.8.26	Battery mode connector (JBAT_AUX1).....	36
<b>3.</b>	<b>General Safety Guide</b> .....	<b>37</b>
<b>4.</b>	<b>Touch Button Guide</b> .....	<b>40</b>

# 1. Getting Started

## 1.1 Safety Precautions

### Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

### Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

## 1.2 Packing List

- 1 x APC-2334 Panel PC
- 1 x 19V/3.78A 72W power adapter
- 1 x power cord



---

If any of the above items is damaged or missing, contact your retailer.

---

## 1.3 System Specifications

<b>Component</b>	
<b>Mother Board</b>	HID-2334 M/B
<b>CPU</b>	7th Generation Intel® Core Kaby Lake i5-7300U Processor
<b>CPU Cooler (Type)</b>	Heatsink
<b>Memory</b>	2 x 260pin SODIMM socket up to 32GB Per Slot DDR4 2400 SDRAM
<b>Power Supply</b>	DC in
<b>Adapter</b>	AC adapter 19V/3.78A 72W Screw Type EDAC EA10683V(T06)
<b>Speaker</b>	2W x 2
<b>Camera</b>	2.0M CMOS
<b>Wireless LAN</b>	mPCIe WiFi 1T1R 802.11b/g/n/ac/ BT4.0 (ACC-MPCIE-WIFI-10R) Optional
<b>Bluetooth</b>	BT4.0 Optional
<b>Operating System</b>	Win10 64 bit/Linux (Kernel after 4.7)
<b>Expansion Card</b>	Mini PCIe slot x 1
<b>Other Component</b>	JunWei NFC Module CT-NFCe-10 w/Antenna (ACC-NFC-USB-03R) Optional
<b>Storage</b>	
<b>Solid State Drive</b>	2.5" SSD Optional
<b>Panel</b>	
<b>LCD Panel</b>	BOE MV238FHM-N10
<b>LCD Control Board</b>	D2625014G1PA, 3ASCREEN
<b>Touch Screen</b>	Sense Touch ST-238C04E
<b>Touch Controller</b>	EETI 84H5680 ctrl bd.
<b>External I/O</b>	
<b>USB Port</b>	4 x USB3.0 (2 x Double deck)
<b>Video Port</b>	1 x DP 1 x HDMI
<b>Audio Port</b>	Line-Out & Mic-in
<b>LAN Port</b>	2 x RJ45
<b>Indicator Light</b>	HDD LED, Power LED
<b>Expansion Slots</b>	1 x M.2 2230 1 x mPCIe with SATA or PCIE x1 mSATA
<b>Mechanical</b>	
<b>Power Type</b>	DC in +19V ~ 24V
<b>Power Connector Type</b>	Lockable DC jack
<b>Dimension</b>	539.6 x 342.6 x 45.5mm
<b>Weight</b>	6.9 kg (without battery and adapter)

<b>Color</b>	White Plastic
<b>Fanless</b>	Yes
<b>Reliability</b>	
<b>EMI Test</b>	CE/ FCC class B
<b>Safety</b>	EN 300 330 EN 62368-1 (LVD)
<b>Dust and Rain Test</b>	Front Panel IP65
<b>Vibration Test</b>	<p>Random Vibration Operation Reference IEC60068-2-64 Testing procedures Test Fh : Vibration boardband random Test 1 Test PSD : 0.00454G<sup>2</sup>/Hz , 1.5 Grms 2 Test frequency : 5~500 Hz 3 Test axis : X,Y and Z axis 4 Test time : 30 minutes each axis 5 System condition : operation mode 6 Test curve</p> <p>Sine Vibration Test Reference IEC60068-2-6 Testing procedures Test Fc : Vibration sinusoidal 1 Test Acceleration : 2G 2 Test frequency : 5~500 Hz 3 Sweep : 1 Oct/ per one minute. (logarithmic) 4 Test axis : X,Y and Z axis 5 Test time :30 min. each axis 6 System condition : Non-Operating mode 7 Test curve</p> <p>Package Vibration Test: Reference IEC60068-2-64 Testing procedures Test Fh : Vibration boardband random Test 1 Test PSD : 0.026G<sup>2</sup>/Hz , 2.16 Grms 2 Test frequency : 5~500 Hz 3 Test axis : X,Y and Z axis 4 Test time : 30 minutes each axis 5 Test curve</p>
<b>Mechanical Shock Test</b>	With CF/SSD: 10Grms, IEC 60068-2-27, Half Sine, 11ms
<b>Drop Test</b>	<p>Package drop test Reference ISTA 2A, Method : IEC-60068-2-32 Test:Ed Test Ea : Drop Test 1 Test phase : One corner, three edges, six faces</p>

## APC-2334

	2 Test high : 3 Package weight : 4 Test drawing
<b>Operating Temperature</b>	0 ~ 40 degree
<b>Operating Humidity</b>	0 ~ 90% Relative Humidity, Non-condensing
<b>Storage Temperature</b>	-20 ~ 60 degree

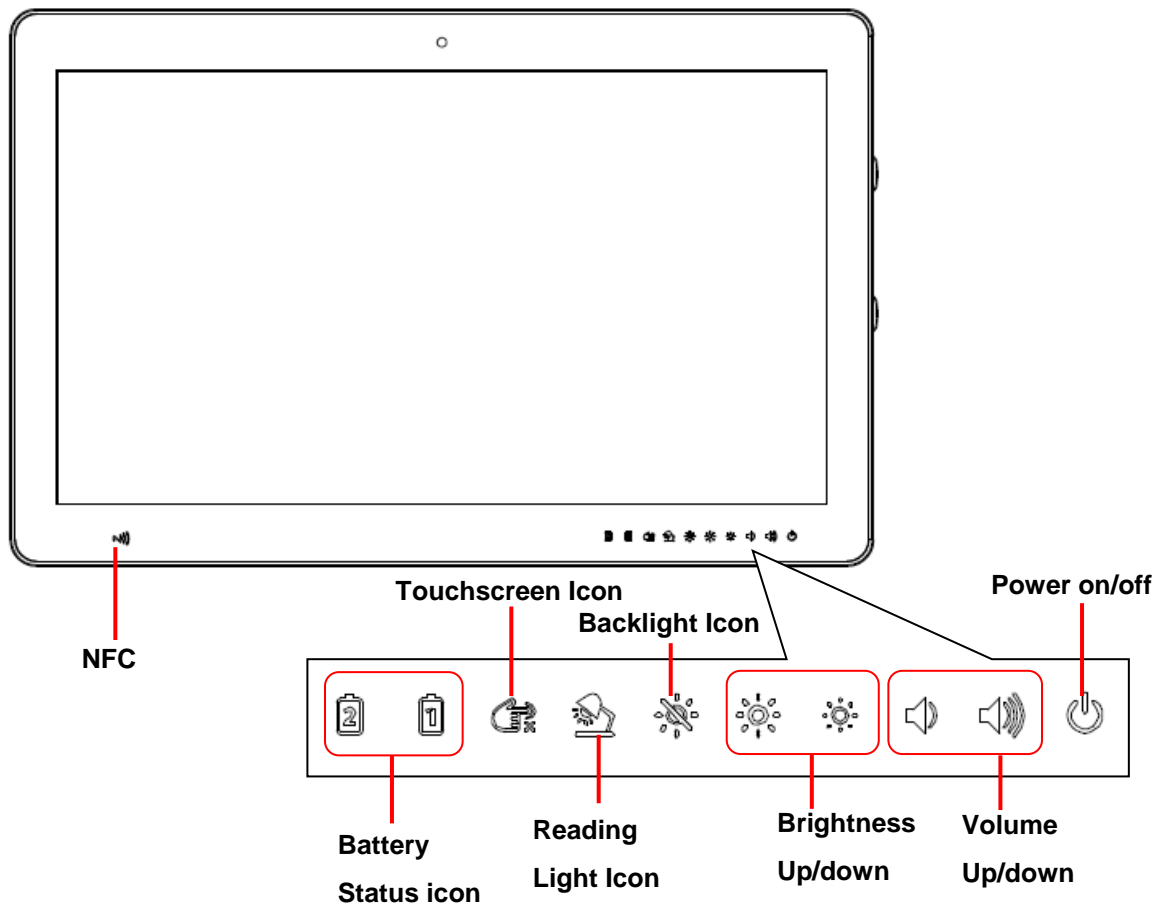


**Note:** Specifications are subject to change without notice.

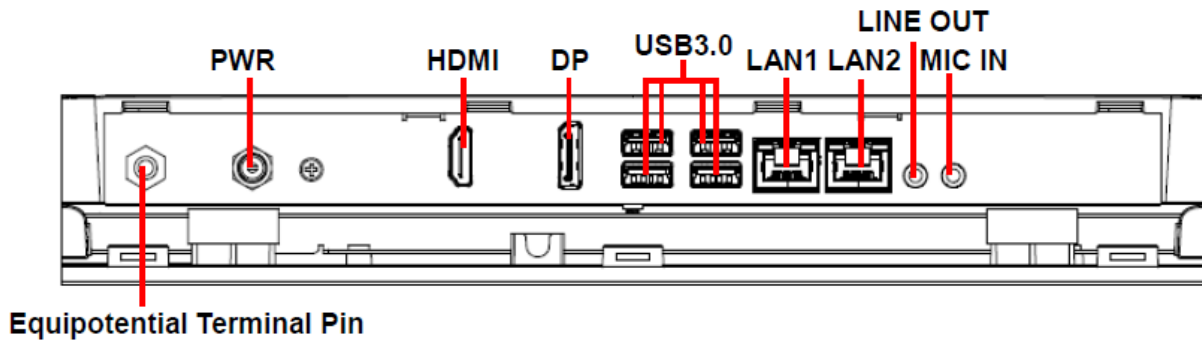


## 1.4 System Overview

### 1.4.1 Front View



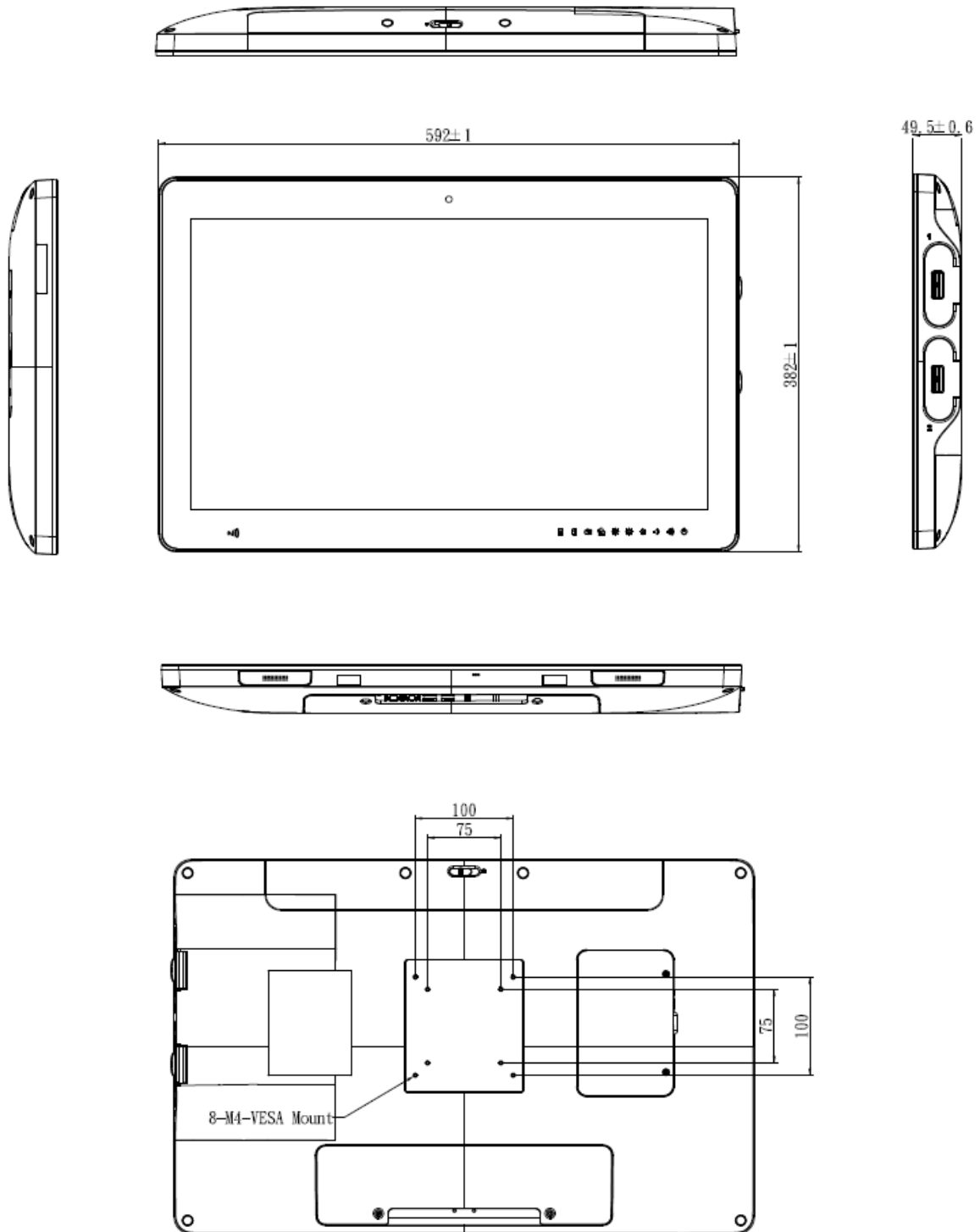
1.4.2 Rear View



**Connectors**

Label	Function	Note
<b>Equipotential Terminal Pin</b>	For connect hospital ground/earth	DB-9 male connector
<b>PWR</b>	System power indicator	
<b>HDMI</b>	HDMI connector	
<b>DP</b>	DP connector	
<b>USB3.0</b>	4 x USB 3.0 connector	
<b>LAN1/2</b>	RJ-45 Ethernet 1/2	
<b>MIC IN</b>	Mic-in audio jack	
<b>LINE OUT</b>	Line-out audio jack	

## 1.5 System Dimensions



(Unit: mm)

# 2. Hardware Configuration

---

For advanced information, please refer to:

- 1- APC-2334 Main Board/DB-A included in this manual.

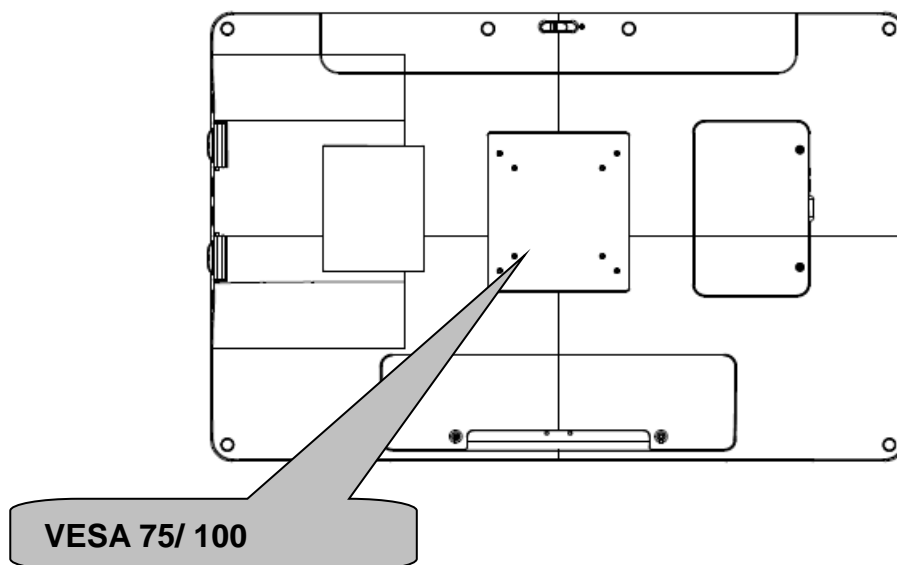
## 2.1 VESA Mounting

The APC-2334 also provides standard VESA mounting to help system integrators conveniently integrate the panel PC into their system.

Never use mounting brackets except as provided to prevent unreliable mounting of the APC-2334. VESA mount installation should be carried out by a professional technician; please contact a service technician or your retailer if you need this service. Installation instructions follow:

1. First attach the wall-mounting to the heat-sink of the APC-2334, securing it in place with four of the M4 x 6mm screws provided.
2. Mount the on the wall, stand or other flat surface.

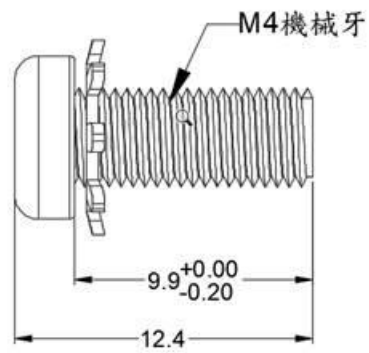
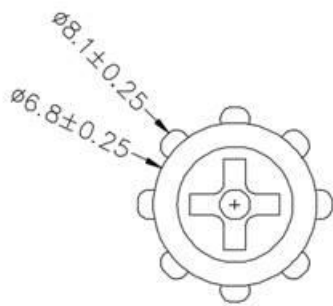
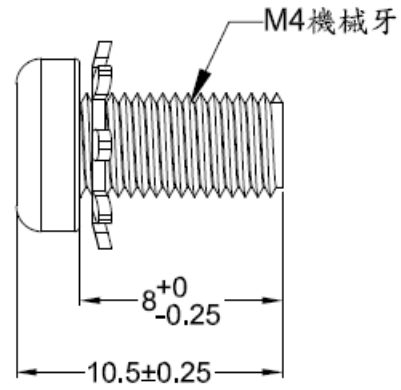
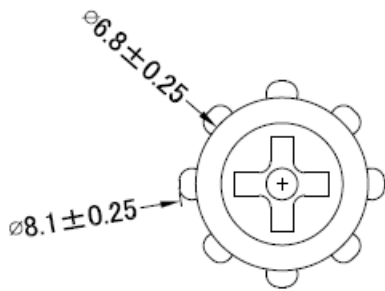
**Warning!** *Be sure to secure the screws of the mounting bracket tightly. A loose joint between the APC-2334 and mounting bracket may create danger of injury.*



# APC-2334

Suggested Screw type for mounting

**Note:** 4 pieces of M4 x 8mm~10mm screws

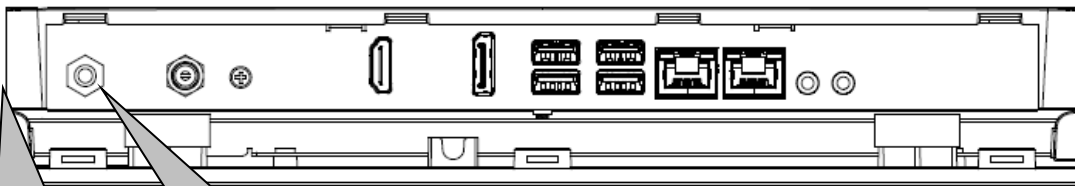
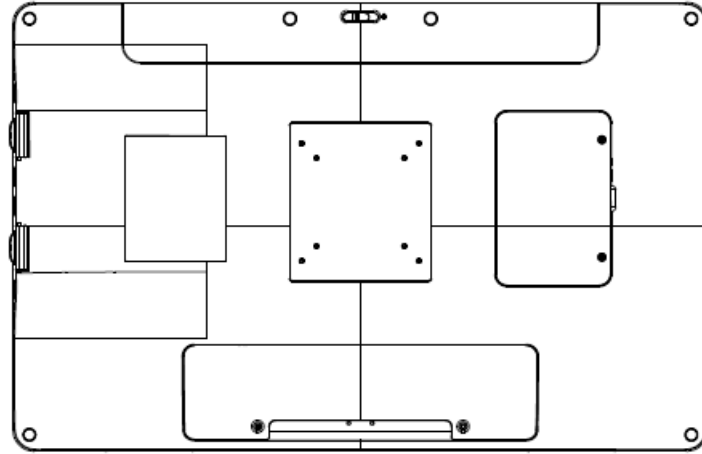


**Warning!** Use suitable mounting apparatus to avoid risk of injury.



## 2.2 Cabling

1. Power Cable
2. Equipotential Terminal Pin



**Equipotential  
Terminal Pin**

**Power Jack**

Follow below step Connecting the Ground pin

1. With system ready, find the equipotential terminal on the rear side of the APC-2334. An equipotential terminal is provided to optionally connect to a hospital ground/earth system.
2. Prepare grounding cable and the other terminal links to the hospital ground/ earth system.
3. Grounding cable plug with Equipotential Terminal

## 2.3 Cleaning and Disinfecting

During normal use of APC-2334, the device may become dirty and should be regularly cleaned.

### Cleaning Instructions

1. Turn off the computer before starting clean up. This way, you can see any dirt on the screen; the brightness of the monitor may make you miss some areas.
2. Wet a soft, lint-free or microfiber cloth with cleaning agent per manufacturer's instructions or hospital protocol. Wipe the PC in a gentle motion to remove dust, oil, or fingerprint smudges.
3. Wipe any moisture excess with a dry lint-free cloth to finish cleaning before turning the computer back on.

### Cleaning Tools

Below is a list of some items that may be needed or used when cleaning the PC or PC peripherals.

Please keep in mind that some components in PC components may only be cleaned using a product designed for cleaning that component.

Cleaning agent list: chemical disinfectants which have been tested on the PC

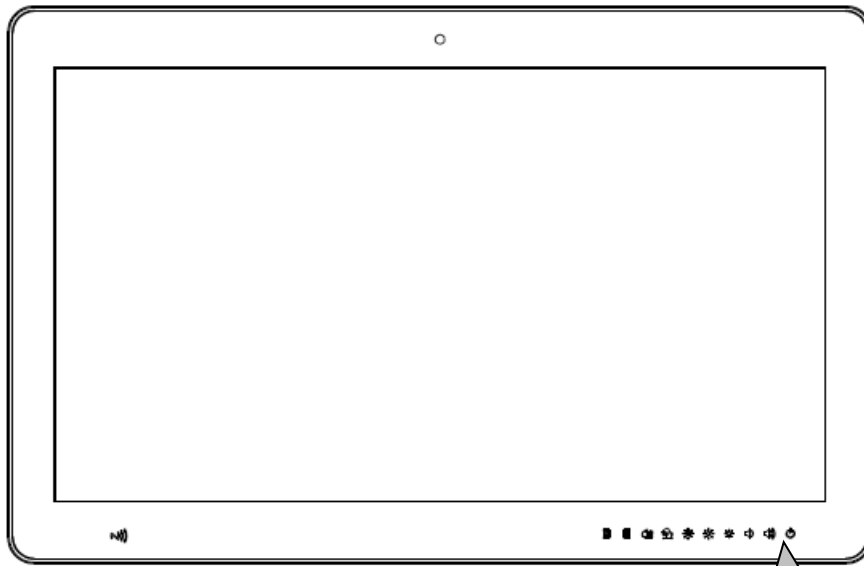
No.	Cleaning agent
1	Acetic Acid
2	Acetone
3	Alcohol
4	Alcohol 70%
5	Ammonia
6	Artificial Perspiration (JIS K6772)
7	Boil Water
8	Caustic Soda
9	Cidex
10	Cold Cream Applied
11	Detergent (Kao Mypet) Applied
12	Ethanol
13	Gasoline
14	Glycerine
15	Green tinctured soap
16	Hydrochloric Acid
17	Incidin liquid



<b>18</b>	Incidin plus
<b>19</b>	Isopropyl alcohol
<b>20</b>	Kerosene
<b>21</b>	Lanoline Applied
<b>22</b>	Methanol
<b>23</b>	Mikrozid liquid
<b>24</b>	Nitric Acid
<b>25</b>	Paraffin Oil
<b>26</b>	Propanol
<b>27</b>	Solution of salt
<b>28</b>	Sulfuric Acid
<b>29</b>	Toluene
<b>30</b>	Vaseline Applied
<b>31</b>	Virkon and water (1:100)
<b>32</b>	Windex

---

## 2.4 Turn ON/OFF the System



ON/OFF Touch

### 3.1.1 Turn ON the System

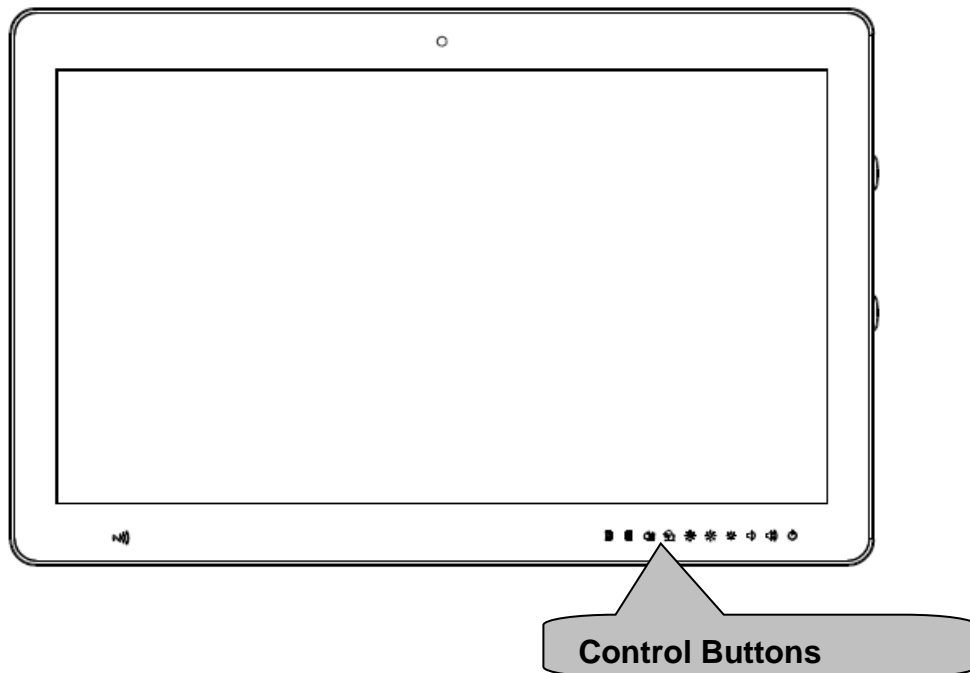
1. Check if the Power ON/OFF LED light is Orange.
2. Press the Power ON/OFF icon firmly to turn power ON/OFF
3. The Power ON/OFF LED will turn green to indicate power is on.

### 3.1.2 Turn OFF the System

1. Press on the Power ON/OFF icon firmly for 4 seconds.
2. The Power ON/OFF LED will turns orange to indicate power is off.
3. Your system is turned OFF.

**Note:** We recommend using operating system shut down procedure to turn the system OFF.

## 2.5 Using LCD Display and Touch Screen



### 3.2.1 Adjust System Volume

1. Press the Volume Up or Volume Down icon to increase or decrease volume
2. The volume will be adjusted accordingly.

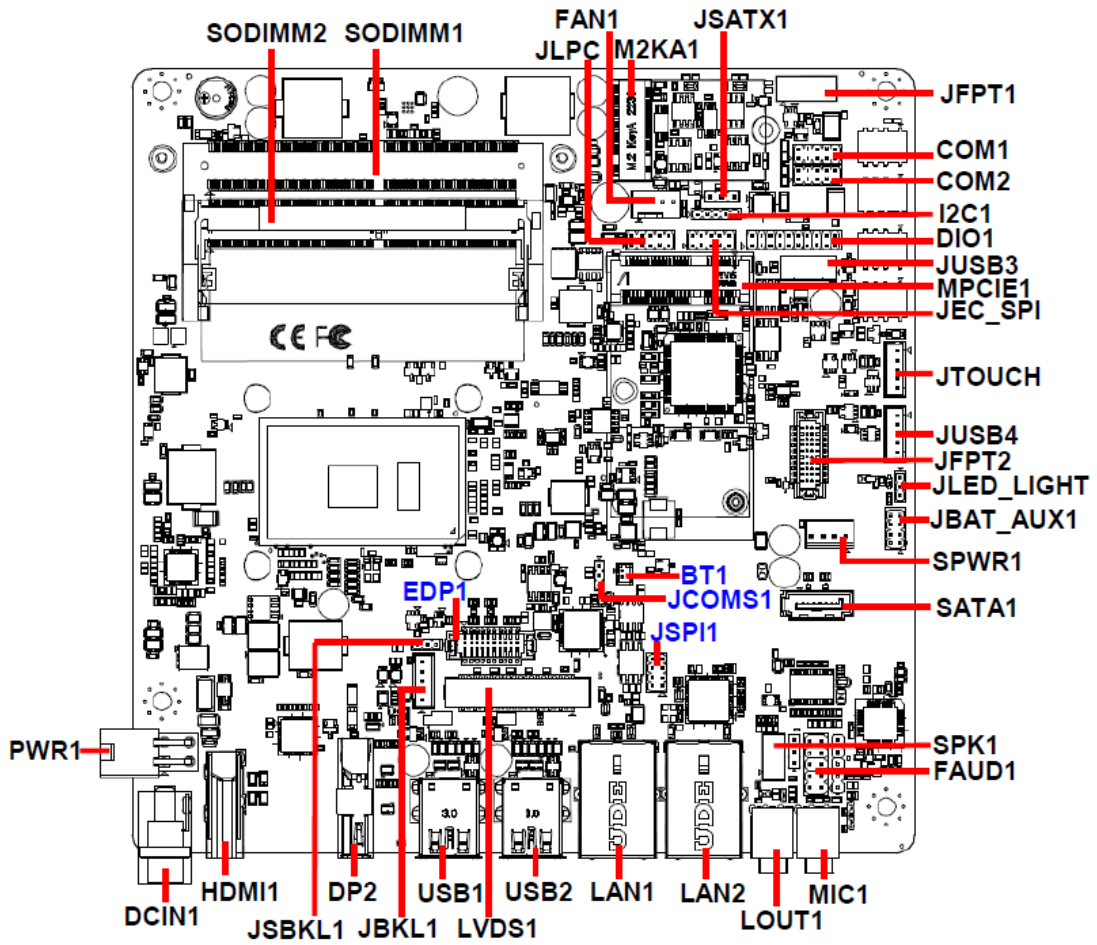
### 3.2.2 Adjust LCD Display Brightness

1. Press the Brightness Up or Brightness Down icon to increase or decrease brightness.
2. The brightness of the LCD display will be adjusted accordingly.

### 3.2.3 LED reading light & Touch function

1. Press LED reading light icon for 2 sec to turn on the light bar.
2. Press LED reading light icon for 2 sec to turn off the light bar
3. Press LED reading light icon for 4 secs to turn off the touch function (touch function always on as default)
4. Press LED reading light icon for 4 secs to turn on the touch function

## 2.6 HID-2334 Main Board Overviews



## 2.7 HID-2334 Main Board Jumper and Connector list

### Jumpers

Label	Function	Note
JCOMS1	Clear CMOS	3 x 1 header, pitch 2.00mm
JSBKL1	LCD backlight brightness adjustment	3 x 1 header, pitch 2.54mm
JSATX1	AT/ATX auto power on select	3 x 1 header, pitch 2.00mm

### Connectors

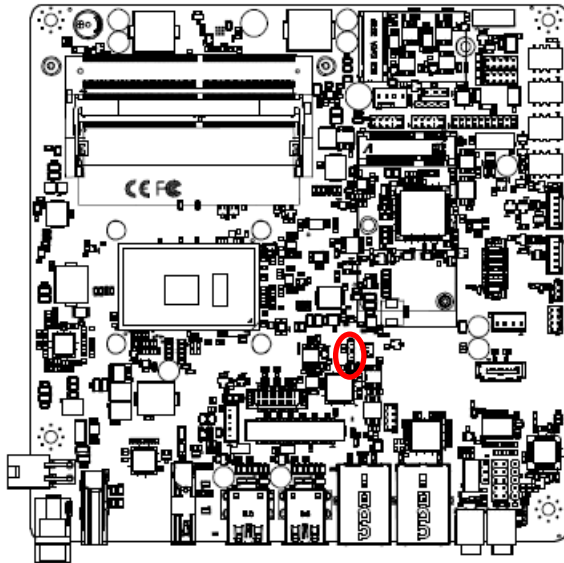
Label	Function	Note
SODIMM1/2	2 x 260-Pin DDR4 2400MHz SO-DIMM	
COM1	Serial port 1 connector(Reserved)	5 x 2 header, pitch 2.00 mm
COM2	Serial port 2 connector(Reserved)	5 x 2 header, pitch 2.00 mm
SPK1	Speaker connector	4 x 1 wafer, pitch 2.00 mm
FAN1	Fan connector	4 x 1 wafer, pitch 2.54 mm
JBKL1	LCD inverter connector	5 x 1 wafer, pitch 2.00 mm Matching Connector: JST PHR-5
JLPC	LPC connector	5 x 2 header, pitch 2.00 mm
LVDS1	LVDS connector	20 x 2 wafer, pitch 1.25 mm Matching Connector: Hirose DF13-40DS-1.25C
JFPT1	Front Panel connector 1	5 x 2 header, pitch 2.54 mm
JFPT2	Front Panel connector 2	10 x 2 wafer, pitch 1.25 mm
DP2	Display Port connector	10 x 2 wafer, pitch 1.25 mm
USB1/2	USB connector 1/2	
JUSB3	On-board header for USB2.0	5 x 2 wafer, pitch 2.00 mm
JUSB4	On-board header for USB2.0	5 x 1 wafer, pitch 2.00 mm
JTOUCH	Touch Panel connector	5 x 1 wafer, pitch 2.00 mm
LAN1/2	RJ-45 Ethernet 1/2	
MPCIE1	Mini-PCIe connector	
BT1	Battery connector	2 x 1 wafer, pitch 1.25 mm
DIO1	General purpose I/O connector	10 x 2 wafer, pitch 2.00 mm
HDMI1	HDMI connector	
M2KA1	M.2 A key slot	
PWR1	Power connector	2 x 2 wafer, pitch 4.20 mm

**APC-2334**

<b>I2C1</b>	I2C connector(Reserved)	5 x 1 header, pitch 2.00 mm
<b>JSPI1</b>	SPI connector	4 x 2 header, pitch 2.00 mm
<b>JEC_SPI</b>	EC Debug connector	5 x 2 header, pitch 2.00 mm
<b>SATA1</b>	Serial ATA connector	
<b>SPWR1</b>	SATA Power connector	4 x 1 wafer, pitch 2.54 mm
<b>JLED_LIGHT</b>	Reading Light connector	3 x 2 header, pitch 2.00 mm
<b>JBAT_AUX1</b>	Battery mode connector	4 x 2 header, pitch 2.00 mm
<b>EDP1</b>	Display Port connector	10 x 2 wafer, pitch 1.25 mm
<b>DCIN1</b>	DC power-in connector	
<b>MIC1</b>	Mic-in audio jack	
<b>LOUT1</b>	Line-out audio jack	
<b>FAUD1</b>	Front Audio connector	5 x 2 header, pitch 2.54 mm

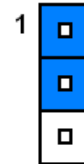
## 2.8 HID-2334 Main Board Jumpers & Connectors settings

### 2.8.1 Clear CMOS (JCOMS1)



\*Default

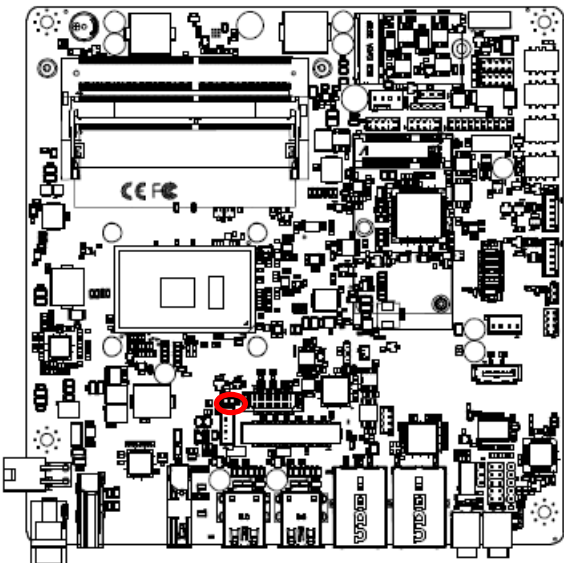
Protect\*



Clear CMOS

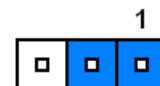


### 2.8.2 LCD backlight brightness adjustment (JSBKL1)

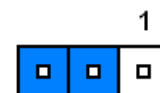


\* Default

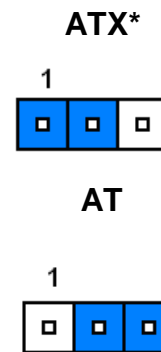
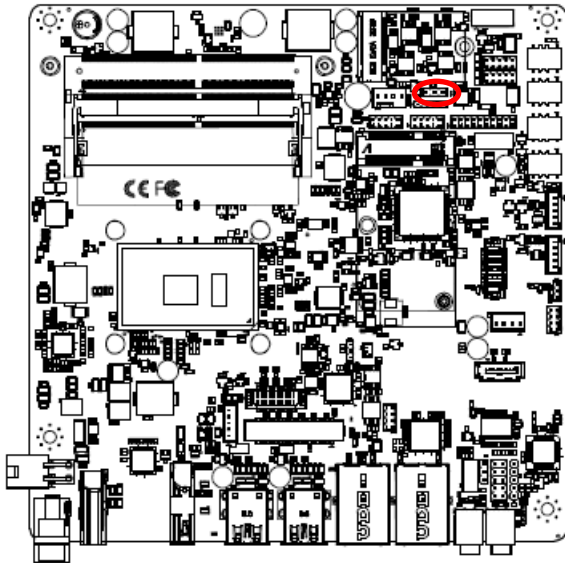
PWM Mode\*



DC Mode

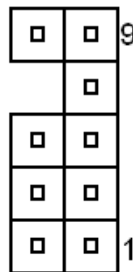
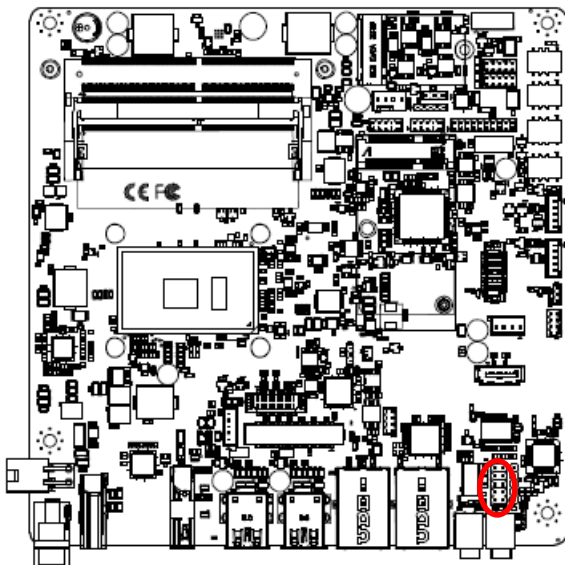


### 2.8.3 AT/ATX auto power on select (JAT1)



\* Default

### 2.8.4 Front Audio connector (FAUD1)



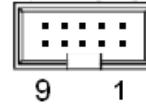
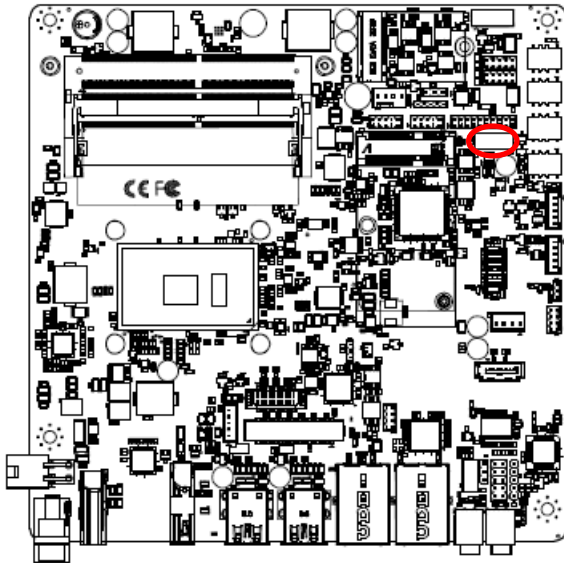
Signal	PIN	PIN	Signal
LINE2_JD	10	9	LINE2_LIN
HD_AGND		7	GND
MIC2_JD	6	5	LINE2_RIN
AUD_FRONT_DET	4	3	MIC2_RIN
GND	2	1	MIC2_LIN

#### 2.8.4.1 Signal Description –Front Audio connector (FAUD1)

Signal	Signal Description
LINE2-JD	AUDIO IN (LINE_RIN/LIN)sense pin
MIC2-JD	MIC IN (MIC_RIN/LIN) sense pin

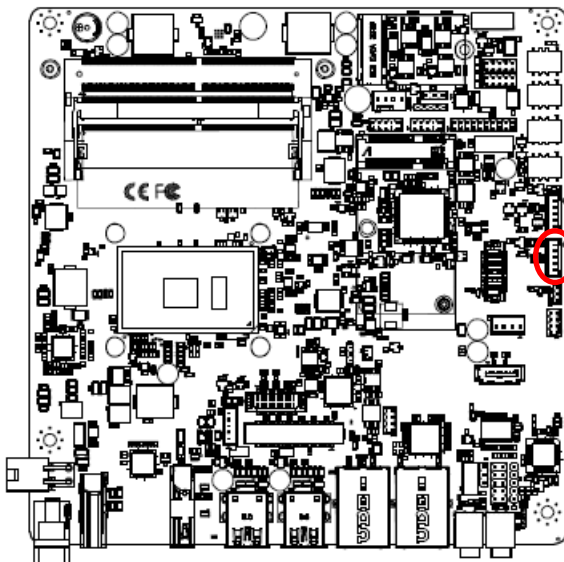


2.8.5 On-board header for USB2.0 (JUSB3)



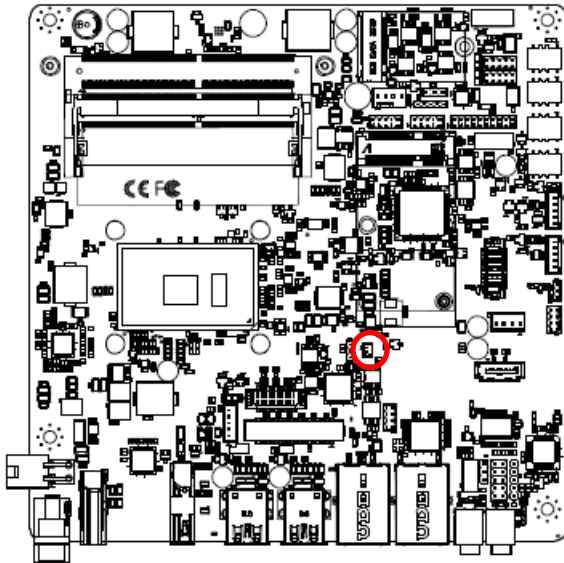
Signal	PIN	PIN	Signal
+5VSB	2	1	+5VSB
USB_DN7	4	3	USB_DN8
USB_DP7	6	5	USB_DP8
GND	8	7	GND
GND	10	9	GND

2.8.6 On-board header for USB2.0 (JUSB4)



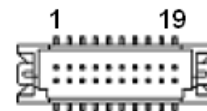
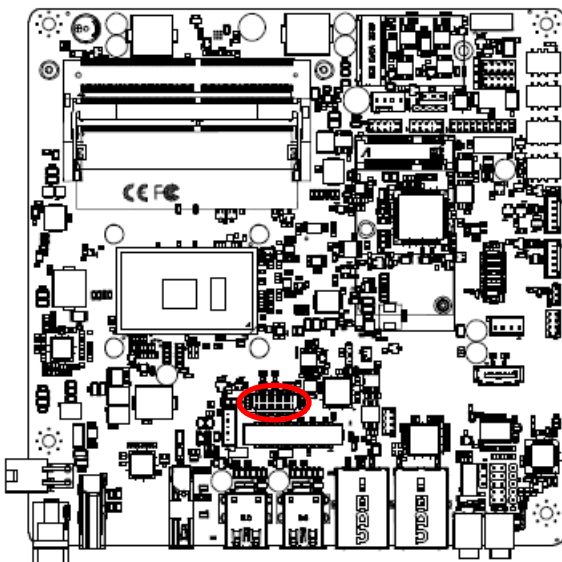
Signal	PIN
+5VSB	1
USB_DN9	2
USB_DP9	3
GND	4
GND	5

2.8.7 Battery connector (BT1)



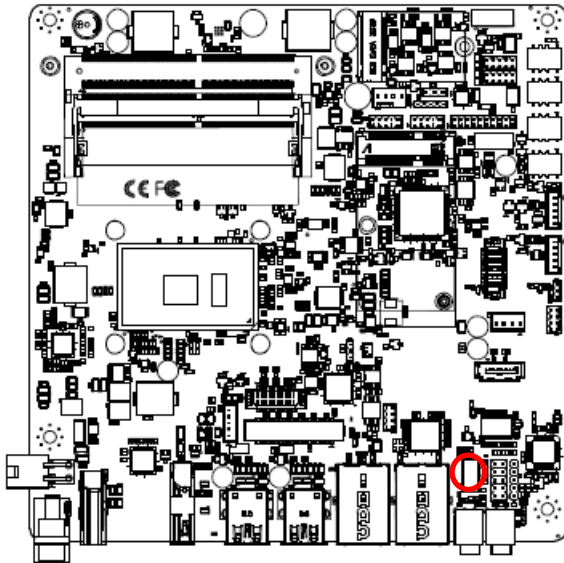
Signal	PIN
+RTCBAT	1
GND	2

2.8.8 Display Port connector (EDP1)



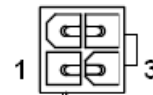
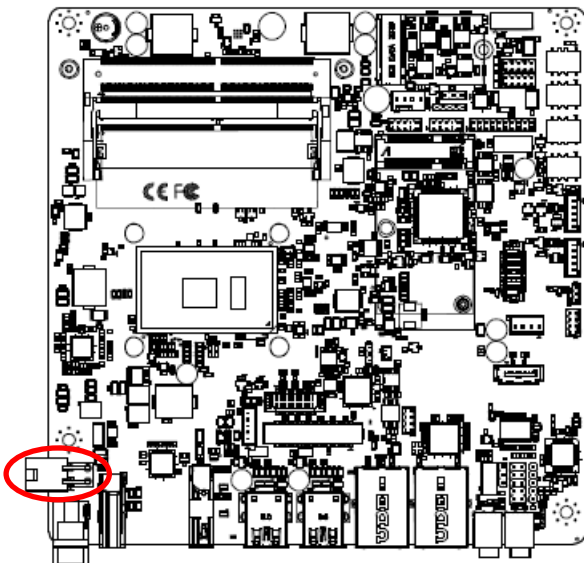
Signal	PIN	PIN	Signal
GND	1	2	GND
EDP_PanelTXN0	3	4	EDP_PanelTXN3
EDP_PanelTXP0	5	6	EDP_PanelTXP3
GND	7	8	Nc
EDP_PanelTXN1	9	10	GND
EDP_PanelTXP1	11	12	EDP_PanelAUXN
GND	13	14	EDP_PanelAUXP
EDP_PanelTXN2	15	16	GND
EDP_PanelTXP2	17	18	EDP_Panel_HPDP
+V3512_EDP	19	20	+V3512_EDP

### 2.8.9 Speaker connector (SPK1)



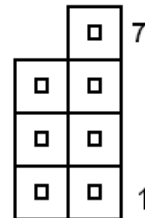
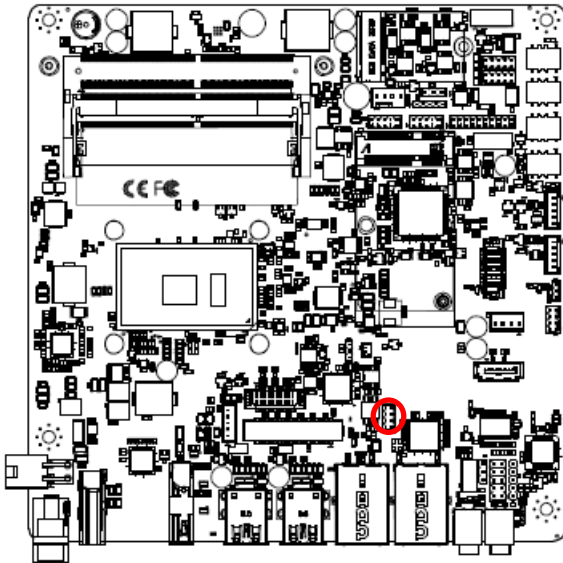
Signal	PIN
SPK_R-	4
SPK_R+	3
SPK_L-	2
SPK_L+	1

### 2.8.10 Power connector (PWR1)



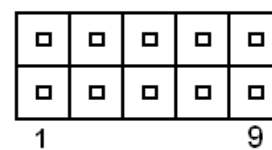
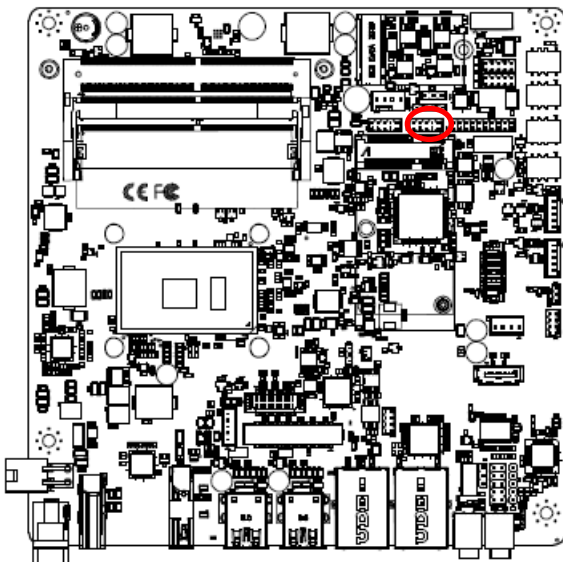
Signal	PIN	PIN	Signal
GND	2	4	+VIN_26V
GND	1	3	+VIN_26V

2.8.11 SPI connector (JSPI1)



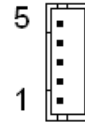
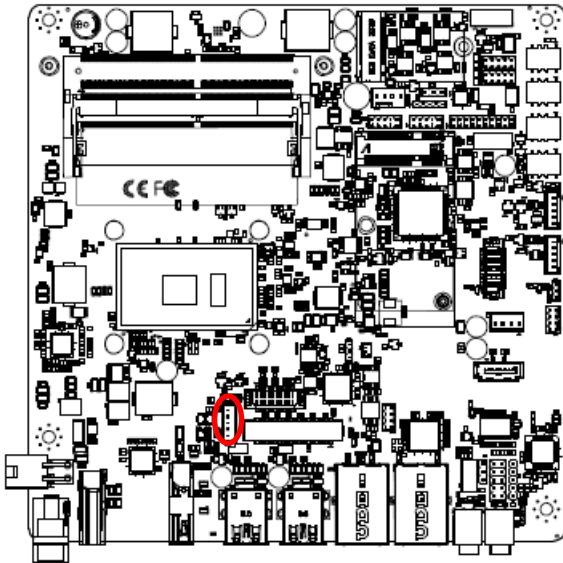
Signal	PIN	PIN	Signal
		7	HOLD#
SPI_SI	6	5	SPI_SO
SPI_CLK	4	3	SPI0_CS0#
GND	2	1	+3.3VSB

2.8.12 EC Debug connector (JEC\_SPI)



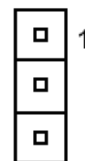
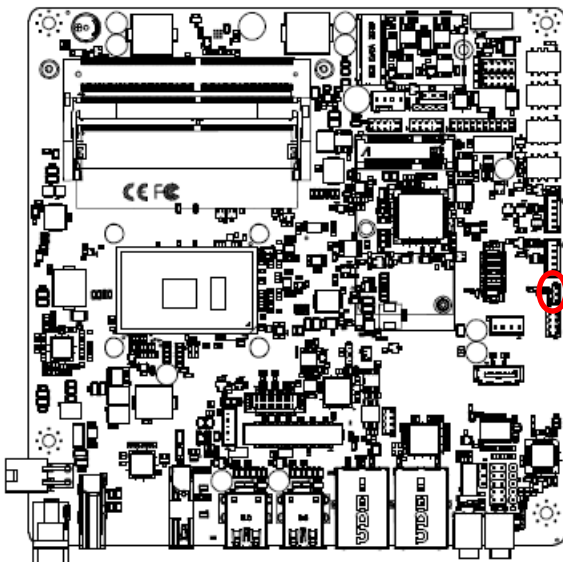
Signal	PIN	PIN	Signal
+3VSPI_EC	1	2	GND
EC_FSCE#	3	4	EC_FSCK
EC_FMISO	5	6	EC_FMOSI
EC_HOLD#	7	8	NC
EC_SMCLK	9	10	EC_SMDAT

2.8.13 LCD Inverter connector (JBKL1)



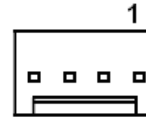
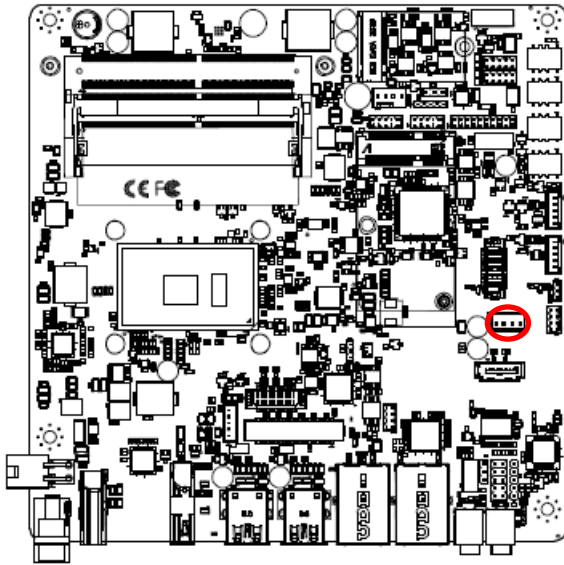
Signal	PIN
+5V	5
LVDS_BKLTCTL	4
LVDS_BKLT_EN	3
GND	2
+12V	1

2.8.14 Reading Light connector (JLED\_LIGHT)



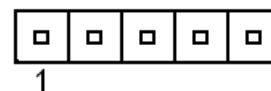
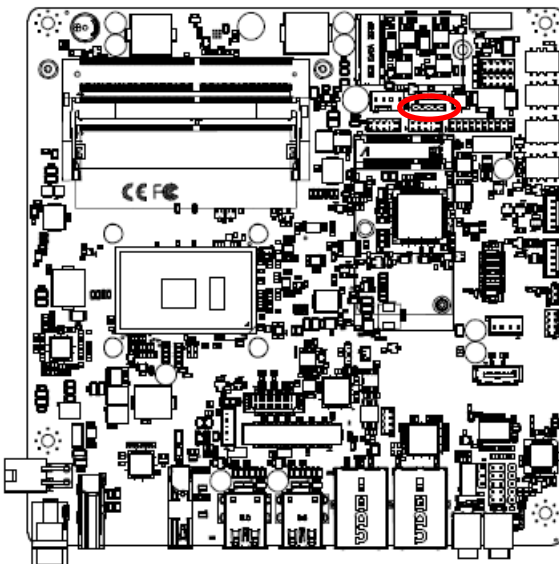
Signal	PIN
+5VSB	1
READ_LIGHT_EN	2
GND	3

2.8.15 SATA Power connector (SPWR1)



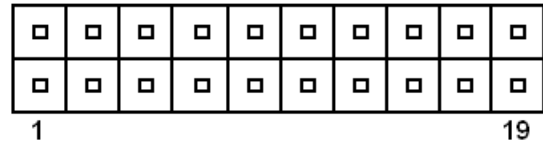
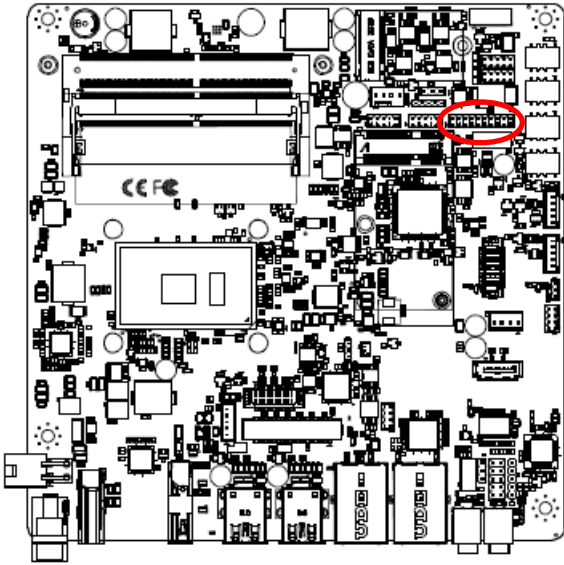
Signal	PIN
+5V	1
GND	2
GND	3
+12V	4

2.8.16 I2Cconnector (I2C1)



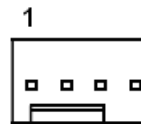
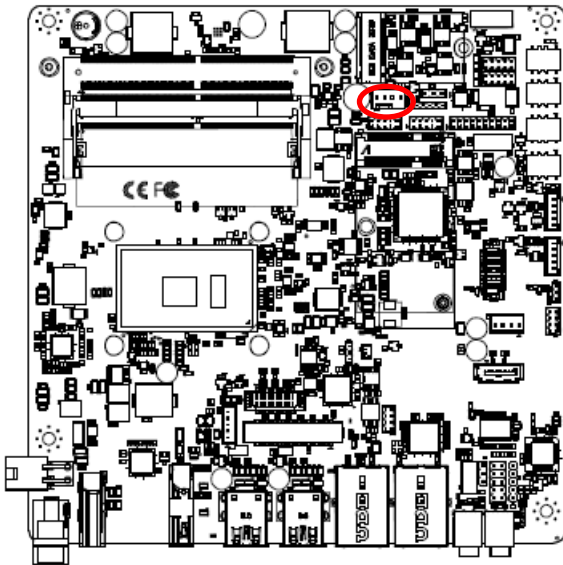
Signal	PIN
+3.3V	1
INT_I2C0#	2
I2C0_CLK	3
I2C0_DATA	4
GND	5

### 2.8.17 General purpose I/O connector (DIO1)



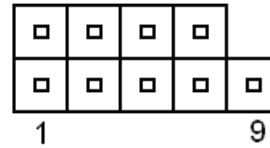
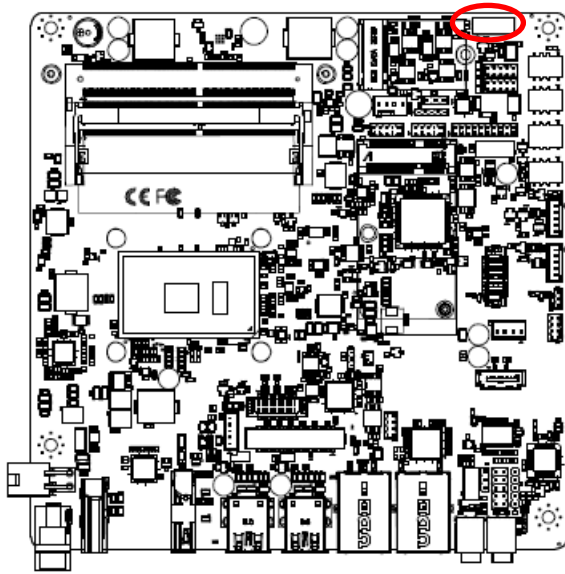
Signal	PIN	PIN	Signal
DI0	1	2	DO0
DI1	3	4	DO1
DI2	5	6	DO2
DI3	7	8	DO3
DI4	9	10	DO4
DI5	11	12	DO5
DI6	13	14	DO6
DI7	15	16	DO7
SMB_CLK_S	17	18	SMB_DATA_S
GND	19	20	+5V

### 2.8.18 Fan connector (FAN1)



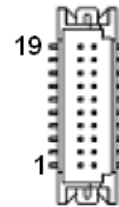
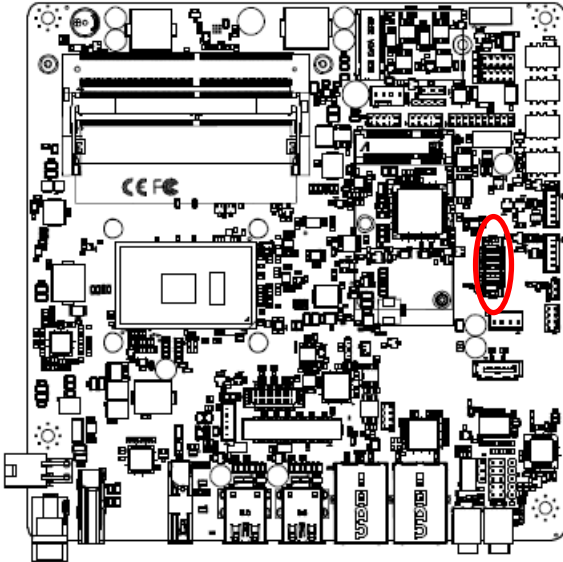
Signal	PIN
GND	1
+12V	2
CPUFANIN	3
FAN_PWM0	4

2.8.19 Front Panel connector 1 (JFPT1)



Signal	PIN
+HD_LED	1
+PWR_LED	2
-HD_LED	3
-PWR_LED	4
+Reset	5
+PWR_BNT	6
-Reset	7
-PWR_BNT	8

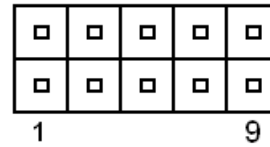
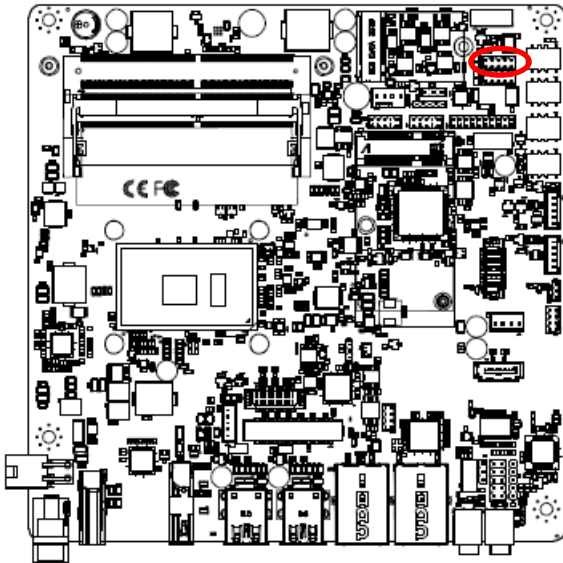
2.8.20 Front Panel connector 2 (JFPT2)



Signal	PIN	PIN	Signal
NC	19	20	NC
NC	17	18	PWR_LED#
TOUCH_OFF_LED#	15	16	SUS_LED#
BATTERY_2_B#	13	14	PWR_BTN_EC#
BATTERY_2_O#	11	12	TOUCH_ON_OFF
BATTERY_1_B#	9	10	VOLUME_DN
BATTERY_1_O#	7	8	VOLUME_UP
READ_LIGHT	5	6	BLK_BRI_DN
BKL_ON_OFF	3	4	BLK_BRI_UP
+3.3V	1	2	GND

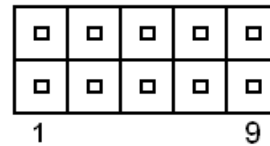
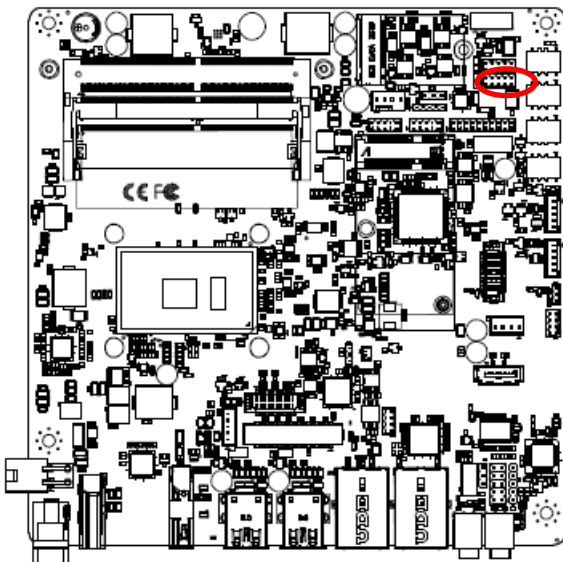


2.8.21 Serial port 1 connector (COM1)



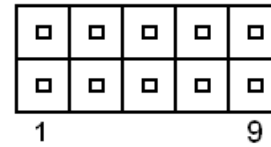
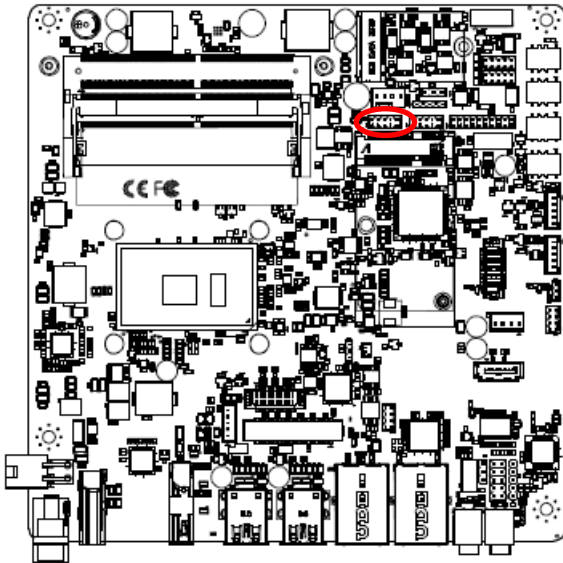
Signal	PIN	PIN	Signal
COM_DCD#_1 _485_422TX1-	1	2	COM_RXD#_1 _422RX1+
COM_TXD_1	3	4	COM_DTR#_1
GND	5	6	COM_DSR#_1 _485_422TX1+
COM_RTS#_1	7	8	COM_CTS#_1 _422RX1-
COM_RI#_1	9	10	NC

2.8.22 Serial port 2 connector (COM2)



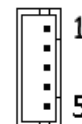
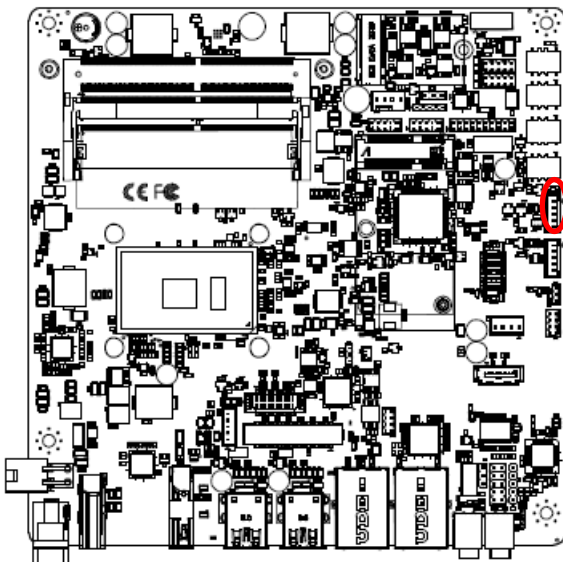
Signal	PIN	PIN	Signal
COM_DCD#_2 _485_422TX2-	1	2	COM_RXD#_2 _422RX2+
COM_TXD_2	3	4	COM_DTR#_2
GND	5	6	COM_DSR#_2 _485_422TX2+
COM_RTS#_2	7	8	COM_CTS#_2 _422RX2-
COM_RI#_2	9	10	NC

2.8.23 LPC connector (JLPC)



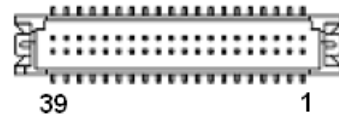
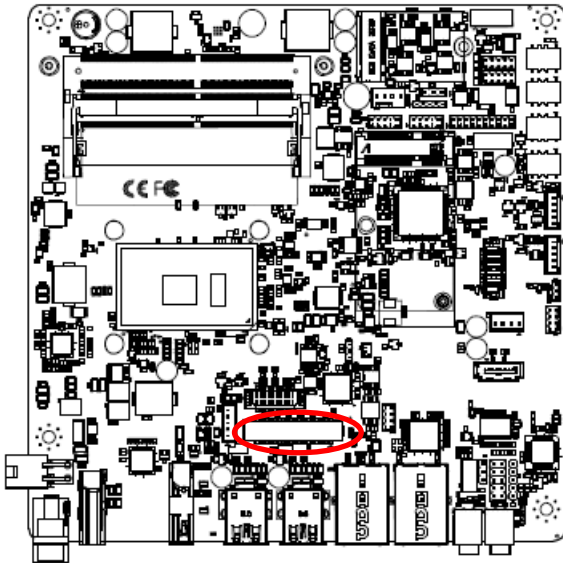
Signal	PIN	PIN	Signal
LPC_AD0	1	2	+3.3V
LPC_AD1	3	4	PCH_PLTRST#
LPC_AD2	5	6	LPC_FRAME#
LPC_AD3	7	8	LPC_CLK
LPC_SERIRQ	9	10	GND

2.8.24 Touch Panel connector (JTOUCH)



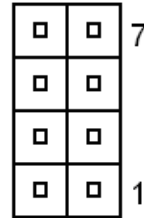
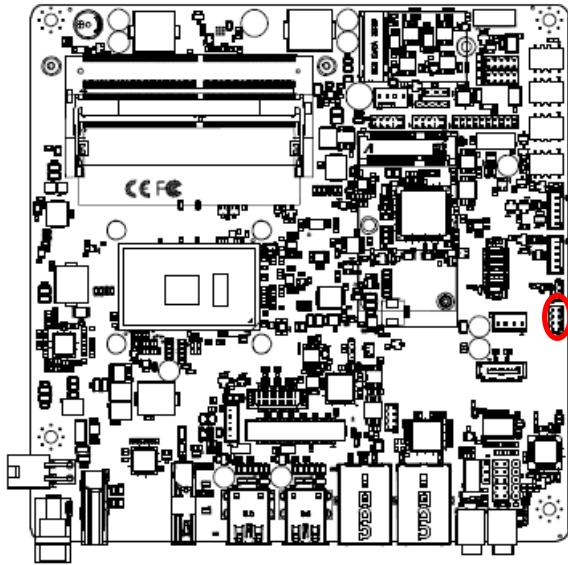
Signal	PIN
+5VSB	1
USB_DN10	2
USB_DP10	3
GND	4
GND	5

2.8.25 LVDS connector (LVDS1)



Signal	PIN	PIN	Signal
+5V	2	1	+3.3V
+5V	4	3	+3.3V
NC	6	5	NC
GND	8	7	GND
LVDS_DATA0_P	10	9	LVDS_DATA1_P
LVDS_DATA0_N	12	11	LVDS_DATA1_N
GND	14	13	GND
LVDS_DATA2_P	16	15	LVDS_DATA3_P
LVDS_DATA2_N	18	17	LVDS_DATA3_N
GND	20	19	GND
LVDS_DATA4_P	22	21	LVDS_DATA5_P
LVDS_DATA4_N	24	23	LVDS_DATA5_N
GND	26	25	GND
LVDS_DATA6_P	28	27	LVDS_DATA7_P
LVDS_DATA6_N	30	29	LVDS_DATA7_N
GND	32	31	GND
LVDS_CLK1_P	34	33	LVDS_CLK2_P
LVDS_CLK1_N	36	35	LVDS_CLK2_N
GND	38	37	GND
+12V	40	39	+12V

2.8.26 Battery mode connector (JBAT\_AUX1)



Signal	PIN	PIN	Signal
CHARGER_DISABLE	8	7	GND
BAT2_PRSENT	6	5	NC
BAT1_PRSENT	4	3	EC_SMDAT1
DB_AC_SENCE	2	1	EC_SMCLK1

# 3. General Safety Guide

---

## APC-2334

For your own safety and that of your equipment, always take the following precautions.

Disconnect the power plug (by pulling the plug, not the cord), from your computer if any of the following conditions exists:

The power cord or plug becomes frayed or otherwise damaged

You spill something into the case

Your computer has been dropped or the case has been otherwise damaged

You suspect that your computer needs service or repair

You want to clean the computer or screen

You want to remove/install any parts

## Thermal

The APC-2334 is a fanless design system, heat is dispatch through rear metal heatsink which is located at VESA mount area.. When using your APC-2334 systems, it is normal for the metal heatsink to get warm. The rear metal heatsink of the APC-2334 functions as a cooling surface that transfers heat from inside the computer to the cooler air outside. Do not block this heatsink by any soft material.

## Disconnect the power

The only way to disconnect power completely is to unplug the adapter power cord.

Make sure at least one end of the power cord is within easy reach so that you can unplug the computer when you need to.

**Warning!** *Your AC cord came equipped with a three-wire grounding plug (a plug that has a third grounding pin). This plug will fit only a grounded AC outlet. If you are unable to insert the plug into an outlet because the outlet is not grounded, contact a licensed electrician to replace the outlet with a properly grounded outlet. Do not defeat the purpose of the grounding plug.*



**Warning!** *Never push objects of any kind into this product through the openings in the case. Doing so may be dangerous and result in fire or a dangerous electric shock.*



**Attention!** *Votre cordon secteur est équipé d'une fiche de mise à la terre à trois fils (une fiche dotée d'une troisième broche de mise à la terre). Cette fiche ne s'adaptera qu'à une prise secteur mise à la terre. Si vous ne parvenez pas à insérer la fiche dans une prise car la prise n'est pas mise à la terre, contactez un électricien agréé pour remplacer la*



*prise par une prise correctement mise à la terre. N'annulez pas l'objectif de la fiche de mise à la terre.*

**Attention!** *N'introduisez jamais d'objets d'aucune sorte dans ce produit par les ouvertures du boîtier. Cela pourrait être dangereux et provoquer un incendie ou un choc électrique dangereux.*



*Never place anything on system case before turn off computer.*

*Never turn on your computer unless all of its internal and external parts are in place.*

*Operating the computer when it is open or missing parts can be dangerous and can damage your computer.*

## Proper Handling

Handle your APC-2334 with care. It is made of metal, glass, and plastic and has sensitive electronic components inside.

Don't use a damaged APC-2334, such as one with a cracked screen, as it may cause injury.

Setup APC-2334 on a stable work surface.

Do not push objects into the ventilation openings.

To lift or move your system, hold its sides.

When you move your system, do not hit the surface of the glass.

## Maintaining the Smart battery pack

If your equipment comes with the optional rechargeable smart battery pack, make sure to follow the instructions below to optimize the service life for your battery

- The battery should be charged/discharged at temperature between 0 ~ 40°C (32~104°F)
- The battery should be stored at temperature between -20~60°C (-4~140°F)
- If the battery level is less than 10%, fully charge the battery to 100% within 24 hours.
- If the battery will not be in use for more than one week, fully charge the battery to 100% before storage, also make sure to charge the battery to 100% once a month during the storage period.
- Set it as shipping mode if need to keep longer storage period
- In case battery leakage or battery is out of function such as, can't be charge or discharge, do not open and try to change the battery, please contact with MANUFACTURER to replace the defective battery to avoid any dangerous might happen (Ex: fire or explosion).

# 4. Touch Button Guide

---



## ■ Power On / Off



User Behavior	Power Icon Status
Connect the adapter to the terminal with power cord plugged into a power outlet	Power icon shows solid orange
Short press power icon to turn on the terminal	Power icon shows solid blue
Long press power icon for 4 seconds while system is operating	Terminal is forced shutdown Power icon shows solid orange

## ■ Volume Control



User Behavior	Volume Status
Short press volume up icon	Volume level being turned up
Short press volume down icon	Volume level being turned down

## ■ Brightness Control



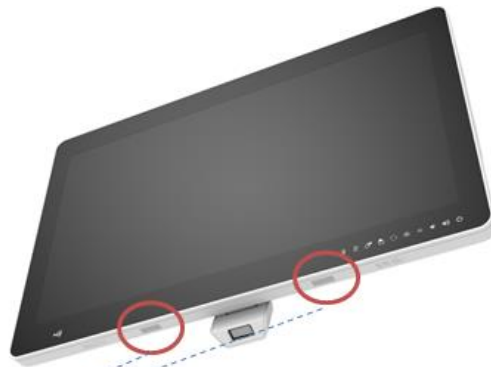
User Behavior	Brightness Status
Short press brightness up icon	Brightness level being turned up
Short press brightness down icon	Brightness level being turned down

## ■ Backlight On / Backlight Off



User Behavior	Backlight & Touchscreen Status
Long press backlight icon for 3 seconds when backlight is on	Backlight is turned off. Touchscreen is locked simultaneously. Touchscreen icon shows solid blue light.
Long press backlight icon for 3 seconds when backlight is off	Backlight is turned on. Brightness level automatically return to the value before backlight was off. Touchscreen remains locked.
Long press touchscreen icon 3 seconds when backlight is off	Touchscreen is unlocked. Backlight is turned on simultaneously. Brightness level automatically return to the value before backlight was off.

## ■ Reading Light



User Behavior	Reading Lights Status
Short press reading light icon	Reading lights are on at the bottom of the terminal
Short pressed reading light icon again	Reading lights are off at the bottom of the terminal

## ■ Locking/ Unlocking Touchscreen



Icon Behavior	Indication
Touchscreen icon shows solid blue light	Touchscreen is locked after 3 seconds long press. To unlock, press touch icon for another 3 seconds.
Touchscreen icon shows no light	Touchscreen is functional.