

APC-2334

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

Quick Reference Guide

2nd Ed – 10 November 2022

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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.

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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.

To receive the latest version of the user's manual; please visit our Web site at:

<http://www.avalue.com.tw/>

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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

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

| | |
|------------------------------|--|
| Color | White Plastic |
| Fanless | Yes |
| Reliability | |
| EMI Test | CE/ FCC class B |
| Safety | EN 300 330 EN 62368-1 (LVD) |
| Dust and Rain Test | Front Panel IP65 |
| Vibration Test | <p>Random Vibration Operation Reference IEC60068-2-64 Testing procedures Test Fh : Vibration boardband random Test 1 Test PSD : 0.00454G²/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 : 0.026G²/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> |
| Mechanical Shock Test | With CF/SSD: 10Grms, IEC 60068-2-27, Half Sine, 11ms |
| Drop Test | <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> |

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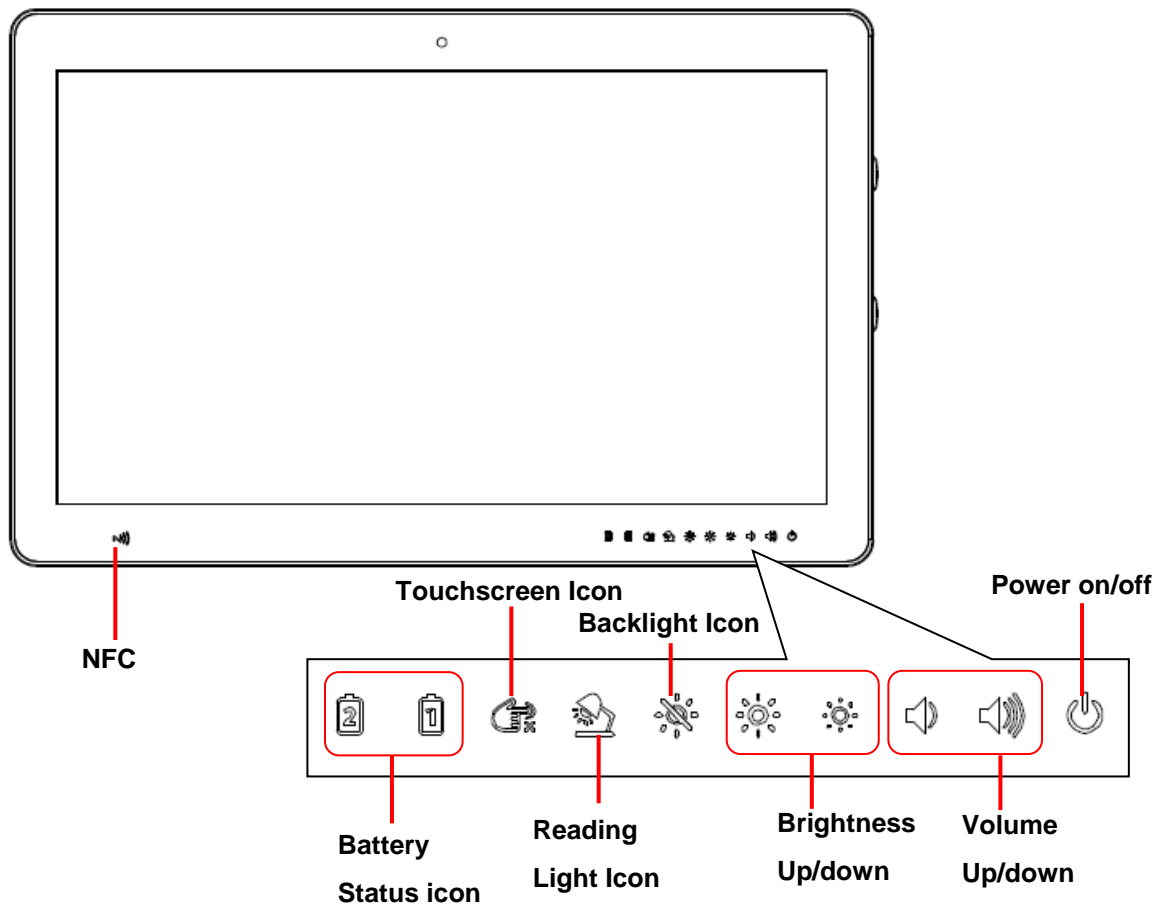
| | |
|------------------------------|---|
| | 2 Test high : 3 Package weight : 4 Test drawing |
| Operating Temperature | 0 ~ 40 degree |
| Operating Humidity | 0 ~ 90% Relative Humidity, Non-condensing |
| Storage Temperature | -20 ~ 60 degree |



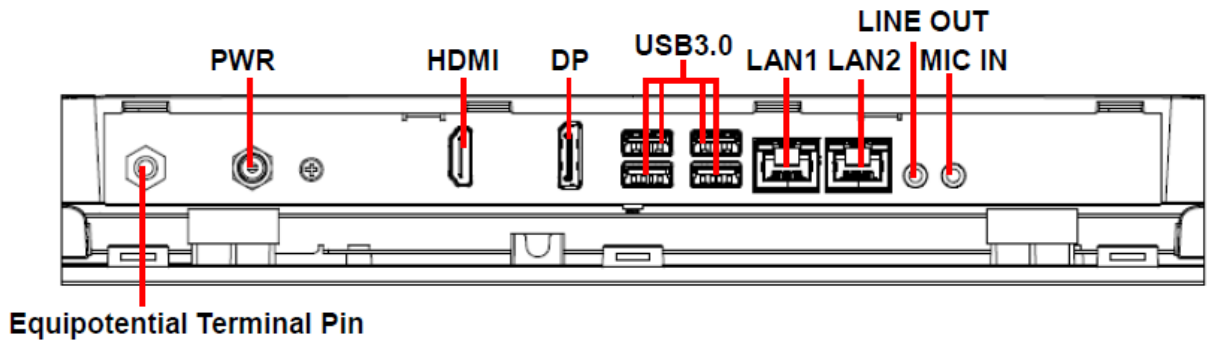
Note: Specifications are subject to change without notice.

1.4 System Overview

1.4.1 Front View



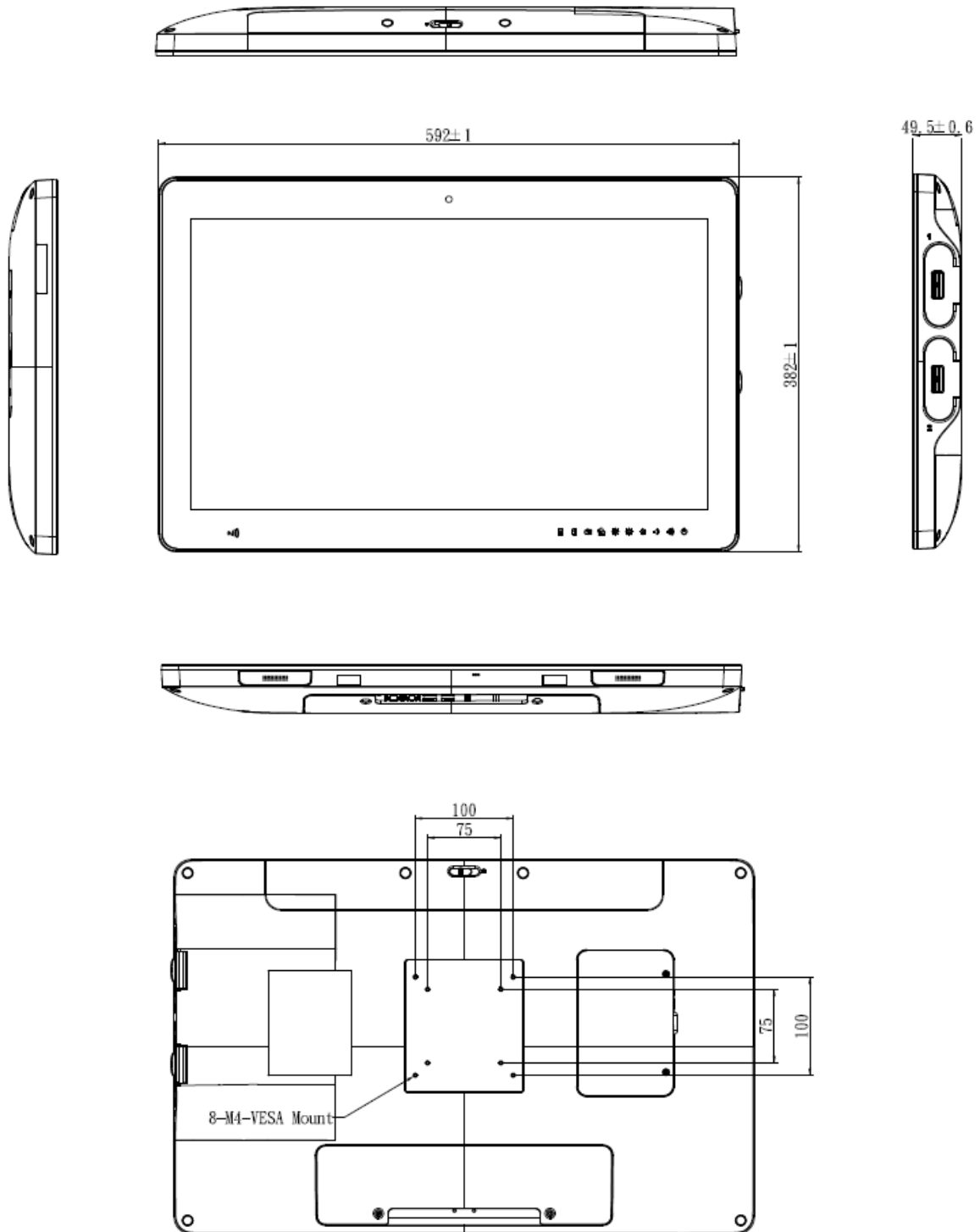
1.4.2 Rear View



Connectors

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



Note: If you need more information, please visit our website:

<http://www.avalue.com.tw>

2.1 VESA Mounting

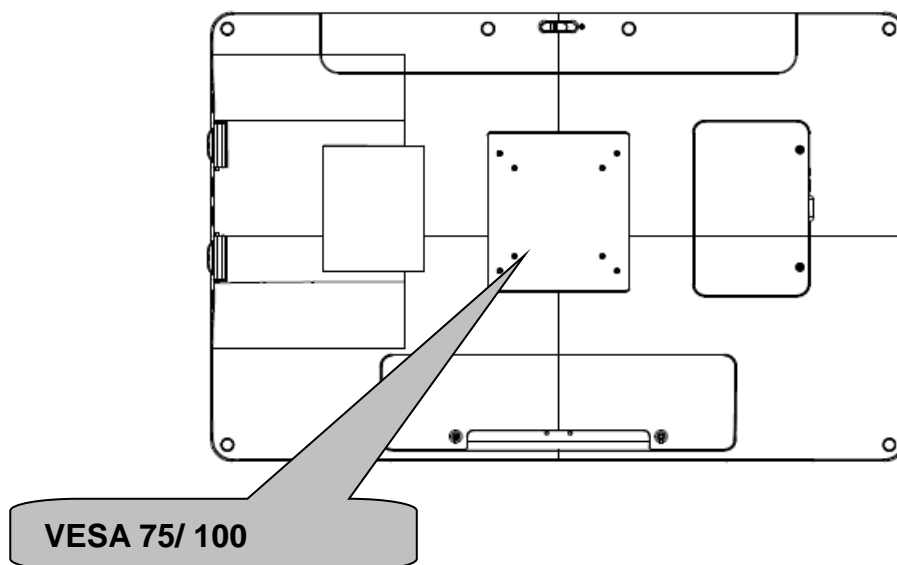
The APC-2334 also provides standard VESA mounting to help system integrators conveniently integrate the panel PC into their system.

Never use mounting brackets except as provided by Avalue 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.

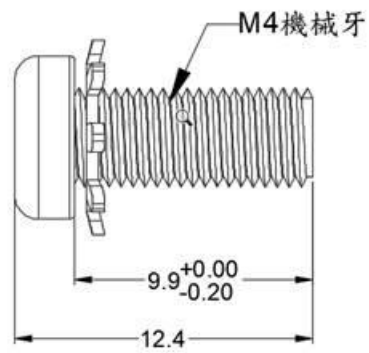
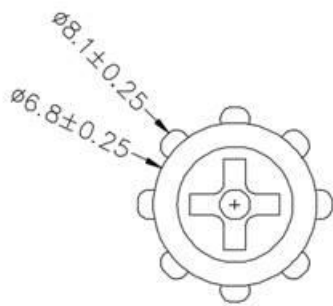
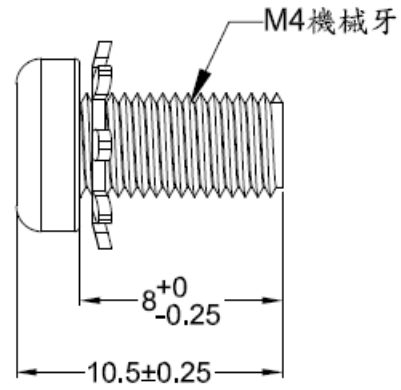
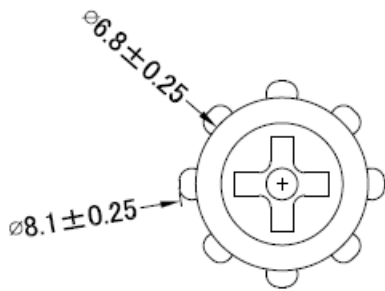
Warning! *Be sure to secure the screws of the mounting bracket tightly. A loose joint between the APC-2334 and mounting bracket may create danger of injury.*



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Suggested Screw type for mounting

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

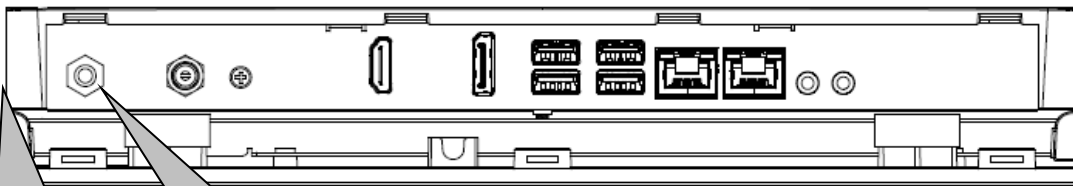
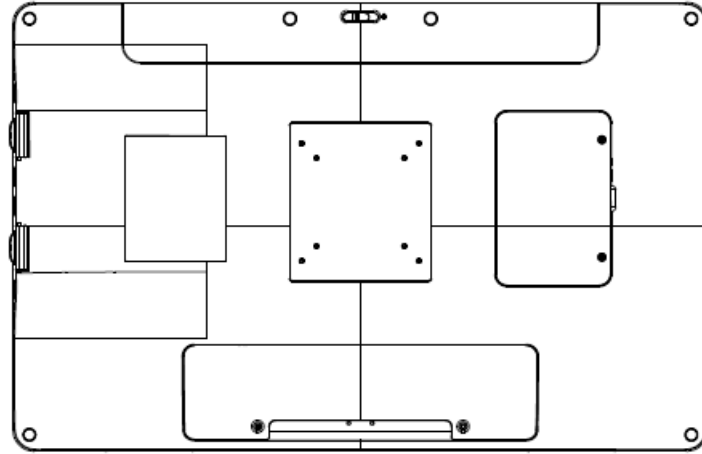


Warning! Use suitable mounting apparatus to avoid risk of injury.



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. To properly maintain and clean the surfaces, use a damp cloth for cleaning.
2. You may wet a soft, lint-free or microfiber cloth with cleaning agent per manufacturer’s instructions or hospital protocol.
3. You may disable the touchscreen in advance to avoid false triggers during cleaning process.



| 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. |

4. Wipe the PC in a gentle motion to remove dust, oil, or fingerprint smudges.
5. Do not use liquid or spray detergents directly for cleaning. To avoid short-circuiting and otherwise damaging the device, do not allow fluids to come in contact with the device. If fluids are accidentally spilled on the equipment, remove the affected unit from service as soon as possible and contact the service personnel for verification.

Cleaning Tools

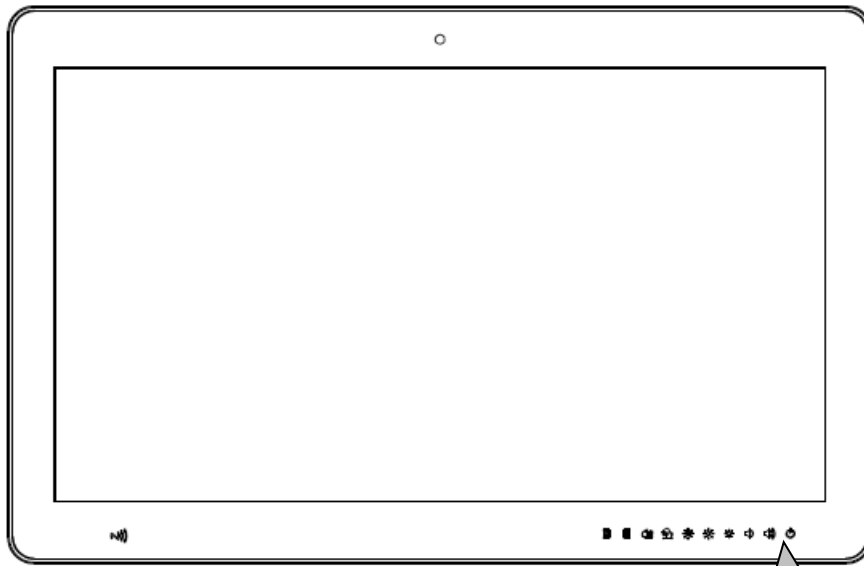
Below is a list of some items that may be needed or used when cleaning the PC or PC peripherals.

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

2.4 Turn ON/OFF the System



ON/OFF Touch

3.1.1 Turn ON the System

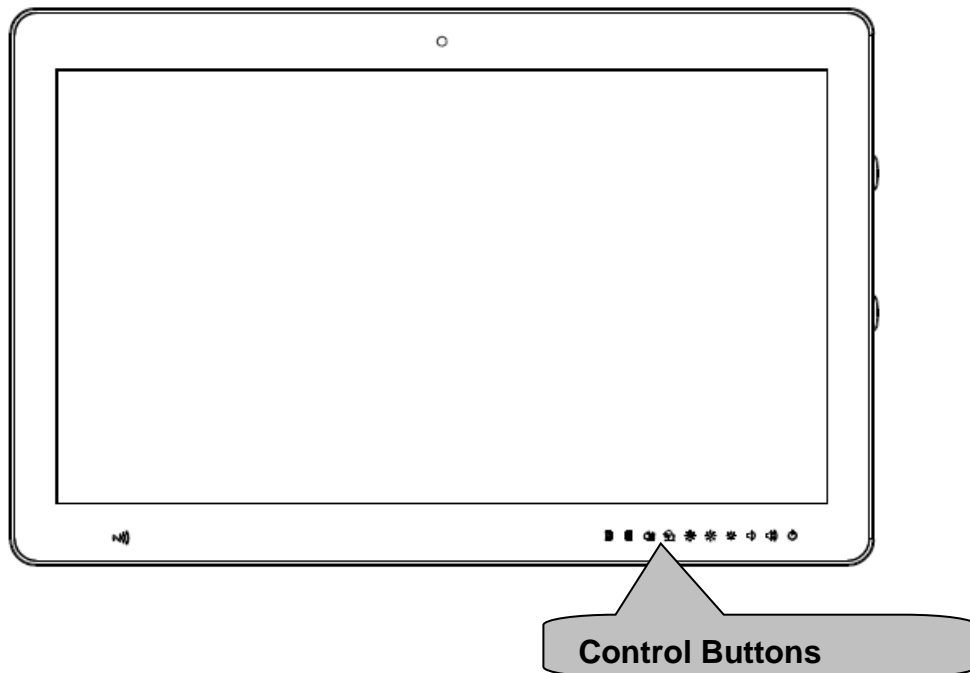
1. Check if the Power ON/OFF LED light is Orange.
2. Press the Power ON/OFF icon firmly to turn power ON/OFF
3. The Power ON/OFF LED will turn green to indicate power is on.

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.

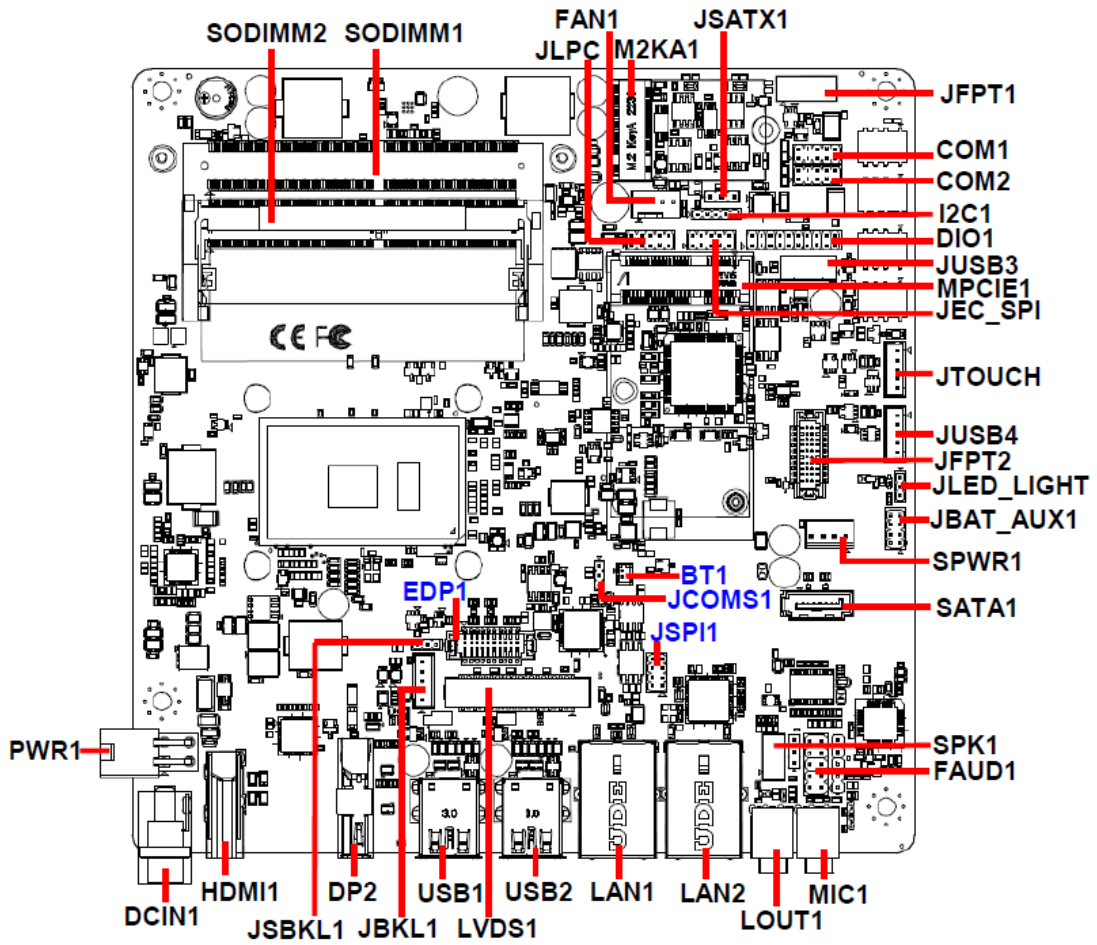
3.2.2 Adjust LCD Display Brightness

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

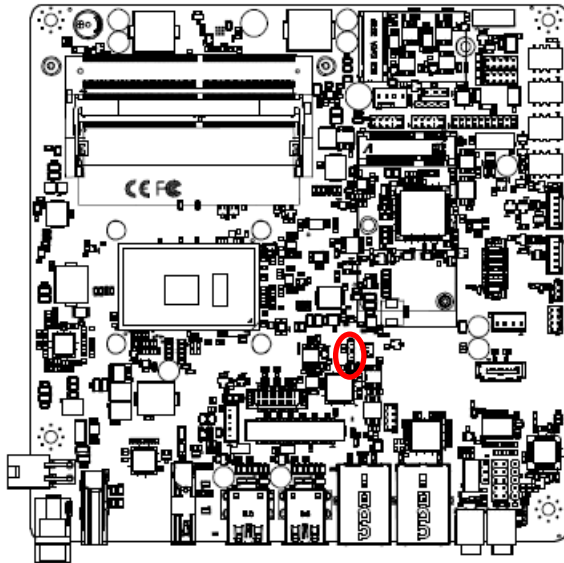
| Label | Function | Note |
|-----------|-----------------------------------|--|
| SODIMM1/2 | 2 x 260-Pin DDR4 2400MHz SO-DIMM | |
| COM1 | Serial port 1 connector(Reserved) | 5 x 2 header, pitch 2.00 mm |
| COM2 | Serial port 2 connector(Reserved) | 5 x 2 header, pitch 2.00 mm |
| SPK1 | Speaker connector | 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-PCle 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 |

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

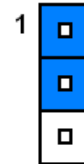
2.8 HID-2334 Main Board Jumpers & Connectors settings

2.8.1 Clear CMOS (JCOMS1)



*Default

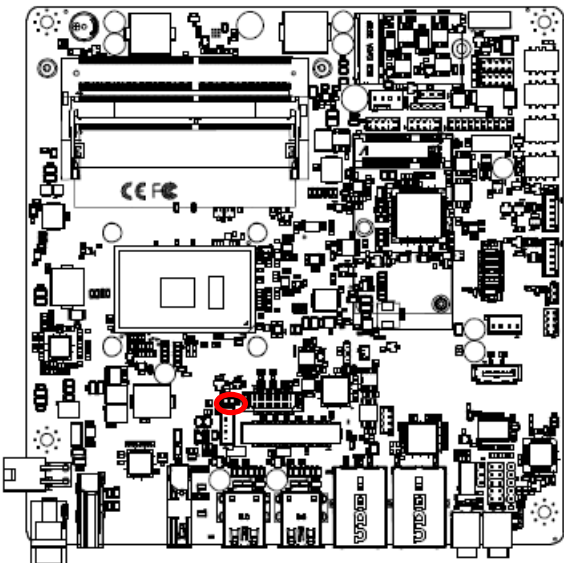
Protect*



Clear CMOS

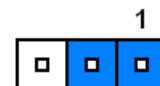


2.8.2 LCD backlight brightness adjustment (JSBKL1)

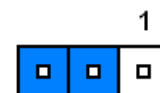


* Default

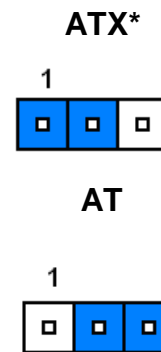
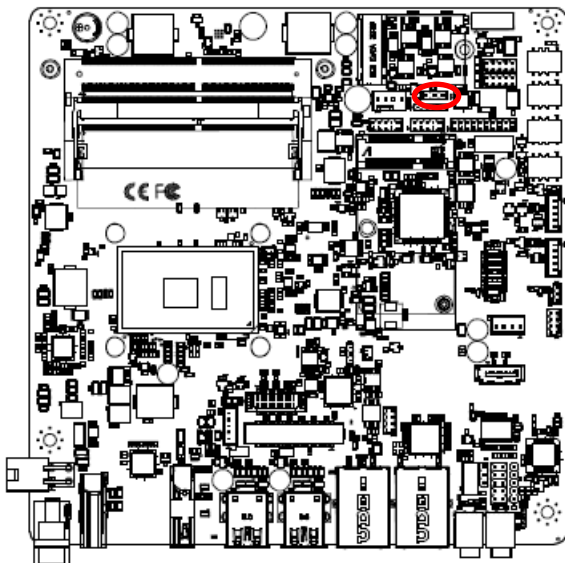
PWM Mode*



DC Mode

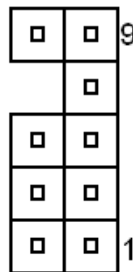
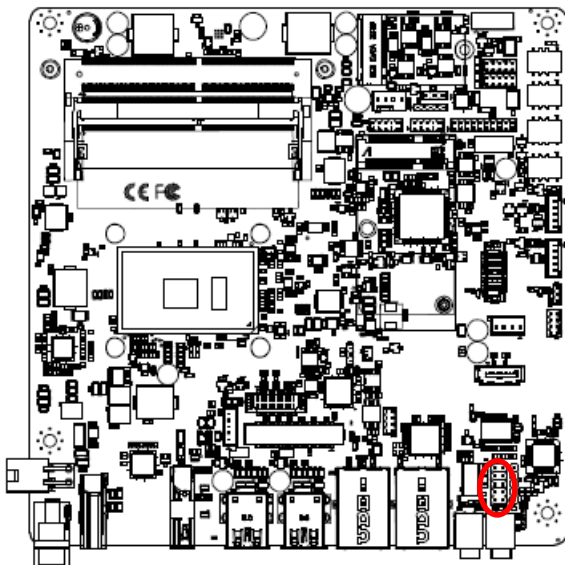


2.8.3 AT/ATX auto power on select (JAT1)



* Default

2.8.4 Front Audio connector (FAUD1)

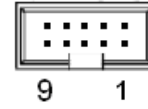
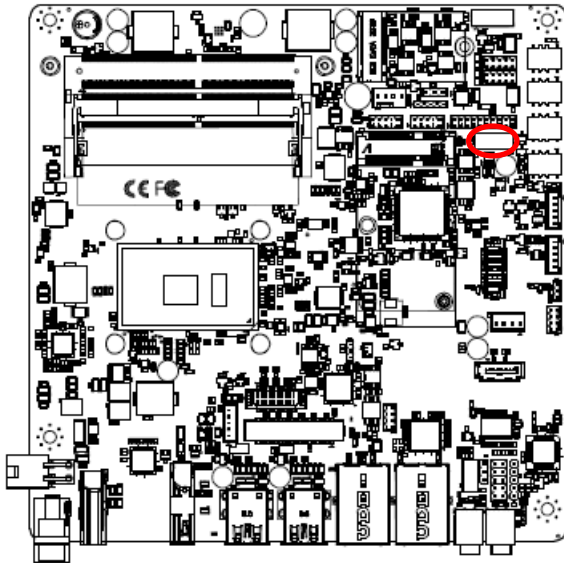


| Signal | PIN | PIN | Signal |
|---------------|-----|-----|-----------|
| LINE2_JD | 10 | 9 | LINE2_LIN |
| HD_AGND | | 7 | GND |
| MIC2_JD | 6 | 5 | LINE2_RIN |
| AUD_FRONT_DET | 4 | 3 | MIC2_RIN |
| GND | 2 | 1 | MIC2_LIN |

2.8.4.1 Signal Description –Front Audio connector (FAUD1)

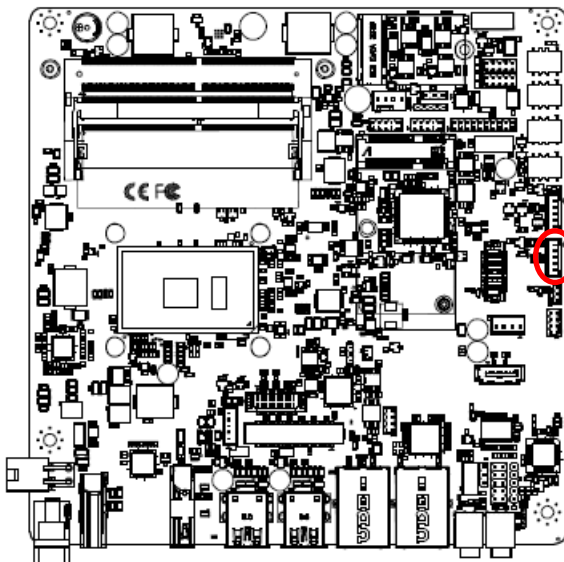
| Signal | Signal Description |
|----------|----------------------------------|
| LINE2-JD | AUDIO IN (LINE_RIN/LIN)sense pin |
| MIC2-JD | MIC IN (MIC_RIN/LIN) sense pin |

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



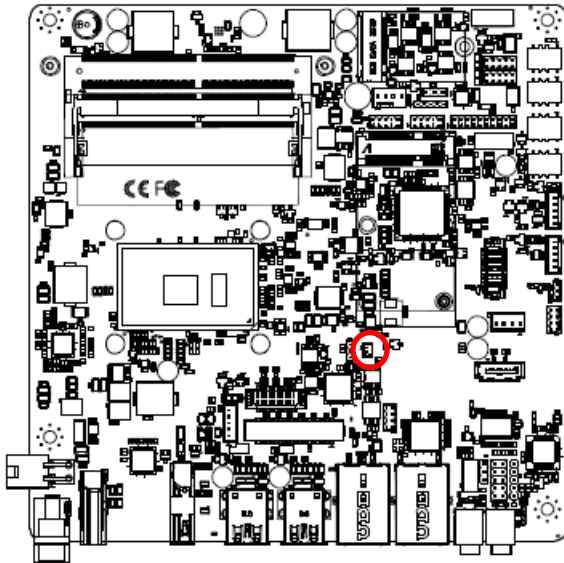
| Signal | PIN | PIN | Signal |
|---------|-----|-----|---------|
| +5VSB | 2 | 1 | +5VSB |
| USB_DN7 | 4 | 3 | USB_DN8 |
| USB_DP7 | 6 | 5 | USB_DP8 |
| GND | 8 | 7 | GND |
| GND | 10 | 9 | GND |

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



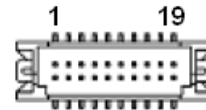
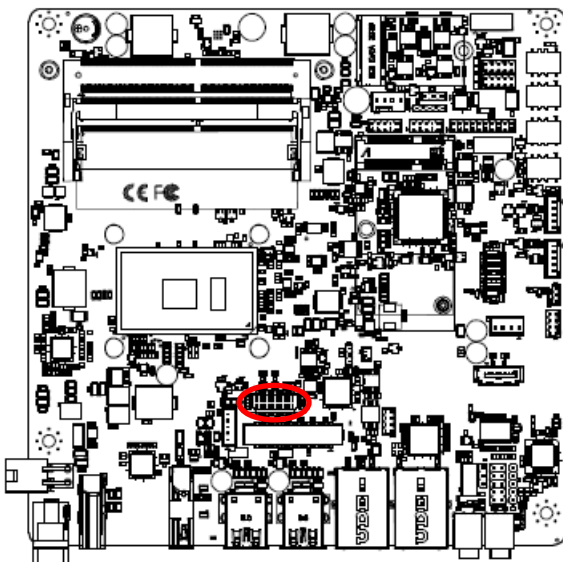
| Signal | PIN |
|---------|-----|
| +5VSB | 1 |
| USB_DN9 | 2 |
| USB_DP9 | 3 |
| GND | 4 |
| GND | 5 |

2.8.7 Battery connector (BT1)



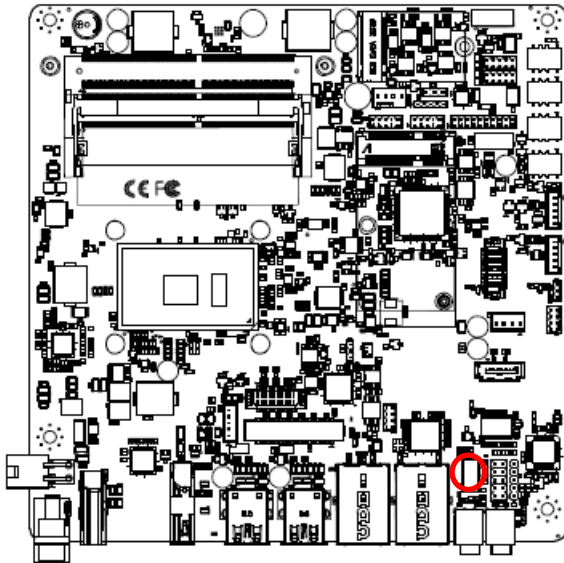
| Signal | PIN |
|---------|-----|
| +RTCBAT | 1 |
| GND | 2 |

2.8.8 Display Port connector (EDP1)



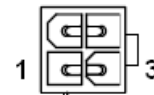
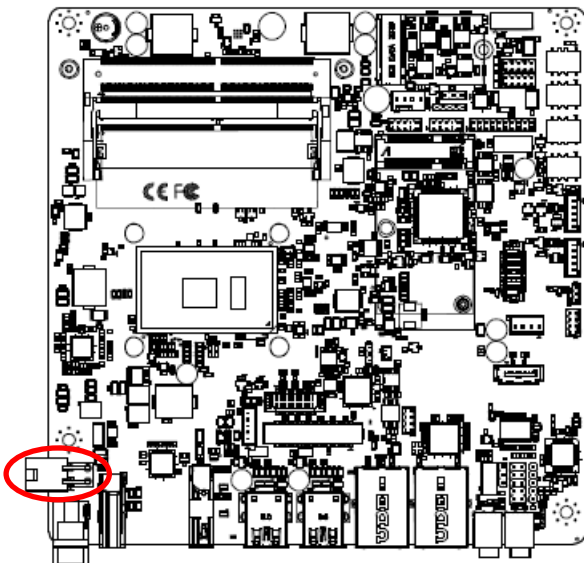
| Signal | PIN | PIN | Signal |
|---------------|-----|-----|----------------|
| GND | 1 | 2 | GND |
| EDP_PanelTXN0 | 3 | 4 | EDP_PanelTXN3 |
| EDP_PanelTXP0 | 5 | 6 | EDP_PanelTXP3 |
| GND | 7 | 8 | Nc |
| EDP_PanelTXN1 | 9 | 10 | GND |
| EDP_PanelTXP1 | 11 | 12 | EDP_PanelAUXN |
| GND | 13 | 14 | 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)



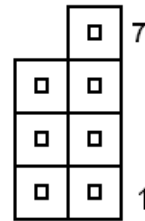
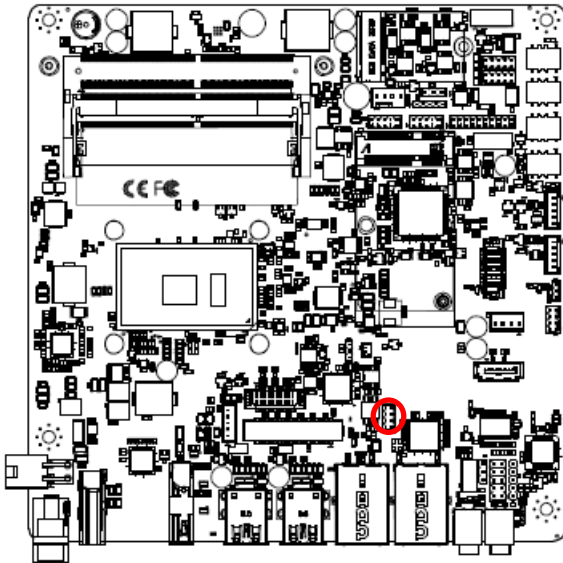
| Signal | PIN |
|--------|-----|
| SPK_R- | 4 |
| SPK_R+ | 3 |
| SPK_L- | 2 |
| SPK_L+ | 1 |

2.8.10 Power connector (PWR1)



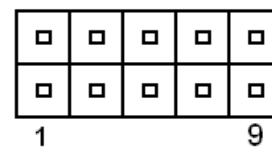
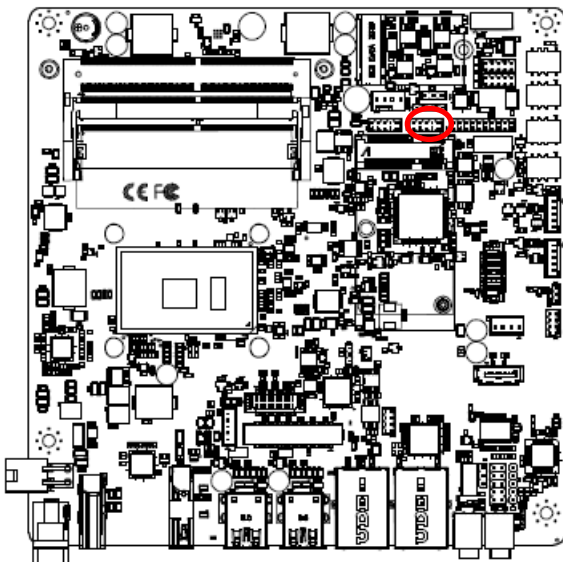
| Signal | PIN | PIN | Signal |
|--------|-----|-----|----------|
| GND | 2 | 4 | +VIN_26V |
| GND | 1 | 3 | +VIN_26V |

2.8.11 SPI connector (JSPI1)



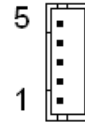
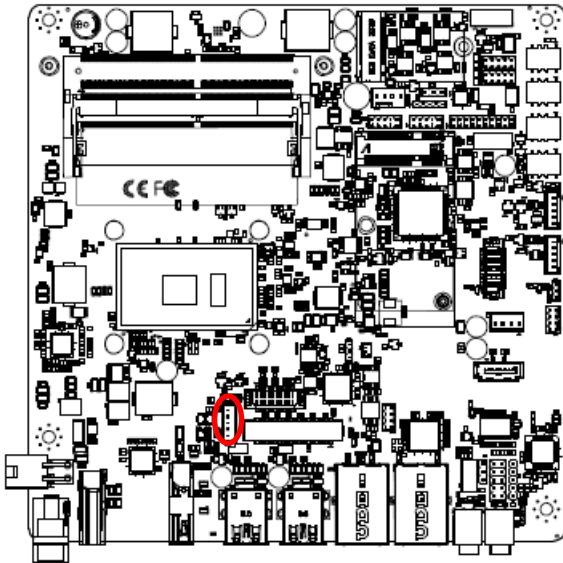
| Signal | PIN | PIN | Signal |
|---------|-----|-----|-----------|
| | | 7 | HOLD# |
| SPI_SI | 6 | 5 | SPI_SO |
| SPI_CLK | 4 | 3 | SPI0_CS0# |
| GND | 2 | 1 | +3.3VSB |

2.8.12 EC Debug connector (JEC_SPI)



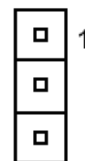
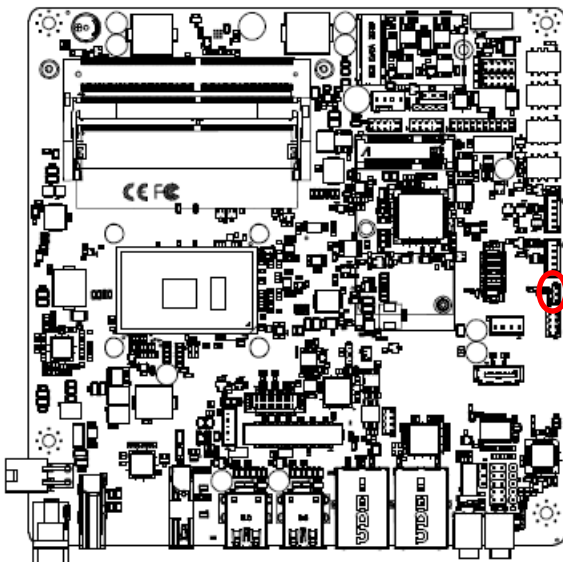
| Signal | PIN | PIN | Signal |
|-----------|-----|-----|----------|
| +3VSPI_EC | 1 | 2 | GND |
| EC_FSCE# | 3 | 4 | EC_FSCK |
| EC_FMISO | 5 | 6 | EC_FMOSI |
| EC_HOLD# | 7 | 8 | NC |
| EC_SMCLK | 9 | 10 | EC_SMDAT |

2.8.13 LCD Inverter connector (JBKL1)



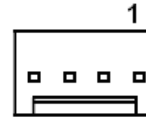
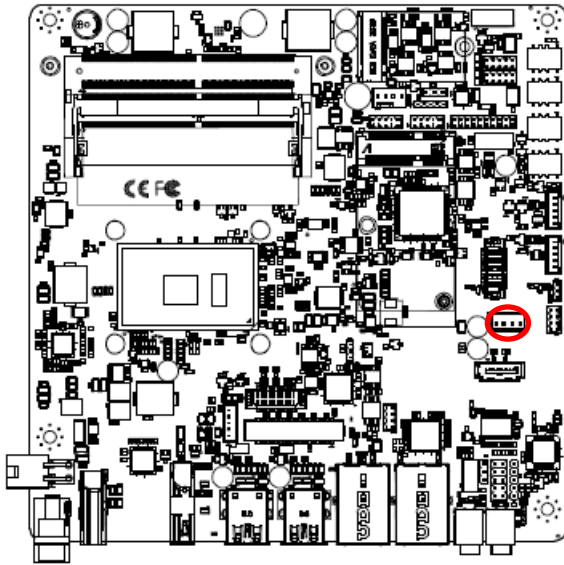
| Signal | PIN |
|--------------|-----|
| +5V | 5 |
| LVDS_BKLTCTL | 4 |
| LVDS_BKLT_EN | 3 |
| GND | 2 |
| +12V | 1 |

2.8.14 Reading Light connector (JLED_LIGHT)



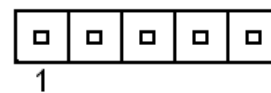
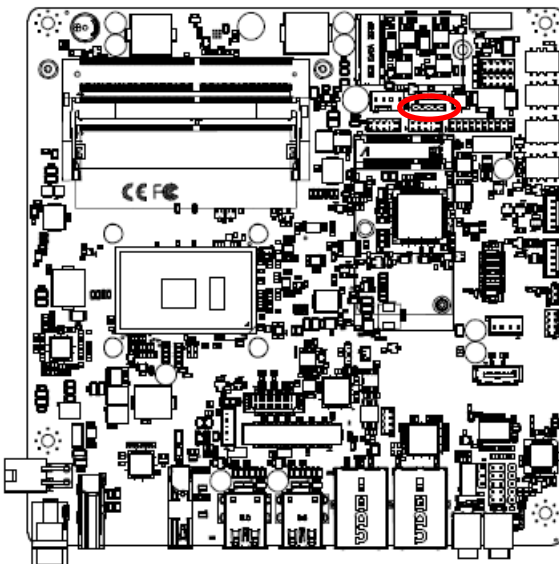
| Signal | PIN |
|---------------|-----|
| +5VSB | 1 |
| READ_LIGHT_EN | 2 |
| GND | 3 |

2.8.15 SATA Power connector (SPWR1)



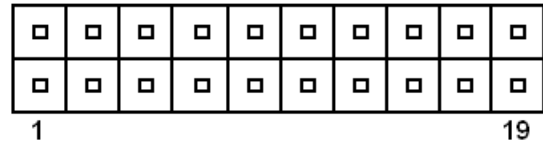
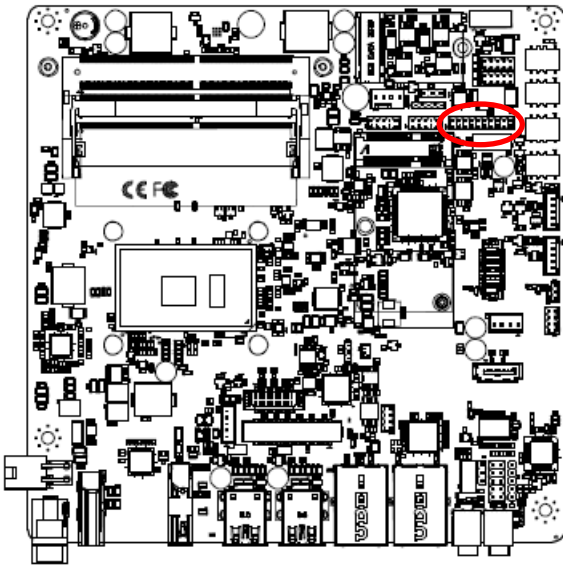
| Signal | PIN |
|--------|-----|
| +5V | 1 |
| GND | 2 |
| GND | 3 |
| +12V | 4 |

2.8.16 I2Cconnector (I2C1)



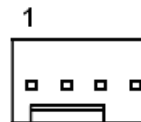
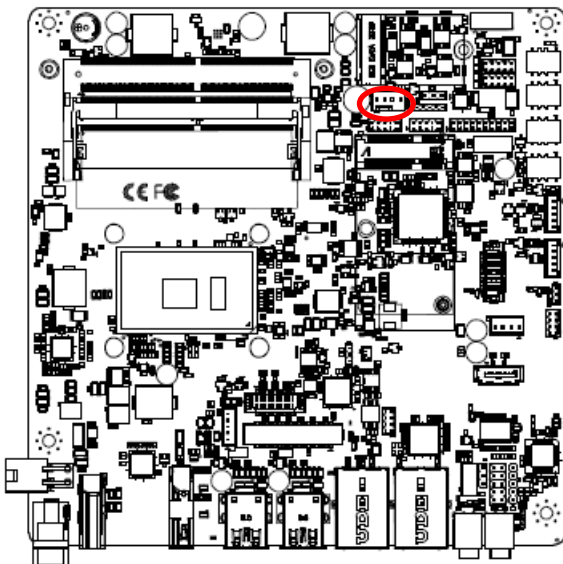
| Signal | PIN |
|-----------|-----|
| +3.3V | 1 |
| INT_I2C0# | 2 |
| I2C0_CLK | 3 |
| I2C0_DATA | 4 |
| GND | 5 |

2.8.17 General purpose I/O connector (DIO1)



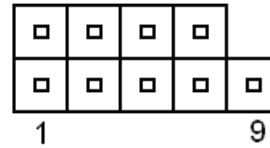
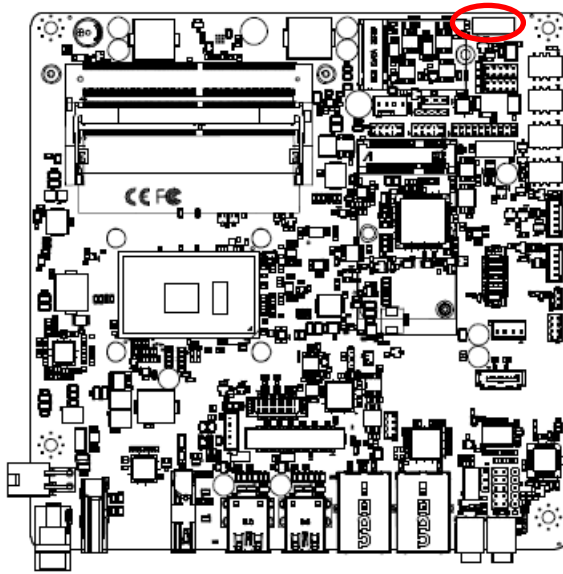
| Signal | PIN | PIN | Signal |
|-----------|-----|-----|------------|
| DI0 | 1 | 2 | DO0 |
| DI1 | 3 | 4 | DO1 |
| DI2 | 5 | 6 | DO2 |
| DI3 | 7 | 8 | DO3 |
| DI4 | 9 | 10 | DO4 |
| DI5 | 11 | 12 | DO5 |
| DI6 | 13 | 14 | DO6 |
| DI7 | 15 | 16 | DO7 |
| SMB_CLK_S | 17 | 18 | SMB_DATA_S |
| GND | 19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

2.8.18 Fan connector (FAN1)



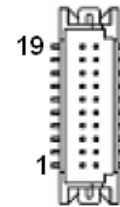
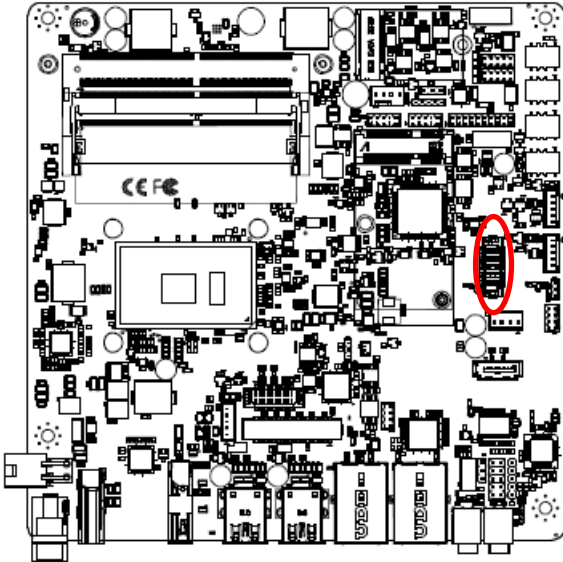
| Signal | PIN |
|----------|-----|
| GND | 1 |
| +12V | 2 |
| CPUFANIN | 3 |
| FAN_PWM0 | 4 |

2.8.19 Front Panel connector 1 (JFPT1)



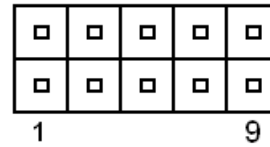
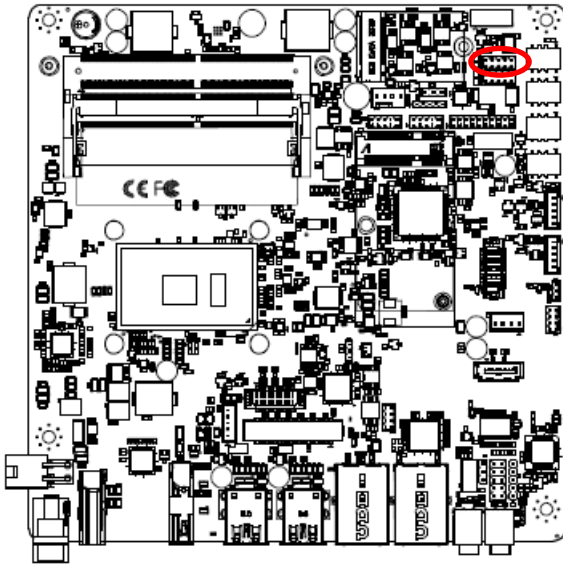
| Signal | PIN |
|----------|-----|
| +HD_LED | 1 |
| +PWR_LED | 2 |
| -HD_LED | 3 |
| -PWR_LED | 4 |
| +Reset | 5 |
| +PWR_BNT | 6 |
| -Reset | 7 |
| -PWR_BNT | 8 |

2.8.20 Front Panel connector 2 (JFPT2)



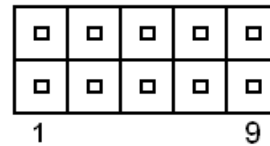
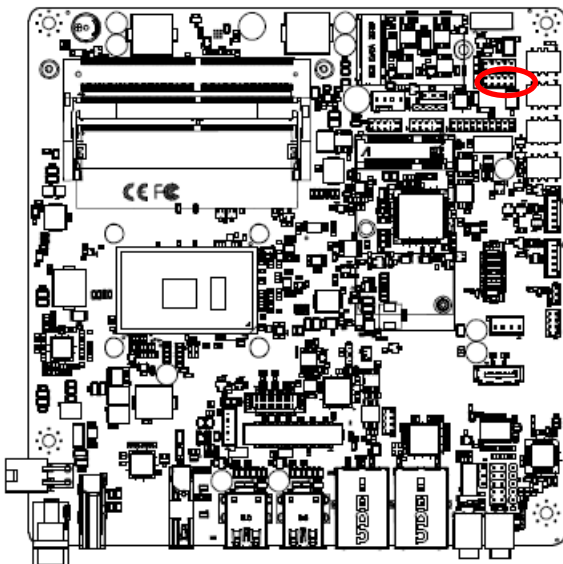
| Signal | PIN | PIN | Signal |
|----------------|-----|-----|--------------|
| NC | 19 | 20 | NC |
| NC | 17 | 18 | PWR_LED# |
| TOUCH_OFF_LED# | 15 | 16 | SUS_LED# |
| BATTERY_2_B# | 13 | 14 | PWR_BTN_EC# |
| BATTERY_2_O# | 11 | 12 | TOUCH_ON_OFF |
| BATTERY_1_B# | 9 | 10 | VOLUME_DN |
| BATTERY_1_O# | 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)



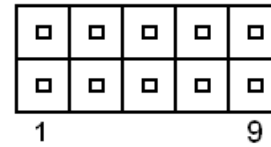
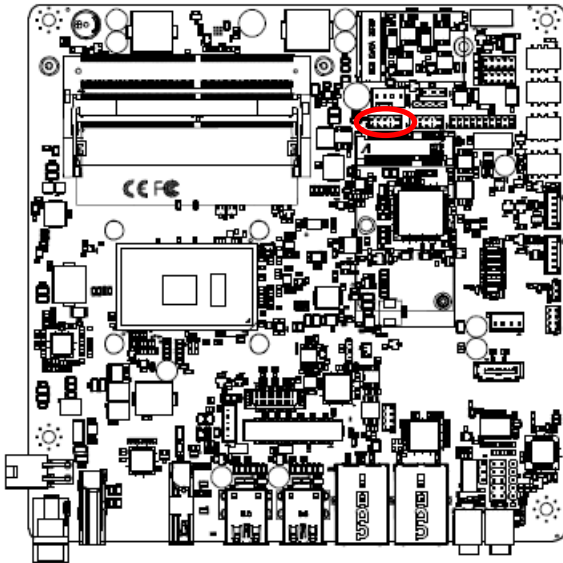
| Signal | PIN | PIN | Signal |
|----------------------------|-----|-----|----------------------------|
| COM_DCD#_1 _485_422TX1- | 1 | 2 | COM_RXD#_1 _422RX1+ |
| COM_TXD_1 | 3 | 4 | COM_DTR#_1 |
| GND | 5 | 6 | COM_DSR#_1 _485_422TX1+ |
| COM_RTS#_1 | 7 | 8 | COM_CTS#_1 _422RX1- |
| COM_RI#_1 | 9 |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

2.8.22 Serial port 2 connector (COM2)



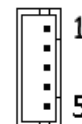
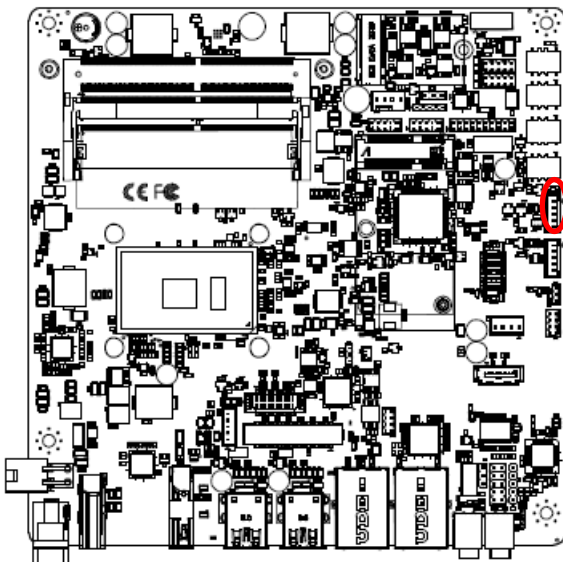
| Signal | PIN | PIN | Signal |
|----------------------------|-----|-----|----------------------------|
| COM_DCD#_2 _485_422TX2- | 1 | 2 | COM_RXD#_2 _422RX2+ |
| COM_TXD_2 | 3 | 4 | COM_DTR#_2 |
| GND | 5 | 6 | COM_DSR#_2 _485_422TX2+ |
| COM_RTS#_2 | 7 | 8 | COM_CTS#_2 _422RX2- |
| COM_RI#_2 | 9 |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

2.8.23 LPC connector (JLPC)



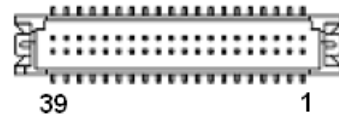
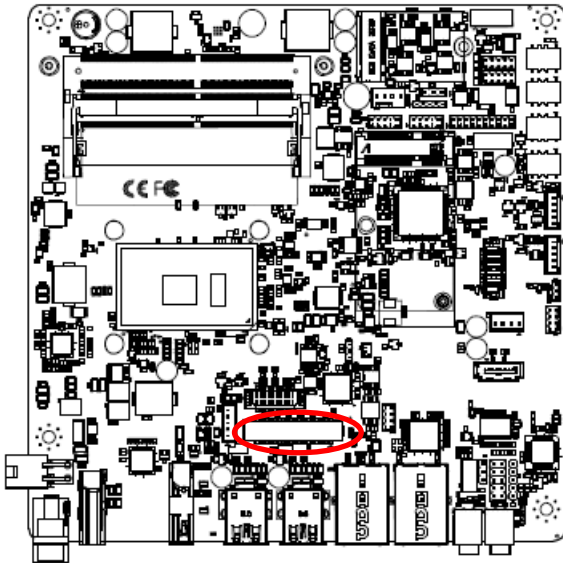
| Signal | PIN | PIN | Signal |
|------------|-----|-----|-------------|
| LPC_AD0 | 1 | 2 | +3.3V |
| LPC_AD1 | 3 | 4 | PCH_PLTRST# |
| LPC_AD2 | 5 | 6 | LPC_FRAME# |
| LPC_AD3 | 7 | 8 | LPC_CLK |
| LPC_SERIRQ | 9 | 10 | GND |

2.8.24 Touch Panel connector (JTOUCH)



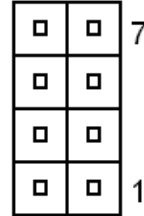
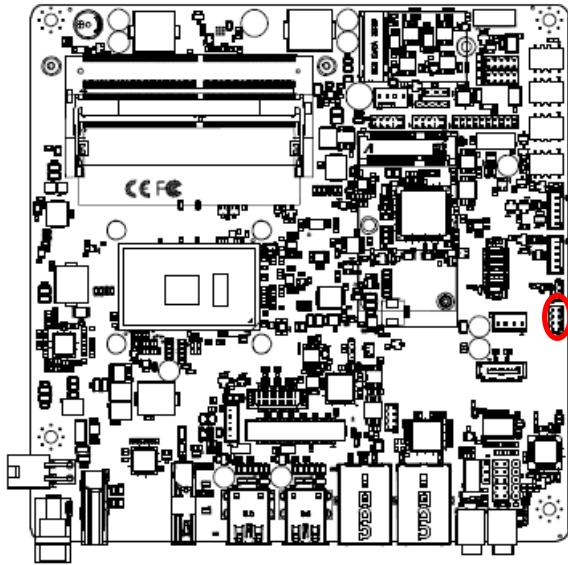
| Signal | PIN |
|----------|-----|
| +5VSB | 1 |
| USB_DN10 | 2 |
| USB_DP10 | 3 |
| GND | 4 |
| GND | 5 |

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 dispatched 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



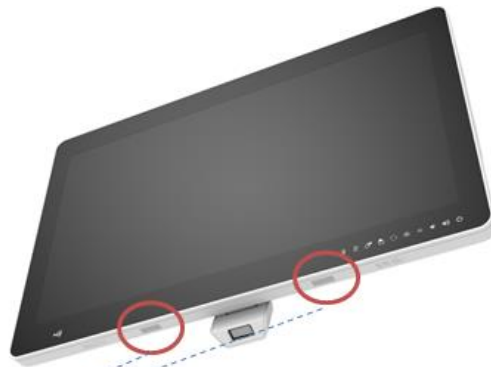
| User Behavior | Brightness Status |
|----------------------------------|------------------------------------|
| Short press brightness up icon | Brightness level being turned up |
| Short press brightness down icon | Brightness level being turned down |

■ 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. |

