Avalue Intelligent Display & System

HID-2334

23.8” Ultra-Light Medical Cart Panel PC with Multi-touch Function

User Manual

7th Ed- 06 June 2022

DMR No: T54268-00 Part No: E2017H340A6R
Rev: 7th

Instructions for the User

The document combines text and illustrations, providing a comprehensive overview of the system. The information is presented as a sequential steps of actions, allowing the user to learn directly how to use the device. The text provides explanations and instructs the user step-by-step in the practical use of the product, with short, clear instructions in an easy-to-follow sequence.
Minimum at least 18 years old and basically reading experience.
Read and understand “westernized Arabic numbers” when written in Arial font, basically can distinguish human organs and understands hygiene.
Languages as specified in the marketing plan (Ext: Chinese, English….).
For general function operation, no special experience needed for user. For maintenance project, no special experience needed. Basically mechanical tool operation knowledge needed when install mounting means (One support system capable of wall-mounting or base.), please contact a service technician or your retailer.

Purposes and Applications

HID-2334 is intended to be used in healthcare institutions for general purpose as an assisting device for data access – patient information, medical records, media services, and so on. The product is designed for general or special use in the hospital environment.

Operating principle

A Medical Panel PC has four main components: the arithmetic logic unit (ALU), the control unit, the memory, and the input and output devices (collectively termed I/O). These parts are interconnected by buses, often made of groups of wires.
The control unit, ALU, and registers are collectively known as a central processing unit (CPU). Inside each of these parts are thousands to trillions of small electrical circuits which can be turned off or on by means of an electronic switch. Each circuit represents a bit (binary digit) of information so that when the circuit is on it represents a "1", and when off it represents a "0" (in positive logic representation). The circuits are arranged in logic gates so that one or more of the circuits may control the state of one or more of the other circuits.

Definitions

Warning! *A WARNING statement provides important information about a potentially hazardous situation which, if not avoided, could result in death or serious injury.*

Caution! *A CAUTION statement provides important information about a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or in damage to the equipment or other property.*

Attention! *Un avertissement fournit des informations importantes sur une situation potentiellement dangereuse qui, si elle n'est pas évitée, peut entraîner la mort ou des blessures graves.*

Précaution! *Une mention ATTENTION fournit des informations importantes sur une situation potentiellement dangereuse qui, si elle n'est pas évitée, peut entraîner des blessures mineures ou modérées pour l'utilisateur ou le patient ou des dommages à l'équipement ou à d'autres biens.*

Note! *A NOTE provides additional information intended to avoid inconveniences during operation.*

Safety Instructions

1. Strictly follow these Instructions for Use, please read these safety instructions carefully.
2. Remind to keep this User's Manual for later reference, and any use of the product requires full understanding and strict observation of all portions of these instructions. Observe all WARNINGS and CAUTIONS as rendered throughout this manual and on labels on the equipment.
3. Repair of the device may also only be carried out by MANUFACTURER.

Warning! *Because of the danger of electric shock, never remove the cover of a device while it is in operation or connected to a power outlet.*

Attention! *En raison du risque de choc électrique, ne retirez jamais le couvercle d'un appareil lorsqu'il est en fonctionnement ou connecté à une prise de courant.*

4. If one of the following situations arises, get the equipment checked by MANUFACTURER:
The power cord or plug is damaged.
Liquid has penetrated into equipment.
The equipment has been exposed to moisture.
The equipment does not work well, or you cannot get it to work according to the user's manual.
The equipment has been dropped and damaged.
The equipment has obvious signs of breakage.

5. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning and keep this equipment away from humidity.

Caution! *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 to verify that patient safety is not compromised.*

Précaution! *Pour éviter tout court-circuit et autrement endommager l'appareil, ne laissez pas de liquides entrer en contact avec l'appareil. Si du liquide est accidentellement renversé sur l'équipement, retirez l'unité affectée du service dès que possible et contactez le personnel d'entretien pour vérifier que la sécurité du patient n'est pas compromise.*

6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.

Caution! *To prevent overheating, do not cover the openings and place the device in direct sunlight or near radiant heaters.*

Précaution! *Pour éviter la surchauffe, ne couvrez pas les ouvertures et placez l'appareil à la lumière directe du soleil ou à proximité de radiateurs rayonnants.*

7. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet. Position the power cord so that people cannot step on it. Do not place anything over the power cord. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over voltage.

Caution! *Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20° C (-4° F) or above 60° C (140° F). this may damage the equipment.*

Précaution! *Ne laissez pas cet équipement dans un environnement non contrôlé où la température de stockage est inférieure à -20 ° C (-4 ° F) ou supérieure à 60 ° C (140 ° F). cela pourrait endommager l'équipement.*

8. If your computer is losing dramatic time or the BIOS configuration reset to default, the battery has no power.

Caution! *Do not replace battery yourself. Please contact* MANUFACTURER*. The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacture. Discard used batteries according to the manufacturer's instructions.*

Précaution! *Ne remplacez pas la batterie vous-même. Veuillez contacter le FABRICANT. L'ordinateur est équipé d'un circuit d'horloge en temps réel alimenté par batterie. Il existe un risque d'explosion si la batterie n'est pas remplacée correctement. Remplacez uniquement par un type identique ou équivalent recommandé par le fabricant. Jeter les piles usagées conformément aux instructions du fabricant.*

9. Improper installation of VESA mounting can result in serious personal injury! VESA mount installation should be operated by professional technician, please contact the service technician or your retail if you need this service.

10. Environmental protection: follow national requirements to dispose of unit.

11. Maintenance: to properly maintain and clean the surfaces, use only the approved products or clean with a dry applicator.

12. Make sure the user not to contact SIP/SOPs and the patient at the same time.

13. When networking with electrical devices, the operator is responsible for ensuring that the resulting system meets the requirements set forth by the following standards:
– EN 60601-1 (IEC 60601-1)
Medical electrical equipment
Part 1: General requirements for safety
– EN 60601-1-1 (IEC 60601-1-1)
Medical electrical equipment
Part 1-1: General requirements for safety
Collateral standard: Safety requirements for Medical electrical systems
– EN 60601-1-2 (IEC 60601-1-2)
Medical electrical equipment
Part 1-2: General requirements for safety
Collateral standard: Electromagnetic compatibility; Requirements and tests

MEDICAL - GENERAL MEDICAL EQUIPMENT AS TO ELECTRICAL SHOCK, FIRE AND MECHANICAL HAZARDS ONLY IN ACCORDANCE ANSI/AAMI ES60601-1 (2005) + AMD 1 (2012)
CAN/CSA-C22.2 No. 60601-1 (2014)

14. Accessory equipment connected to the analog and digital interfaces must be in compliance with the respective nationally harmonized IEC standards (i.e. IEC 60950 for data processing equipment, IEC 60065 for video equipment, IEC 61010-1 for laboratory equipment, and IEC 60601-1 for medical equipment.) Furthermore, all configurations shall comply with the system standard IEC 60601-1-1. Everybody who connects additional equipment to the signal input part or signal output part configures a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 60601-1-1. The unit is for exclusive interconnection with IEC 60601-1 certified equipment in the patient environment and IEC 60601-1 certified equipment outside of the patient environment. If in doubt, consult the technical services department or your local representative.

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

Précaution! *Utilisez un appareil de montage approprié pour éviter tout risque de blessure.*

15. Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your country.

Note! *Environmental protection Follow national requirements to dispose of unit.*

Warning! *Do not modify this equipment without authorization of the manufacturer.*

Warning! *To avoid risk of electric shock, this equipment must only be connected to a supply main with protective earth.*

Caution! *This adapter EDAC EM11011M(18) is a forming part of the medical device.*

Attention! *Ne modifiez pas cet équipement sans l'autorisation du fabricant.*

Attention! *Pour éviter tout risque de choc électrique, cet équipement ne doit être connecté qu'à une alimentation avec terre de protection.*

Précaution! *Cet adaptateur EDAC EM11011M(18) fait partie intégrante du dispositif médical.*

16. The design of Internal Smart battery is considered for backup purpose while system accidently loosing main power supply in any situation, it will supply max.6mins of the operating time to keep let user backup the data and shut down the system properly.

Caution! *Do not attempt to disassemble the battery pack. There is danger of excessive temperatures, fire or explosion if the battery is incorrectly replaced. Please contact with MANUFACTURER to replace battery packs.*

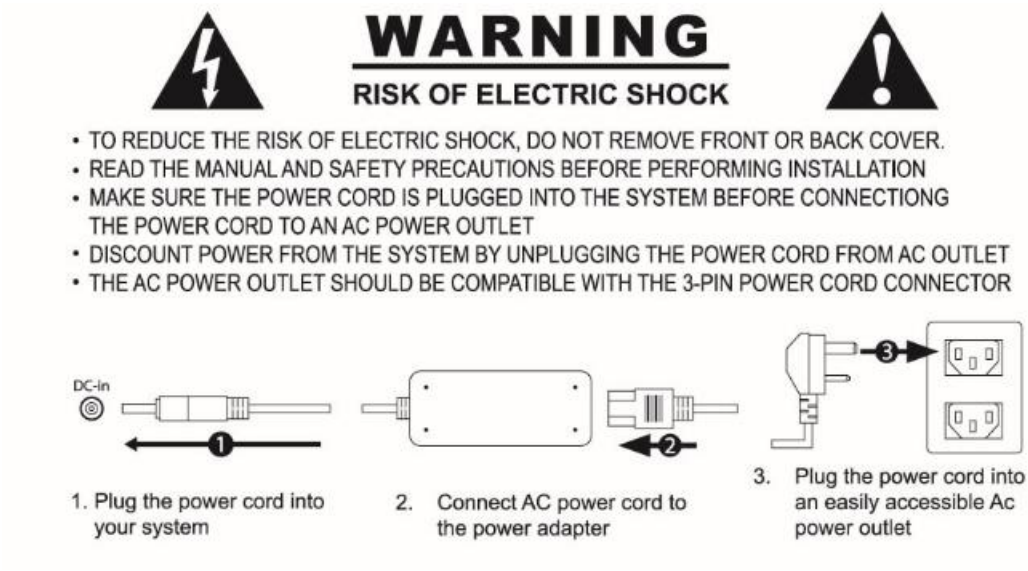
Caution! *Do not use the power adapter that isn't made for the equipment, supplying the equipment with inappropriate voltage may cause harm to the battery (if any) or even worse burn the equipment.*

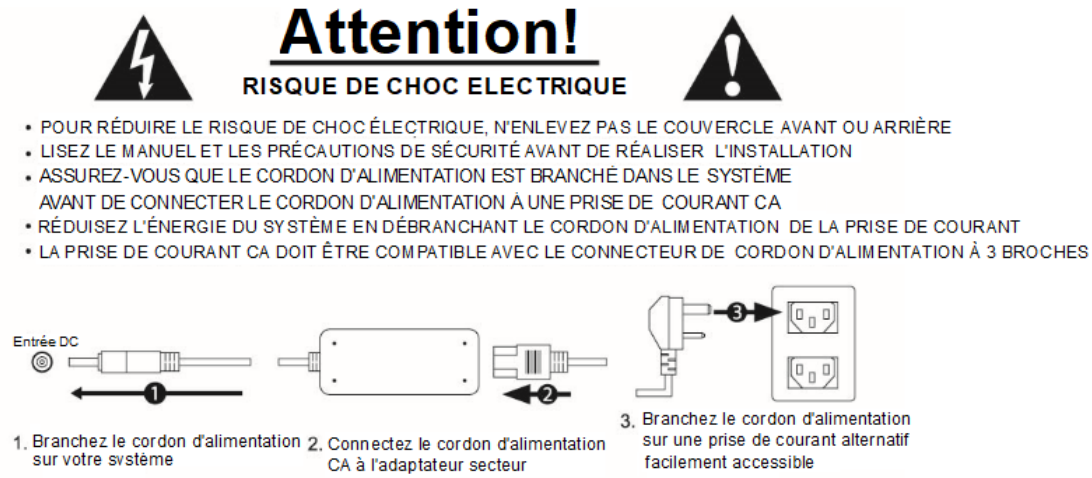
Précaution! *Do not attempt to disassemble the battery pack. There is danger of excessive temperatures, fire or explosion if the battery is incorrectly replaced. Please contact with MANUFACTURER to replace battery packs.*

Précaution! *Do not use the power adapter that isn't made for the equipment, supplying the equipment with inappropriate voltage may cause harm to the battery (if any) or even worse burn the equipment.*

Caution! *Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions."*

Attention! *Risque d'explosion si la batterie est remplacée par un type incorrect. Jetez les piles usagées selon les instructions*





Explanation of Graphical Symbols

	Warning: dangerous voltage
	Caution
	Note
	ISO 7000-1641: Follow operating instructions or Consult instructions for use.
	Direct current.
	Equipotential
	Stand-by
	US Conformance
	Follow the national requirements for disposal of equipment.

Disposing of your old product

Within the European Union

EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of

separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between yourself. The mark on electrical and electronic products only applies to the current European Union Member States.

Federal Communication Commission Interference Statement

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**

• Connect the equipment into an outlet on a circuit different from the one the receiver is connected to.

• Consult the dealer or an experienced radio/TV technician for help.

Notice:

(1) A Unshielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord by used.

(2) Use only shielded cables to connect I/O devices to this equipment.

(3) Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Shielded interface cables must be used in order to comply with emission limits.

Additional Information and Assistance

Contact your distributor, sales representative for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages
- This equipment is a source of electromagnetic waves. Before use please, make sure that there are not EMI sensitive devices in its surrounding which may malfunction therefore.

Environmental protection

- Follow national requirements to dispose of unit.

Manufacturer

Avalue Technology Inc.
7F, No.79, Lide St., Zhonghe District, New Taipei City, 235, Taiwan
TEL: +886-2-8226-2345
FAX: +886-2-8226-2777
Web: www.avalue.com.tw
Information: sales@avalue.com.tw

CONTENT

1. HID-2334 Multi Touch Medical Panel PC

Features

In this chapter, you will get to know all features of our HID-2334 Multi Touch Medical Panel PC.

1.1 Packing List

- 1 x HID-2334 Medical Panel PC
- 1 x 24V 120W Medical power adapter
- 1 x Power cord
- Optional Items:
  Rechargeable Lithium Ion Battery
  4 Bay Battery Charging Station
  19V 120W Adapter for Charging Station
  Barcode Scanner Kit

Power cords:

● Utilize a UL-listed detachable power cord, 3-wire, type SJ or equivalent, 18 AWG min., rated 250 Vmin., provided with a hospital-grade type plug 5-15P configuration for 120V application, or 6-15P for 240V application.

● Do not overload wall outlets and extension cords as this may result in fire or electric shock.

● Mains lead protection (U.S.: Power cord): Power cords should be routed so that they are not likely to be walked upon or pinched by items placed upon or against them, paying particular attention to cords at plugs and receptacles.

● The power supply cord should be replaced by the designated operator only at all time.

●Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.

1.2 Specifications

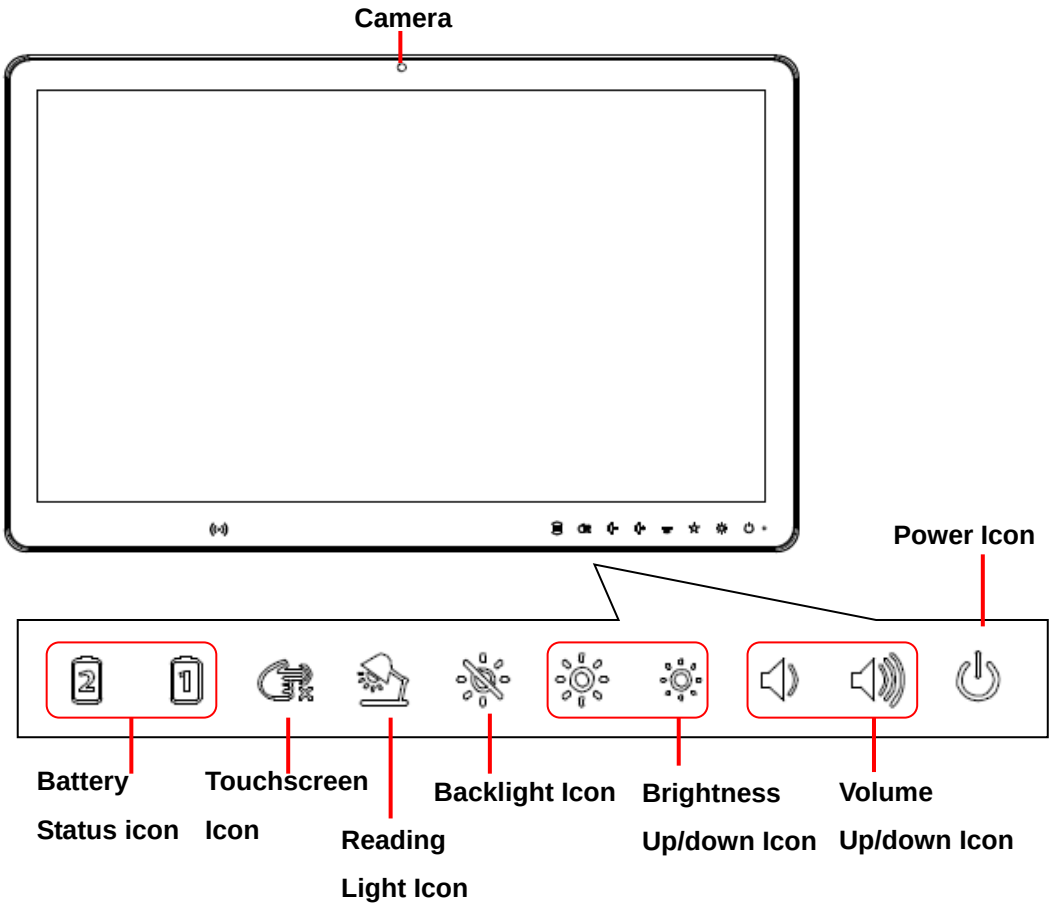
Component	
Mother Board	HID-2334 M/B + Battery Charger Board
Charger Board	HID-2334 Battery Charging Board
CPU	7th Generation Intel® Core Kaby Lake i5-7300U Processor
CPU Cooler (Type)	Heatsink
Memory	2 x 260pin SODIMM socket up to 32GB Per Slot DDR4 2400 SDRAM
Power Supply	DC in
Adapter	EDAC EM11011M(18) 120W/24V
System Fan	Fan-less
Speaker	2W x 2
Camera	5.0M CMOS with auto-focus
Wireless LAN	mPCIe WiFi 1T1R 802.11b/g/n/ac/ BT4.0 (ACC-MPCIE-WIFI-10R) Optional
Antenna	2 x PCB Antenna 2.4/5.0GHz-IPEX D1.13mm 50cm (E170R020000R)
Bluetooth	BT4.0 Optional
Expansion Card	Mini PCIe slot x 1
NFC	JunWei NFC Module CT-NFCe-10 w/Antenna (ACC-NFC-USB-03R) Optional
Battery	2 x 14.4V / 6800mAh 4S2P Totex / RRC hot swappable Rechargeable Lithium Ion battery
Battery Charger	4 slots battery charger
Storage	
Solid State Drive	2.5” 64GB SSD (ACC-2S3S-64G-07R) Optional
Panel	
LCD Panel	AUO M238HVN01.0 LG LM238WF1-SLK1
LED DRIVER BD	Yes
Touch Screen	23.8" P-Cap
Touch Controller	EETI EXC84H5680
External I/O	
USB Port	4 x USB3.0 (2 x Double deck)
LAN Port	2 x RJ45

Service Window	For memory and storage upgrade
Indicator Light	HDD LED, Power LED
Expansion Slots	1 x M.2 2230 1 x mPCIe with SATA or PCIE x1 mSATA
Others	1 x DP 1 x HDMI Line-Out & Mic-in
Mechanical	
Power Type	DC in +19V ~ 24V
Power Connector Type	Lockable DC jack
Dimension	592 x 382 x 49.5mm
Weight	6.9 kg (without battery and adapter)
Color	White Plastic
Finishing	Anti-Microbial
Fanless	Yes
OS Support	Win10 64 bit/Linux (Kernel after 4.7)
Reliability	
EMI Test	CE/ FCC class B
Safety	CE(IEC/EN 60601-1, ed3.1; EN 60601-1-2, 4.0th) UL/cUL(ANSI/AAMI ES60601-1:2005+A1,CAN/CSA C22.2 NO.60601-1:14)
Dust and Rain Test	Front IP65
Vibration Test	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 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

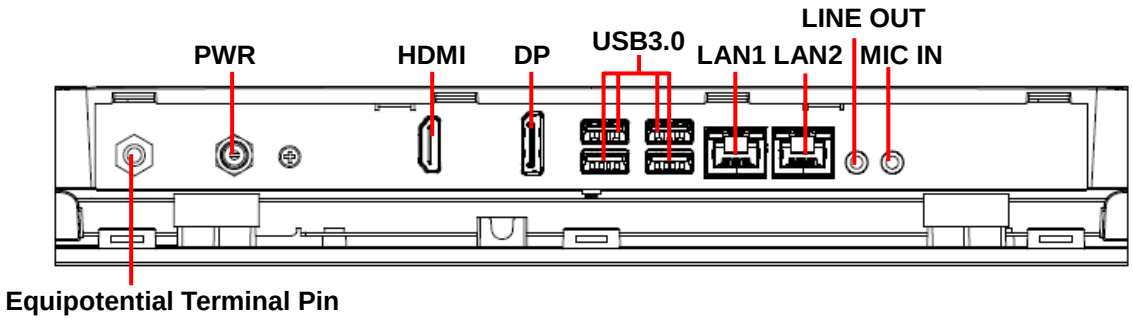
	5 Test time :30 min. each axis 6 System condition : Non-Operating mode 7 Test curve Package Vibration Test: Reference IEC60068-2-64 Testing procedures Test Fh : Vibration boardband random Test 1 Test PSD : 0.026G²/Hz , 2.16 Grms 2 Test frequency : 5~500 Hz 3 Test axis : X,Y and Z axis 4 Test time : 30 minutes each axis 5 Test curve
Mechanical Shock Test	With CF/SSD: 10Grms, IEC 60068-2-27, Half Sine, 11ms
Drop Test	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 2 Test high : 3 Package weight : 4 Test drawing
Operating Temperature	0 ~ 40 degree
Operating Humidity	0 ~ 90% Relative Humidity, Non-condensing
Storage and Transportation Condition	-20 60 degree, 10%~95%@35°C, non-condensing
Atmospheric Pressure	700~1060hPa
Expected Service Life	16363.27hrs

Note: Specifications are subject to change without notice.

1.3 Front view



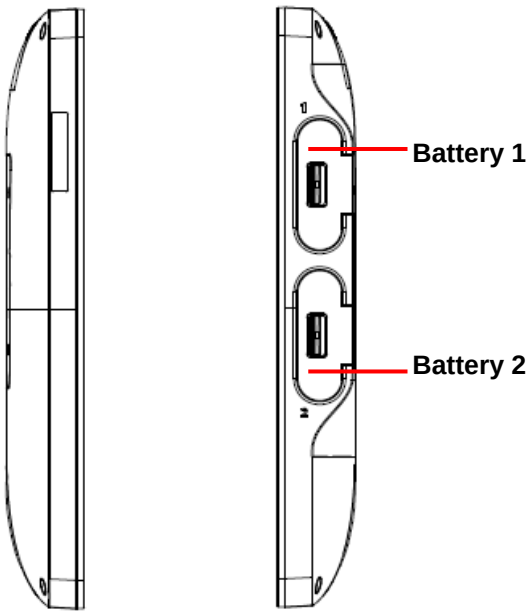
1.4 Rear & Bottom view

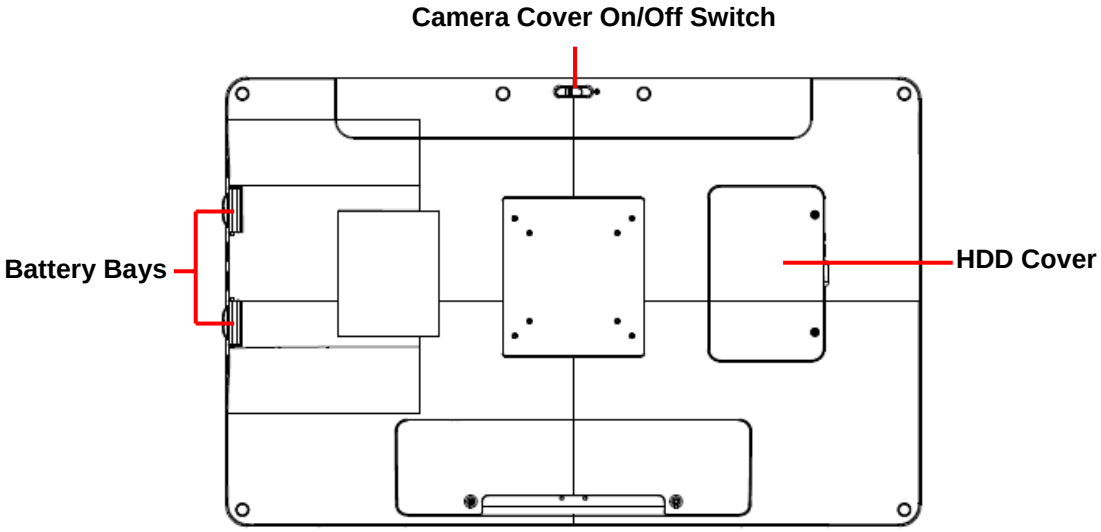


I/O port functions description:
Equipotential Terminal Pin: for connect hospital ground/earth
PWR: System power indicator
DC-IN: for Power adapter DC jack
HDMI: for display output
DP: DP connector
USB3.0: for USB drive/KB/Mouse/USB HDD…etc USB device
LAN: for internet connection
LINE OUT: Line-out jack
MIC IN: Mic-in jack

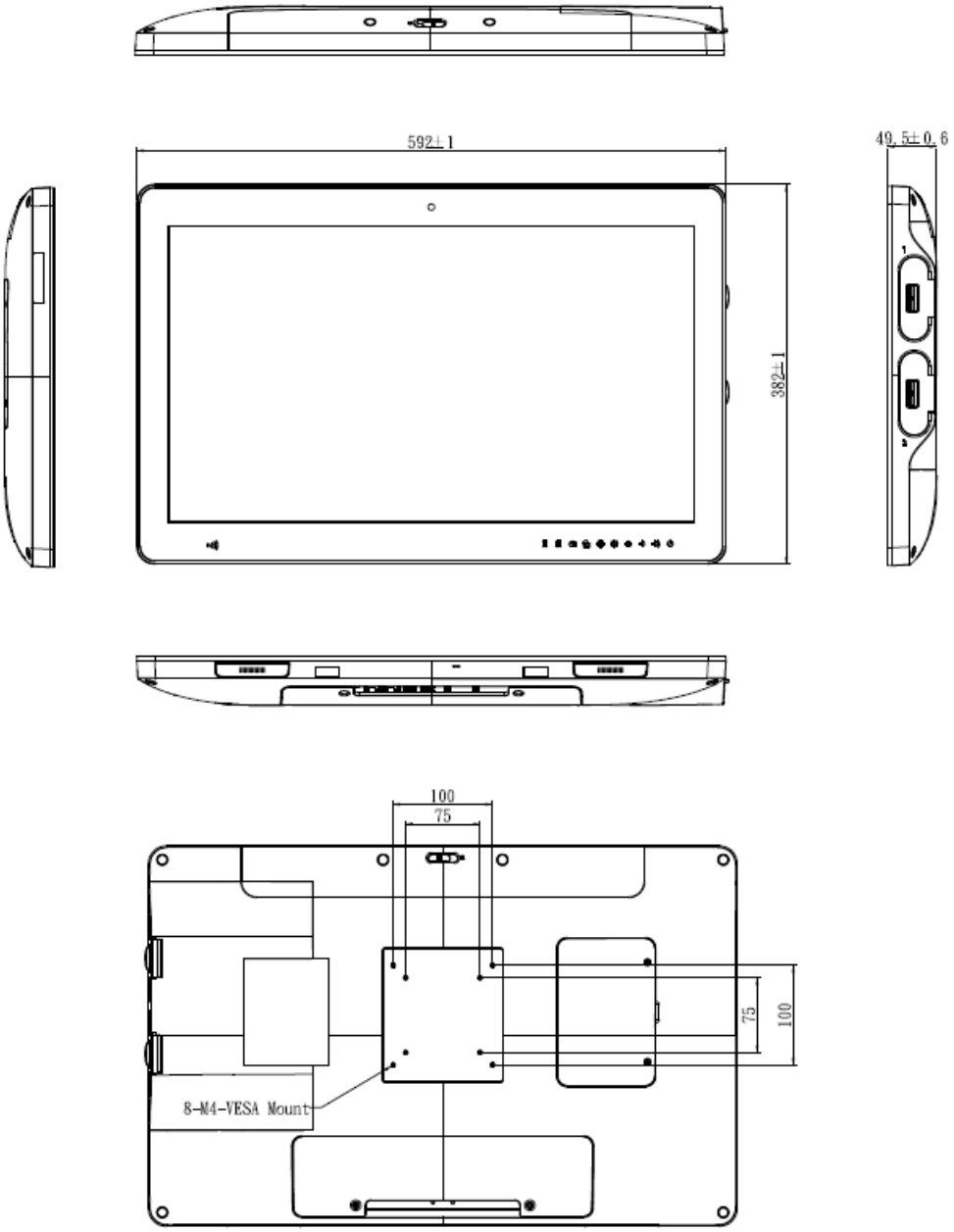
Note! *Equipotential terminal needs to be linked to the hospital ground/earth system before booting the system to protect both operator and system.*

1.5 Side & Rear view





1.6 System Dimensions



(Unit: mm)

2. Setting Up HID-2334 Multi Touch Panel PCs

This chapter gives instructions on how to set up HID-2334 Multi Touch Panel PC and how to connect different cables.

2.1 VESA Mounting
2.2 Cleaning and Disinfecting

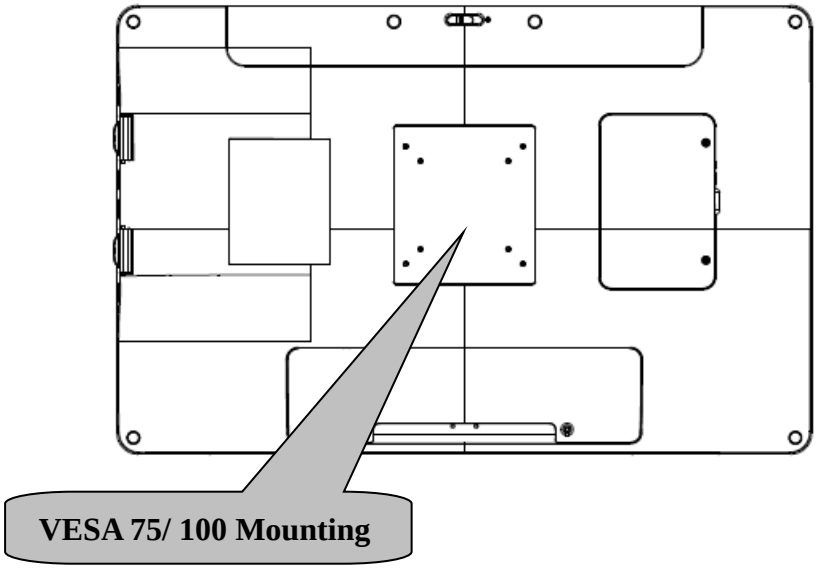
2.1 VESA Mounting

The HID-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 HID-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 HID-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.

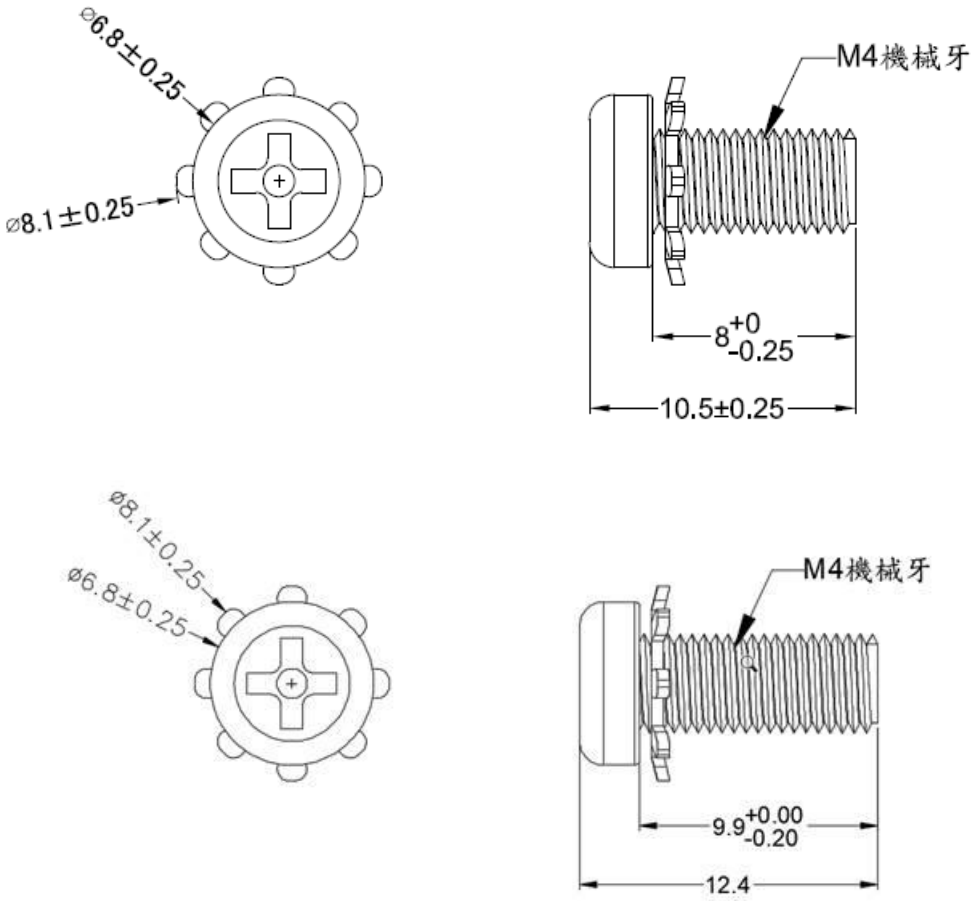
Warning! *Be sure to secure the screws of the mounting bracket tightly. A loose joint between the HID-2334 and mounting bracket may create danger of injury.*

Attention! *Assurez-vous de bien serrer les vis du support de montage. Un joint lâche entre le HID-2334 et le support de montage peut créer un risque de blessure.*



Suggested Screw type for mounting

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

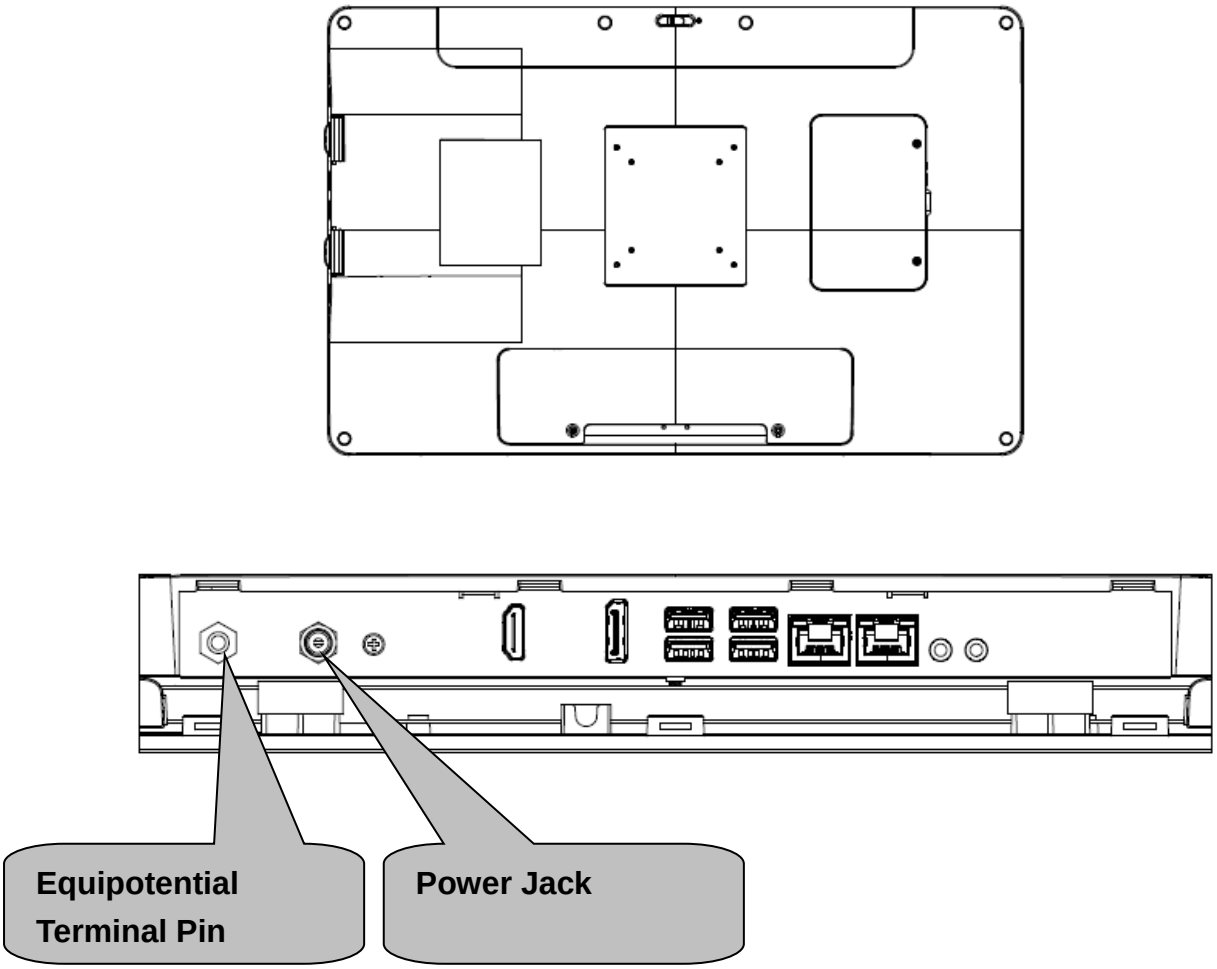


Warning! Use suitable mounting apparatus to avoid risk of injury.

Attention! Utilisez un appareil de montage approprié pour éviter tout risque de blessure.

2.2 Cabling

1. Power Cable
2. Equipotential Terminal Pin

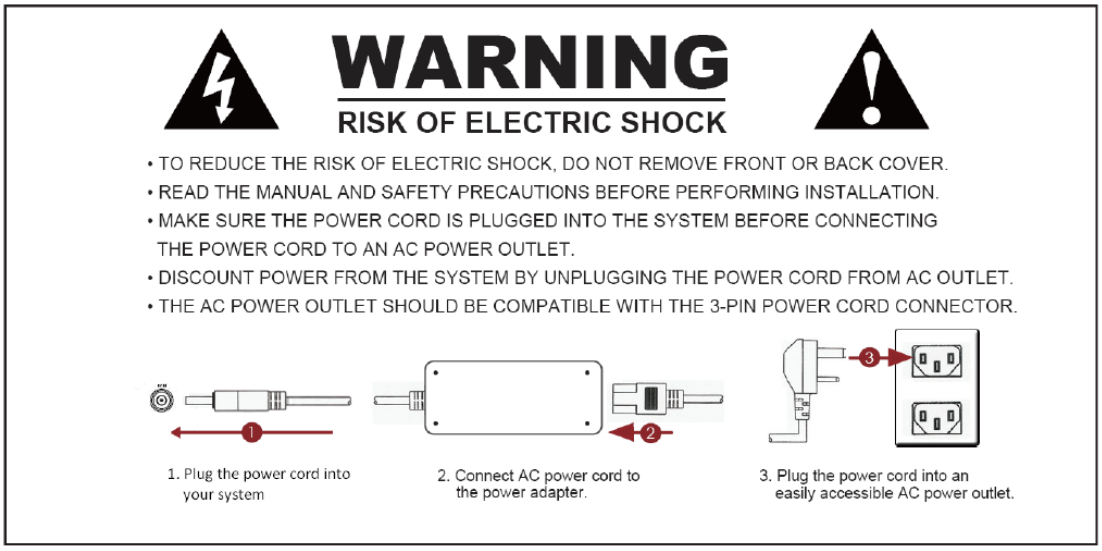


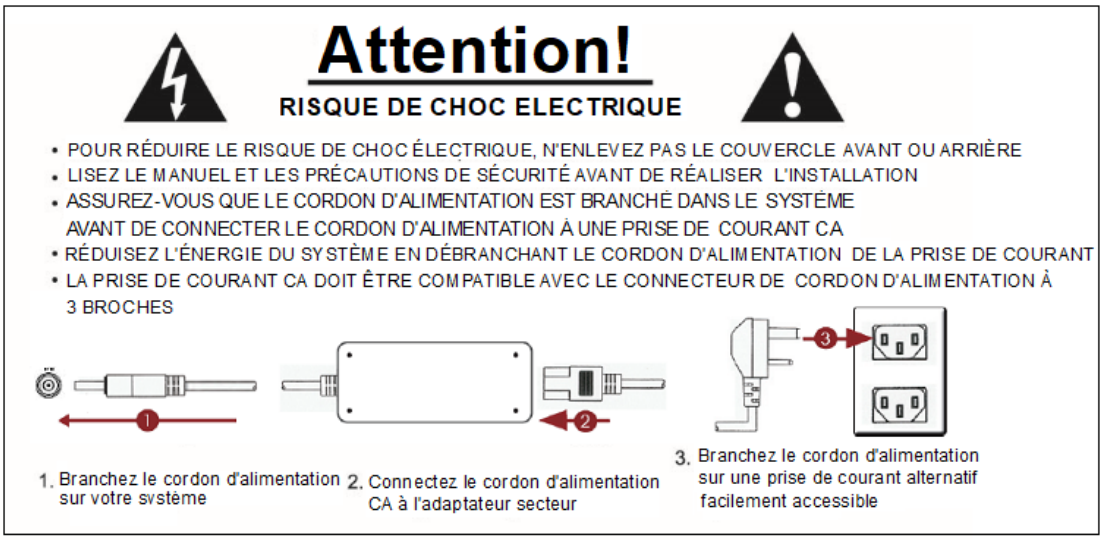
Follow below step Connecting the Ground pin

1. With system ready, find the equipotential terminal on the rear side of the HID-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

Please follow below steps to connect power cable to system.
The HID-2334 could only be powered by a DC power adapter (EDAC Model no. EM11011M(18)). Be sure to always handle the power cords by holding the plug ends
only.
Follow these procedures in order:
1. Connect the female end of the power adapter to the DC jack of the panel PC.
2. Connect the female end of the power cord to the DC power adapter.
3. Connect the 3-pin male plug of the power cord to an electrical outlet.

External equipment intended for connection to signal input/output or other connectors, shall comply with relevant UL standards (e.g. UL 60950-1 for IT equipment and ANSI/AAMI ES60601-1/ IEC 60601-1 series for medical electrical equipment





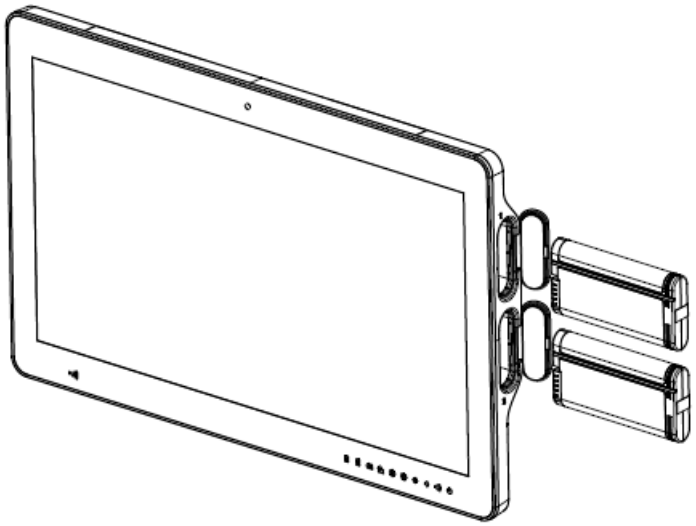
2.3 Battery Installation (Optional)

WARNING:

- Danger of explosion if battery is incorrectly replaced. Replace only with the same type recommended by the manufacturer.
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

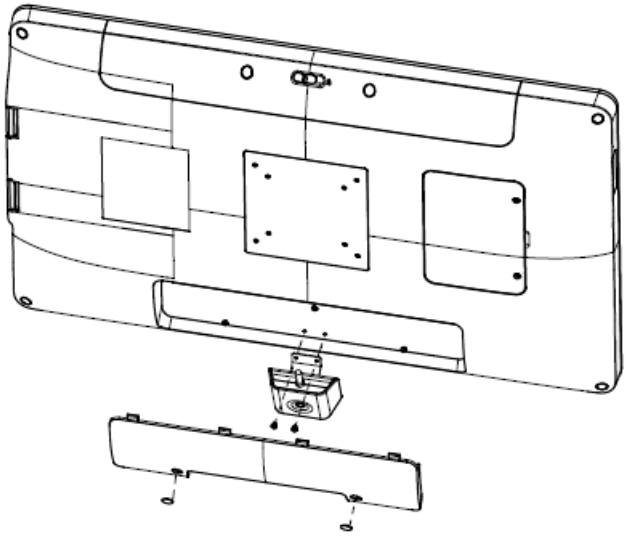
HID-2334 has two battery bays for Lithium Ion battery pack installation. To install battery, please follow the steps below.

Step 1: Push the button on the battery cover to release the latch and open the battery cover.
Step 2: Insert batteries in the direction shown below and push it to the bottom.
Step 3: Close the battery cover.



2.4 Barcode Scanner Kit Installation

Step 1: Remove the I/O cover.
Step 2: Install the barcode scanner kit bracket with two screws as indicated.
Step 3: Re-install the I/O cover.



2.5 Cleaning and Disinfecting

During normal use of HID-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 medical 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 medical PC or medical PC peripherals.

Please keep in mind that some components in medical 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 medical PC

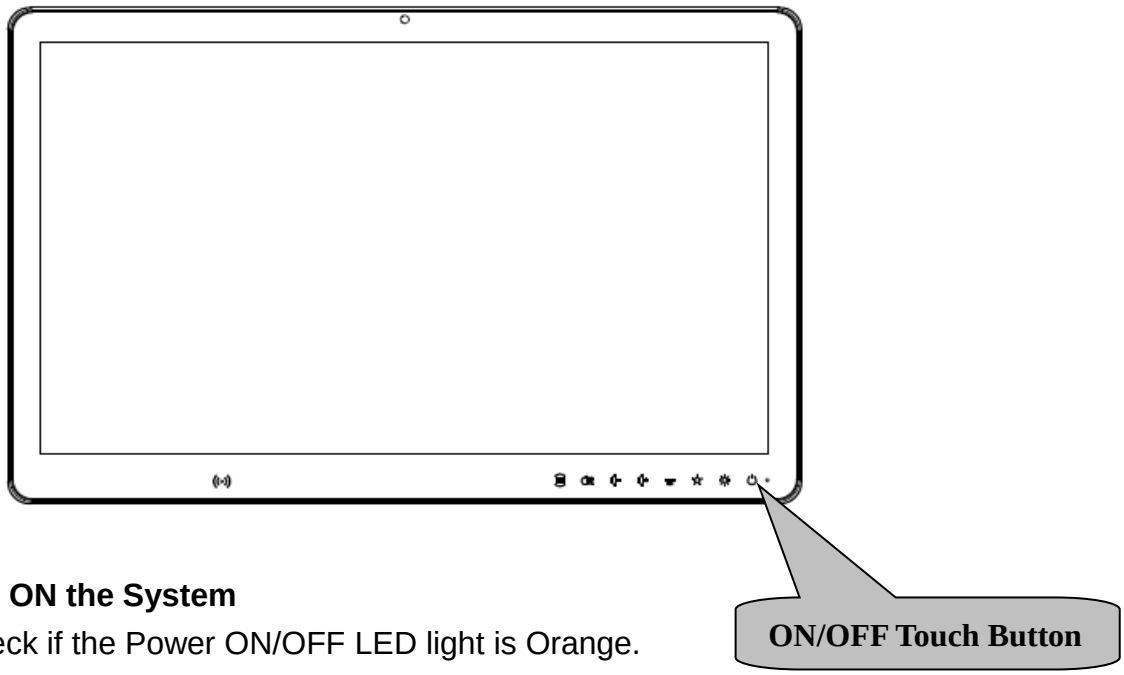
No.	Cleaning agent
1	Acetic Acid
2	Acetone
3	Alcohol
4	Alcohol 70%
5	Ammonia
6	Artificial Perspiration (JIS K6772)
7	Boil Water
8	Caustic Soda
9	Cidex
10	Cold Cream Applied
11	Detergent (Kao Mypet) Applied
12	Ethanol
13	Gasoline
14	Glycerine
15	Green tinctured soap
16	Hydrochloric Acid
17	Incidin liquid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

3. Using HID-2334 Multi Touch Panel PCs

This chapter describes in detail all features of HID-2334 Multi Touch Panel PC.

3.1 Turn ON/OFF the System
3.2 Using LCD Display and Touch Screen

3.1. Turn ON/OFF the System



3.1.1 Turn ON the System

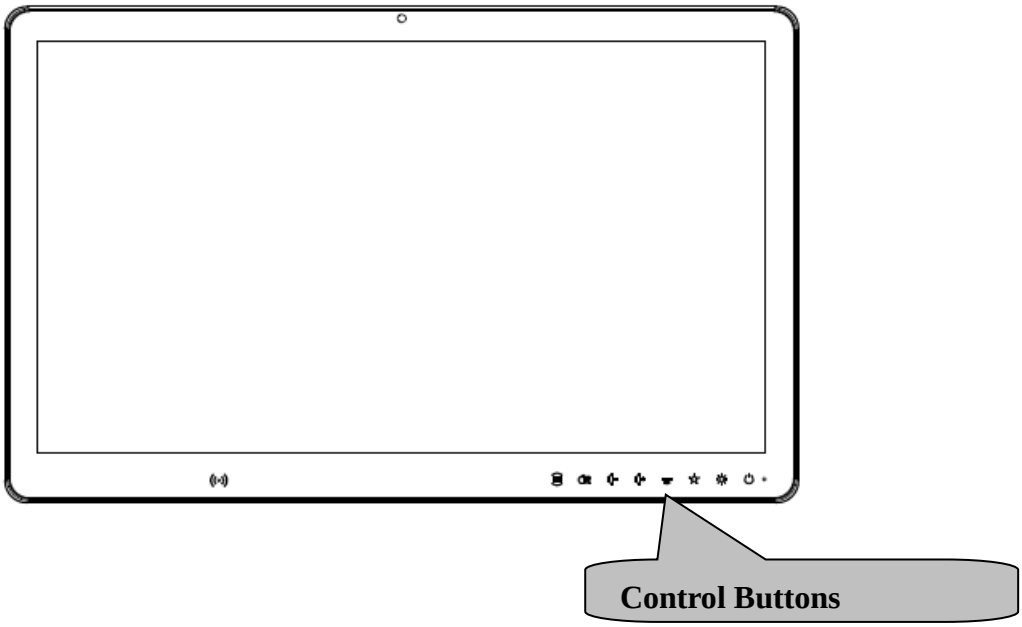
1. Check if the Power ON/OFF LED light is Orange.
2. Press the Power ON/OFF icon firmly to turn power ON/OFF
3. The Power ON/OFF LED will turn green to indicate power is on.

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.

3.2 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

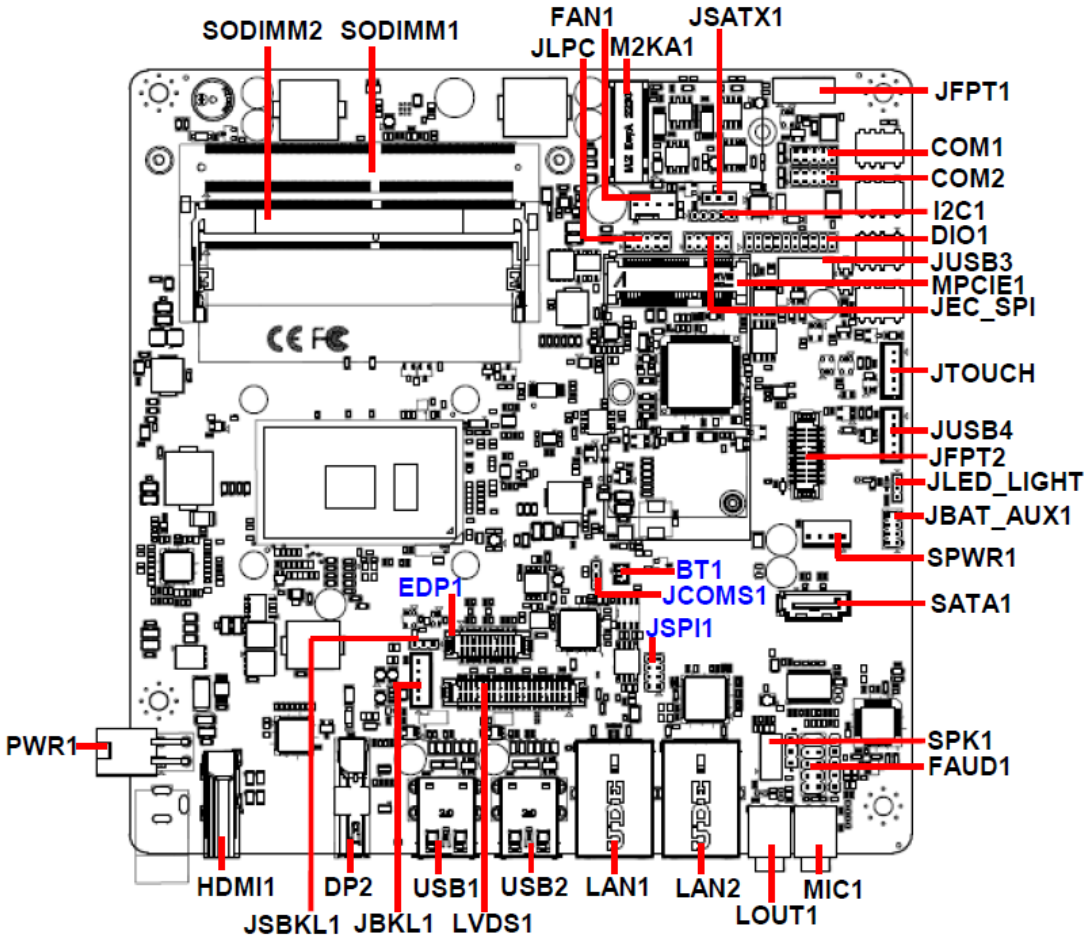
1. Press the Brightness Up or Brightness Down icon to increase or decrease brightness.
2. The brightness of the LCD display will be adjusted accordingly.

3.2.3 LED reading light & Touch function

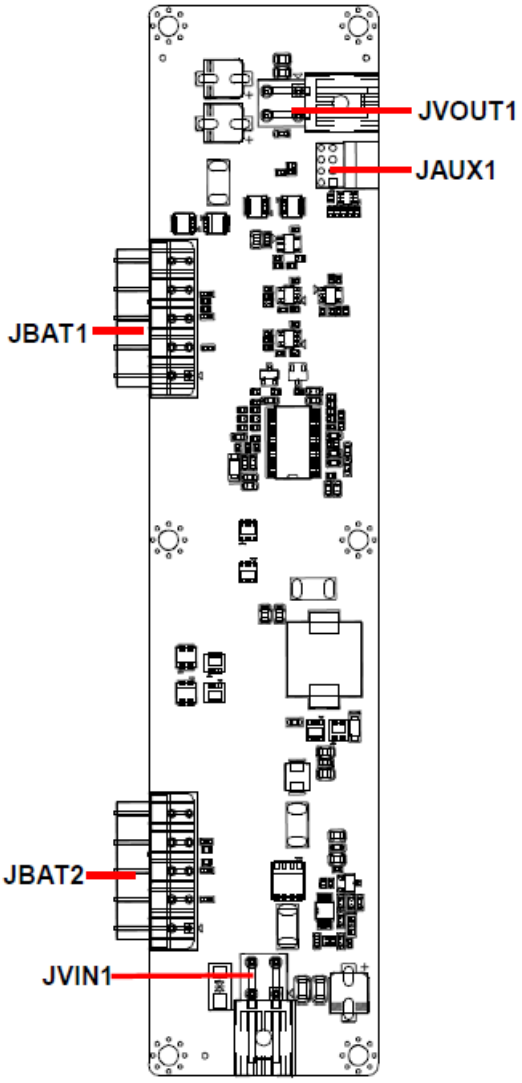
1. Press LED reading light icon for 2 sec to turn on the light bar.
2. Press LED reading light icon for 2 sec to turn off the light bar
3. Press LED reading light icon for 4 secs to turn off the touch function (touch function always on as default)
4. Press LED reading light icon for 4 secs to turn on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

4. Hardware Configuration

4.1 HID-2334 Overviews



4.2 HID-2334 DB-A Overviews



4.3 HID-2334 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

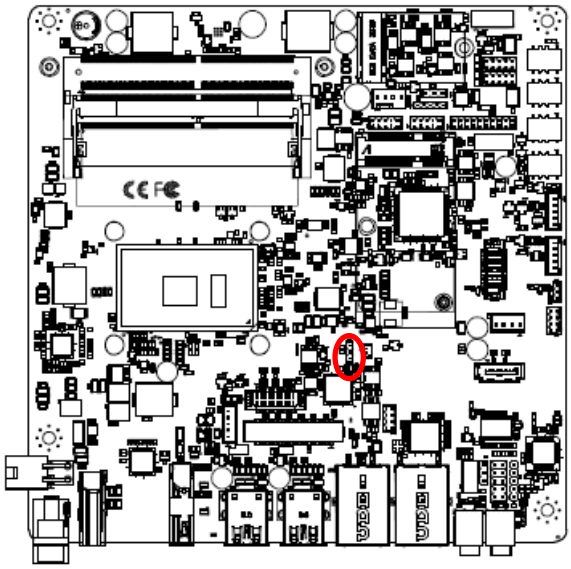
Connectors

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

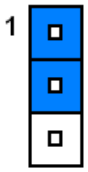
DIO1	General purpose I/O connector	10 x 2 wafer, pitch 2.00 mm
HDMI1	HDMI connector	
M2KA1	M.2 A key slot	
PWR1	Power connector	2 x 2 wafer, pitch 4.20 mm
I2C1	I2C connector(Reserved)	5 x 1 header, pitch 2.00 mm
JSPI1	SPI connector	4 x 2 header, pitch 2.00 mm
JEC_SPI	EC Debug connector	5 x 2 header, 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
MIC1	Mic-in audio jack	
LOUT1	Line-out audio jack	
FAUD1	Front Audio connector	5 x 2 header, pitch 2.54 mm

4.4 HID-2334 MB Jumpers & Connectors settings

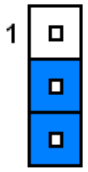
4.4.1 Clear CMOS (JCOMS1)



Protect*

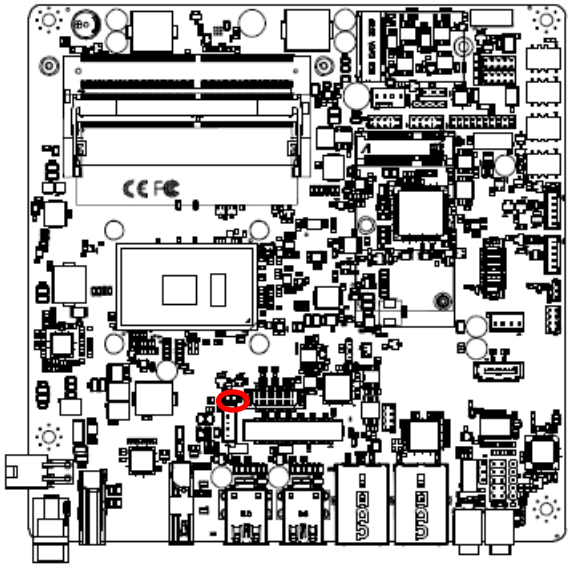


Clear CMOS

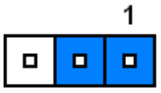


***Default**

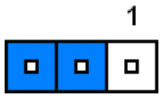
4.4.2 LCD backlight brightness adjustment (JSBKL1)



PWM Mode*

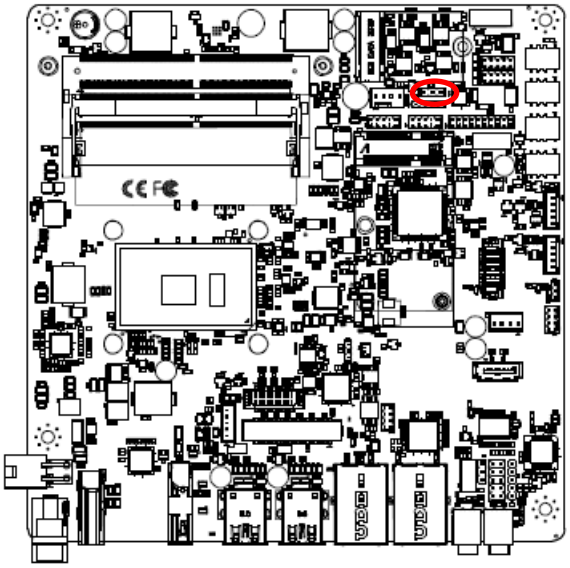


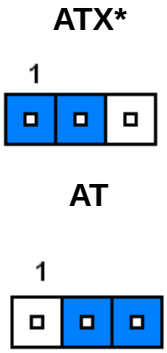
DC Mode



*** Default**

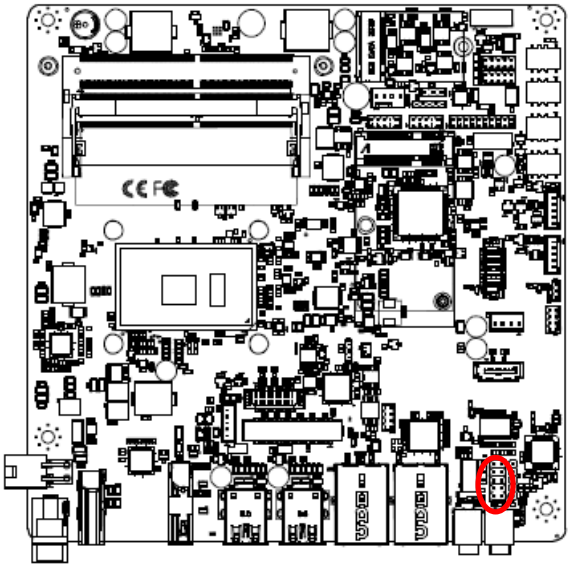
4.4.3 AT/ATX auto power on select (JAT1)

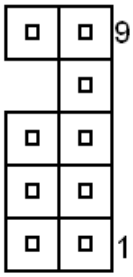




*** Default**

4.4.4 Front Audio connector (FAUD1)



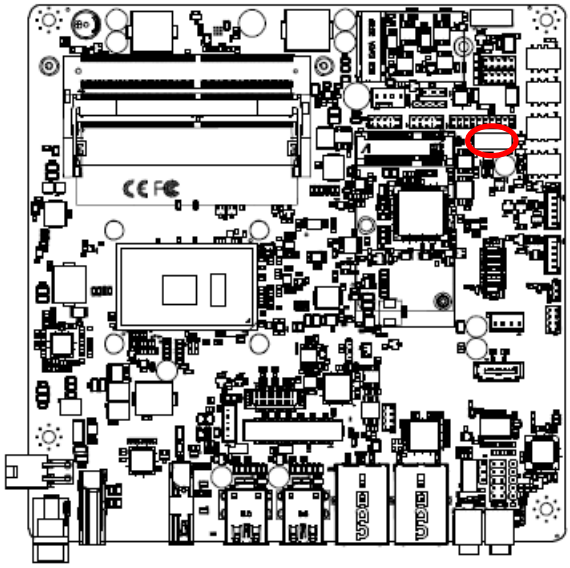


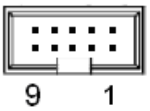
Signal	PIN	PIN	Signal
LINE2_JD	10	9	LINE2_LIN
HD_AGND		7	GND
MIC2_JD	6	5	LINE2_RIN
AUD_FRONT_DET	4	3	MIC2_RIN
GND	2	1	MIC2_LIN

4.4.4.1 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

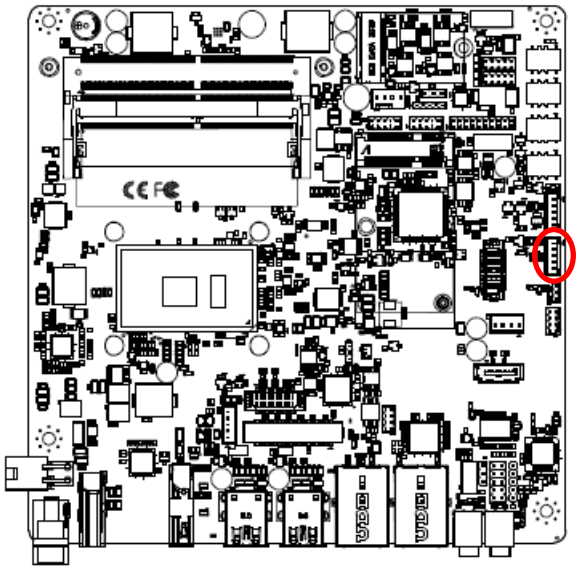
4.4.5 On-board header for USB2.0 (JUSB3)





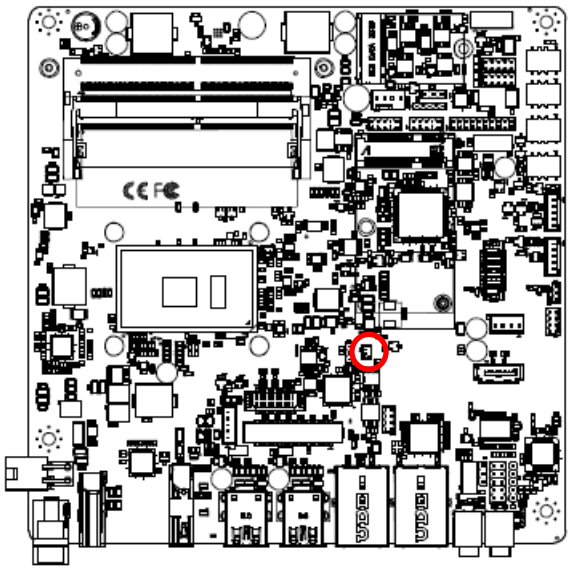
Signal	PIN	PIN	Signal
+5VSB	2	1	+5VSB
USB_DN7	4	3	USB_DN8
USB_DP7	6	5	USB_DP8
GND	8	7	GND
GND	10	9	GND

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



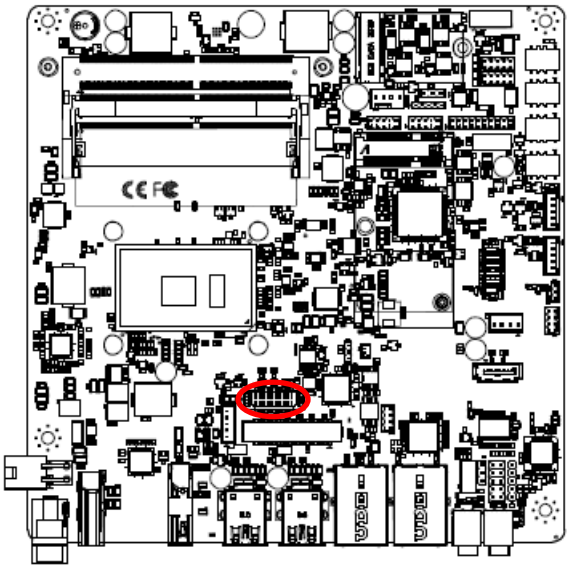
Signal	PIN
+5VSB	1
USB_DN9	2
USB_DP9	3
GND	4
GND	5

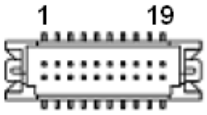
4.4.7 Battery connector (BT1)



Signal	PIN
+RTCBAT	1
GND	2

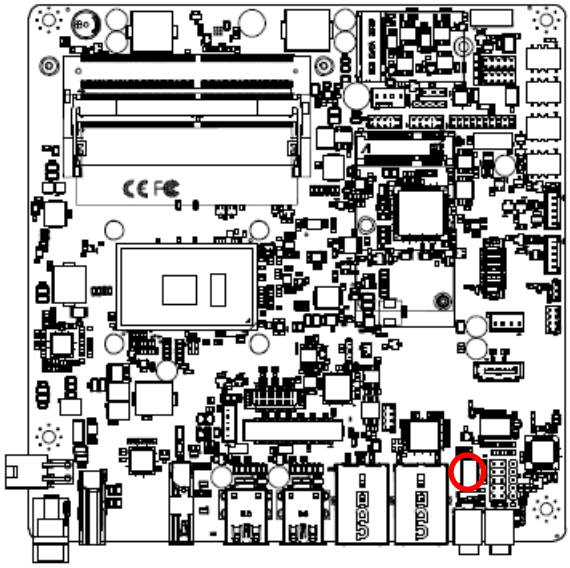
4.4.8 Display Port connector (EDP1)





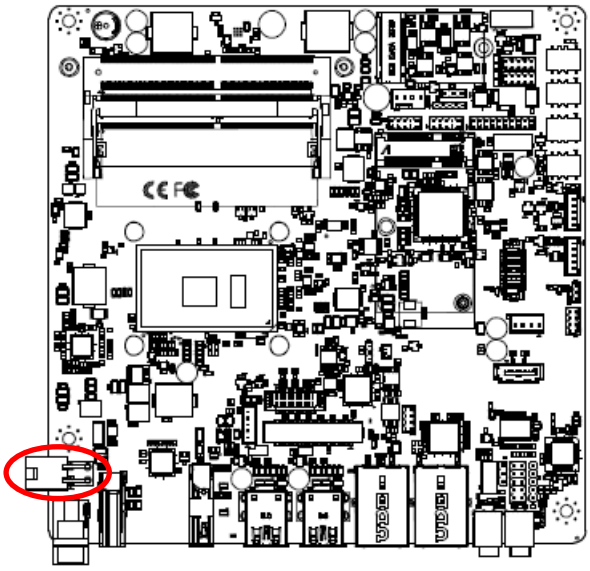
Signal	PIN	PIN	Signal
GND	1	2	GND
EDP_PanelTXN0	3	4	EDP_PanelTXN3
EDP_PanelTXP0	5	6	EDP_PanelTXP3
GND	7	8	Nc
EDP_PanelTXN1	9	10	GND
EDP_PanelTXP1	11	12	EDP_PanelAUXN
GND	13	14	EDP_PanelAUXP
EDP_PanelTXN2	15	16	GND
EDP_PanelTXP2	17	18	EDP_Panel_HPD
+V3512_EDP	19	20	+V3512_EDP

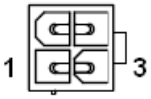
4.4.9 Speaker connector (SPK1)



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

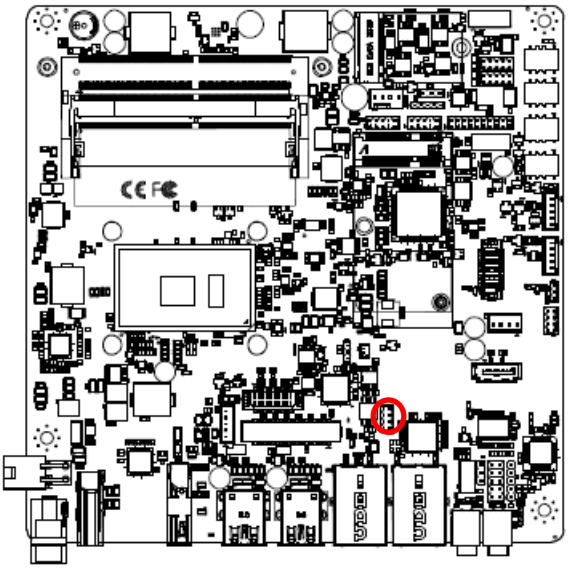
4.4.10 Power connector (PWR1)

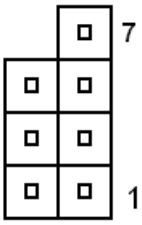




Signal	PIN	PIN	Signal
GND	2	4	+VIN_26V
GND	1	3	+VIN_26V

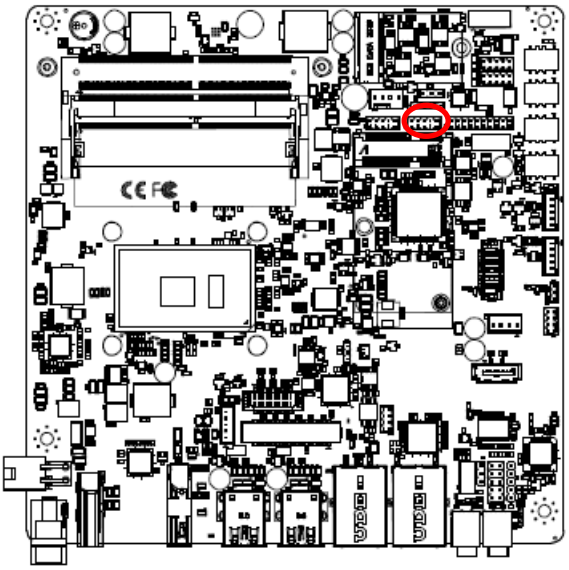
4.4.11 SPI connector (JSPI1)

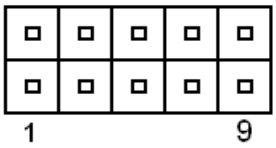




Signal	PIN	PIN	Signal
		7	HOLD#
SPI_SI	6	5	SPI_SO
SPI_CLK	4	3	SPI0_CS0#
GND	2	1	+3.3VSB

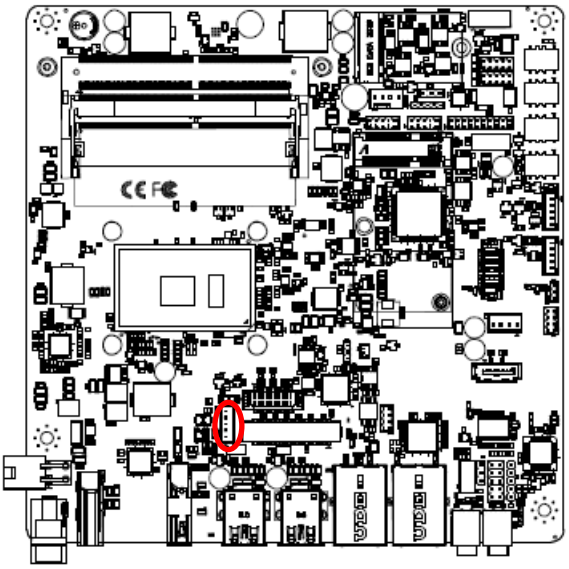
4.4.12 EC Debug connector (JEC_SPI)





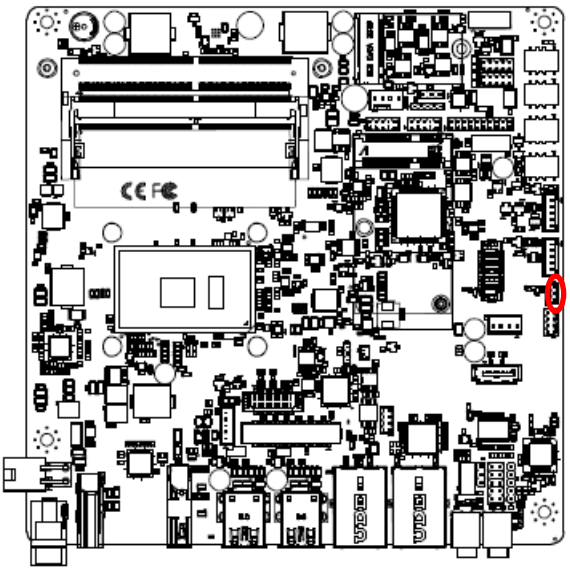
Signal	PIN	PIN	Signal
+3VSPI_EC	1	2	GND
EC_FSCE#	3	4	EC_FSCK
EC_FMISO	5	6	EC_FMOSI
EC_HOLD#	7	8	NC
EC_SMCLK	9	10	EC_SMDAT

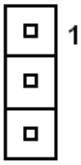
4.4.13 LCD Inverter connector (JBKL1)



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

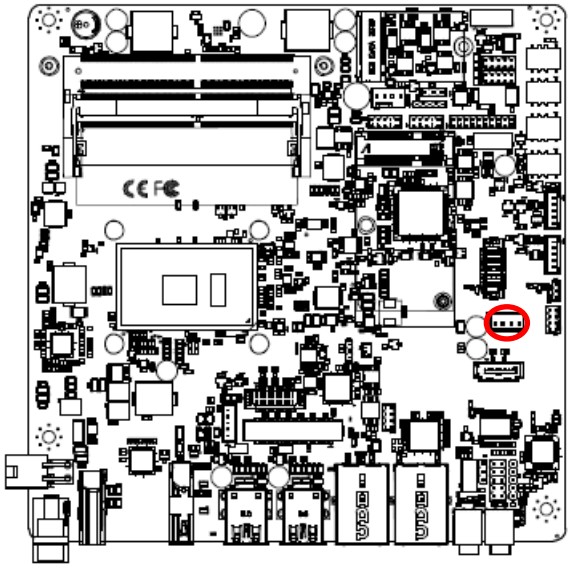
4.4.14 Reading Light connector (JLED_LIGHT)

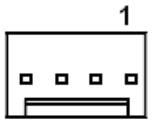




Signal	PIN
+5VSB	1
READ_LIGHT_EN	2
GND	3

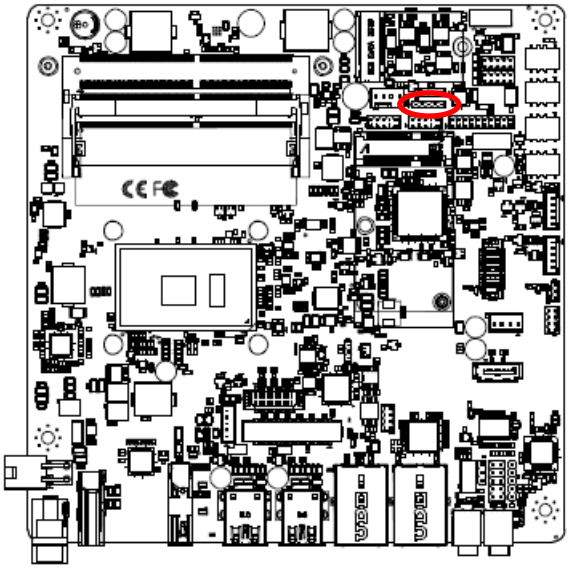
4.4.15 SATA Power connector (SPWR1)





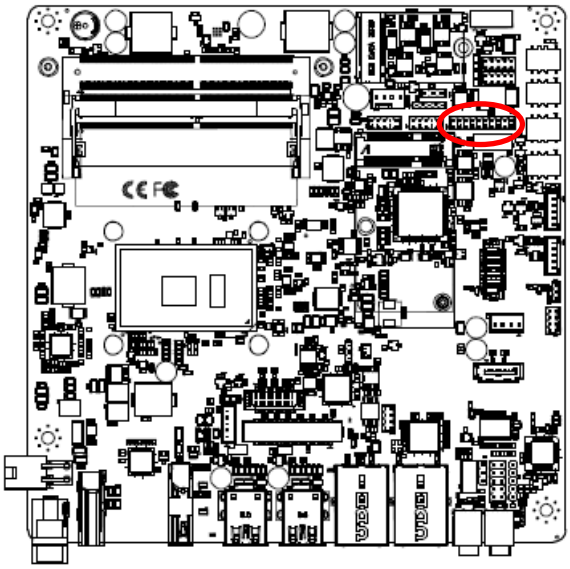
Signal	PIN
+5V	1
GND	2
GND	3
+12V	4

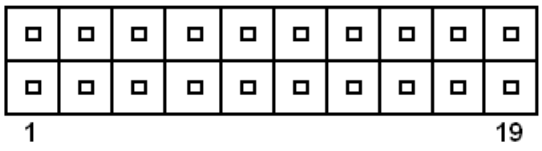
4.4.16 I2C connector (I2C1)



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

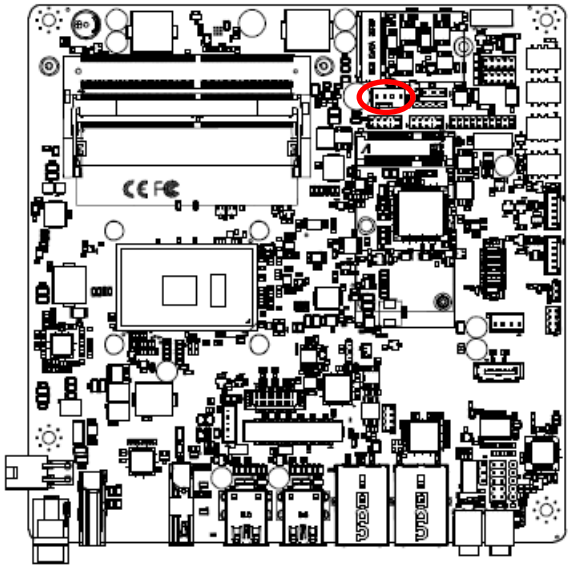
4.4.17 General purpose I/O connector (DIO1)

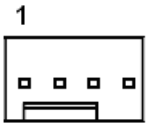




Signal	PIN	PIN	Signal
DI0	1	2	DO0
DI1	3	4	DO1
DI2	5	6	DO2
DI3	7	8	DO3
DI4	9	10	DO4
DI5	11	12	DO5
DI6	13	14	DO6
DI7	15	16	DO7
SMB_CLK_S	17	18	SMB_DATA_S
GND	19	20	+5V

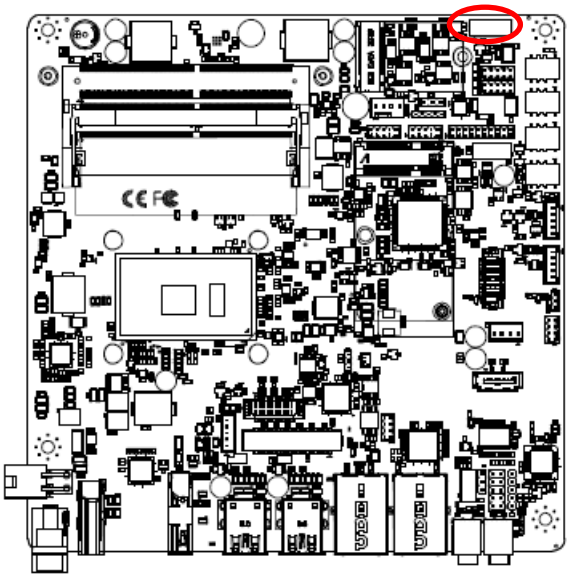
4.4.18 Fan connector (FAN1)

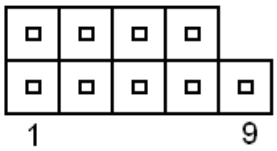




Signal	PIN
GND	1
+12V	2
CPUFANIN	3
FAN_PWM0	4

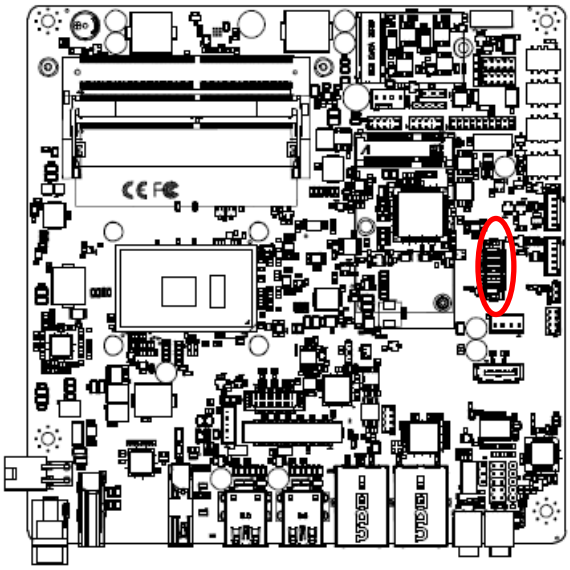
4.4.19 Front Panel connector 1 (JFPT1)

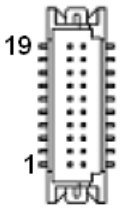




Signal	PIN
+HD_LED	1
+PWR_LED	2
-HD_LED	3
-PWR_LED	4
+Reset	5
+PWR_BNT	6
-Reset	7
-PWR_BNT	8

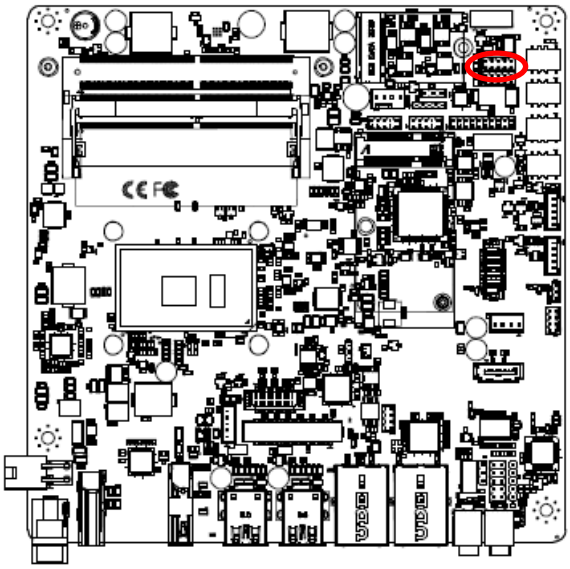
4.4.20 Front Panel connector 2 (JFPT2)

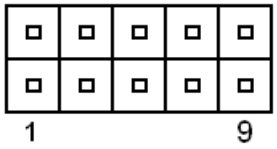




Signal	PIN	PIN	Signal
NC	19	20	NC
NC	17	18	PWR_LED#
TOUCH_OFF_LED#	15	16	SUS_LED#
BATTERY_2_B#	13	14	PWR_BTN_EC#
BATTERY_2_O#	11	12	TOUCH_ON_OFF
BATTERY_1_B#	9	10	VOLUME_DN
BATTERY_1_O#	7	8	VOLUME_UP
READ_LIGHT	5	6	BLK_BRI_DN
BKL_ON_OFF	3	4	BLK_BRI_UP
+3.3V	1	2	GND

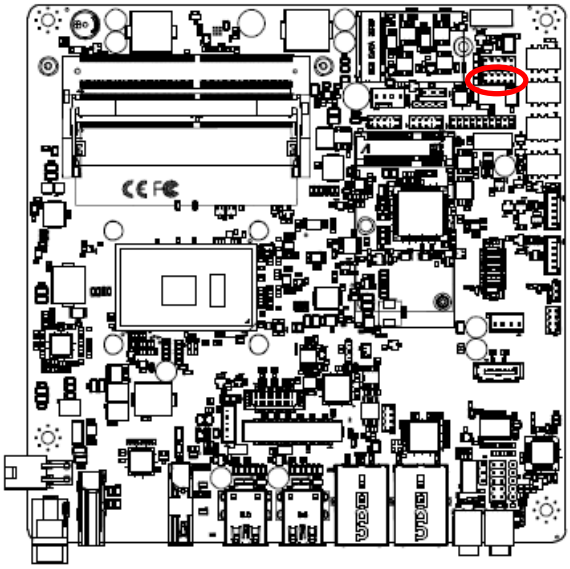
4.4.21 Serial port 1 connector (COM1)

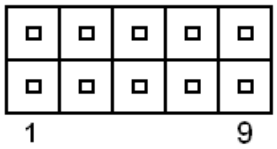




Signal	PIN	PIN	Signal
COM_DCD#_1 _485_422TX1-	1	2	COM_RXD#_1 _422RX1+
COM_TXD_1	3	4	COM_DTR#_1
GND	5	6	COM_DSR#_1 _485_422TX1+
COM_RTS#_1	7	8	COM_CTS#_1 _422RX1-
COM_RI#_1	9	10	NC

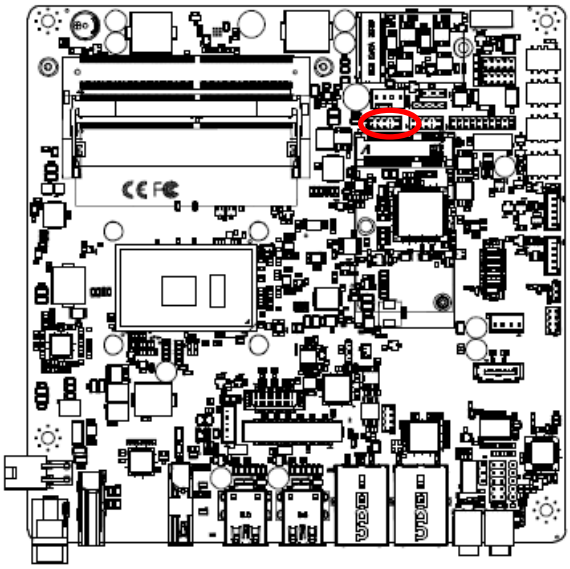
4.4.22 Serial port 2 connector (COM2)

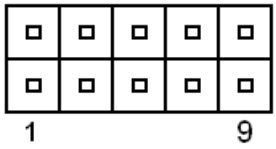




Signal	PIN	PIN	Signal
COM_DCD#_2 _485_422TX2-	1	2	COM_RXD#_2 _422RX2+
COM_TXD_2	3	4	COM_DTR#_2
GND	5	6	COM_DSR#_2 _485_422TX2+
COM_RTS#_2	7	8	COM_CTS#_2 _422RX2-
COM_RI#_2	9	10	NC

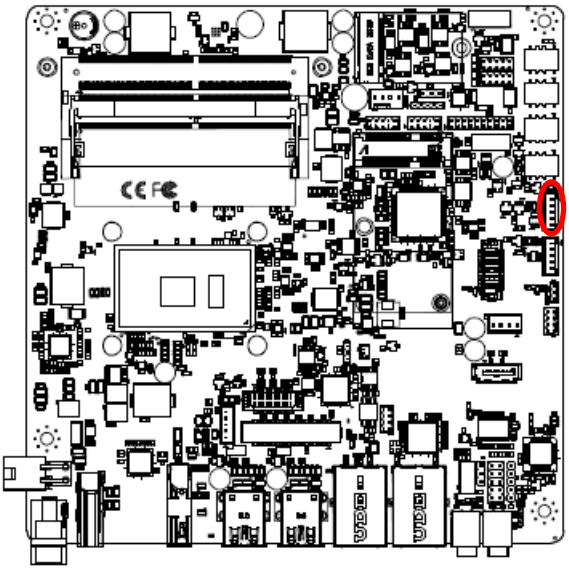
4.4.23 LPC connector (JLPC)





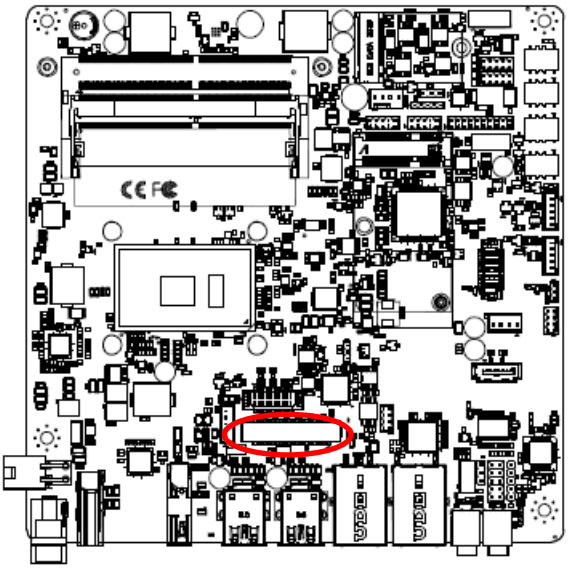
Signal	PIN	PIN	Signal
LPC_AD0	1	2	+3.3V
LPC_AD1	3	4	PCH_PLTRST#
LPC_AD2	5	6	LPC_FRAME#
LPC_AD3	7	8	LPC_CLK
LPC_SERIRQ	9	10	GND

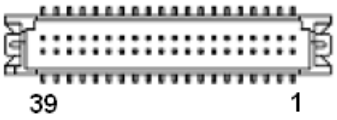
4.4.24 Touch Panel connector (JTOUCH)



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

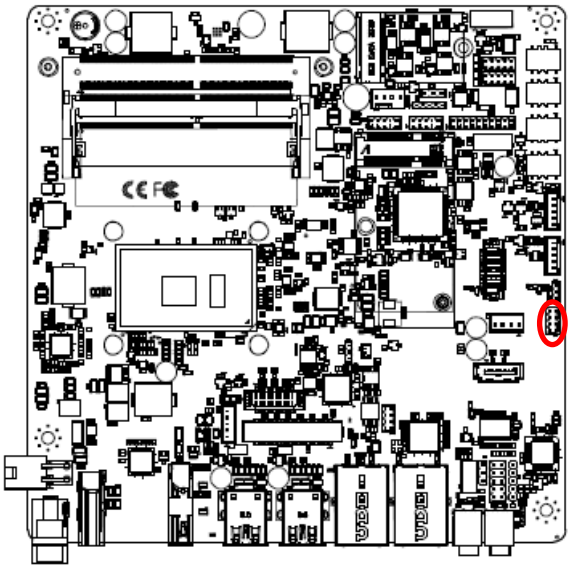
4.4.25 LVDS connector (LVDS1)

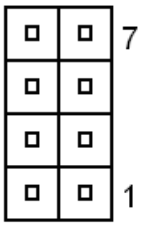




Signal	PIN	PIN	Signal
+5V	2	1	+3.3V
+5V	4	3	+3.3V
NC	6	5	NC
GND	8	7	GND
LVDS_DATA0_P	10	9	LVDS_DATA1_P
LVDS_DATA0_N	12	11	LVDS_DATA1_N
GND	14	13	GND
LVDS_DATA2_P	16	15	LVDS_DATA3_P
LVDS_DATA2_N	18	17	LVDS_DATA3_N
GND	20	19	GND
LVDS_DATA4_P	22	21	LVDS_DATA5_P
LVDS_DATA4_N	24	23	LVDS_DATA5_N
GND	26	25	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

4.4.26 Battery mode connector (JBAT_AUX1)





Signal	PIN	PIN	Signal
CHARGER_DISABLE	8	7	GND
BAT2_PRSNT	6	5	NC
BAT1_PRSNT	4	3	EC_SMDAT1
DB_AC_SENCE	2	1	EC_SMCLK1

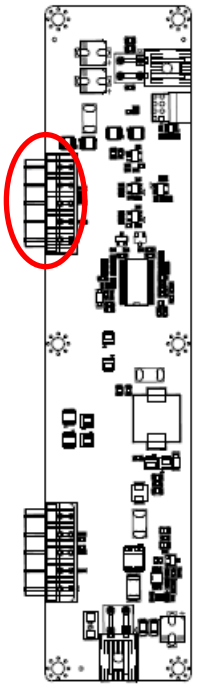
4.5 HID-2334 DB-A Connector list

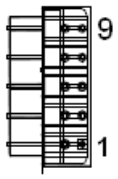
Connectors

Label	Function	Note
JBAT1	Battery connector 1	5 x 2 header, pitch 2.00mm
JBAT2	Battery connector 2	5 x 2 header, pitch 2.00mm
JVIN1	DC-in connector	2 x 2 wafer, pitch 4.20 mm
JVOUT	DC-out connector	2 x 2 wafer, pitch 4.20 mm
JAUX1	Battery mode connector	

4.6 HID-2334 DB-A Connectors settings

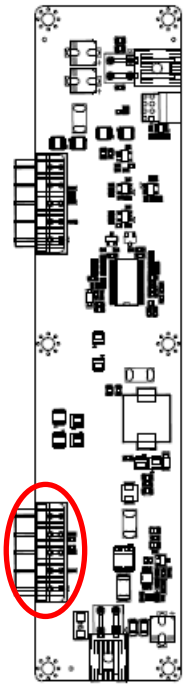
4.6.1 Battery connector 1 (JBAT1)

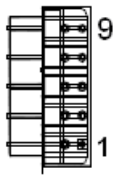




Signal	PIN	PIN	Signal
+V_CHARGER_1	10	9	+V_CHARGER_1
BAT_SMCLK_A	8	7	BAT_SMCLK_A
BAT_SMDAT_A	6	5	BAT_SMDAT_A
TH1	4	3	TH1
GND	2	1	GND

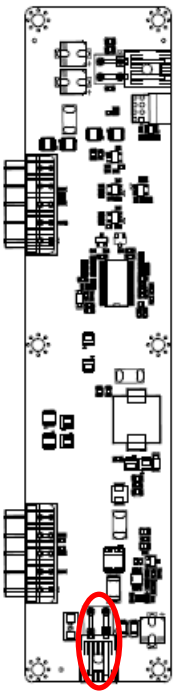
4.6.2 Battery connector 2 (JBAT2)

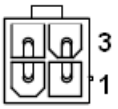




Signal	PIN	PIN	Signal
+V_CHARGER_2	10	9	+V_CHARGER_2
BAT_SMCLK_B	8	7	BAT_SMCLK_B
BAT_SMDAT_B	6	5	BAT_SMDAT_B
TH2	4	3	TH2
GND	2	1	GND

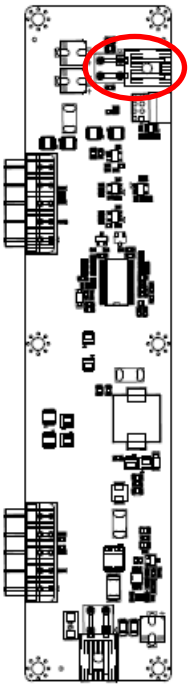
4.6.3 DC-in connector (JVIN1)

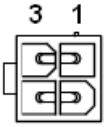




Signal	PIN	PIN	Signal
+DC_IN	4	3	+DC_IN
GND	2	1	GND

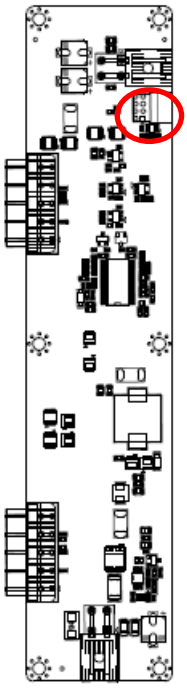
4.6.4 DC-out connector (JVOUT1)

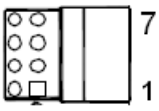




Signal	PIN	PIN	Signal
+DCOUT	3	1	GND
+DCOUT	4	2	GND

4.6.5 Battery mode connector (JAUX1)





Signal	PIN	PIN	Signal
CHARGER_DISABLE	8	7	GND
BAT2_PRSNT	6	5	NC
BAT1_PRSNT	4	3	EC_SMB_SDA
AC_PRSNT	2	1	EC_SMB_SCL

5. General Safety Guide

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 HID-2334 is a fanless design system, heat is dispatch through rear metal heatsink which is located at VESA mount area.. When using your HID-2334 systems, it is normal for the metal heatsink to get warm. The rear metal heatsink of the HID-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 HID-2334 with care. It is made of metal, glass, and plastic and has sensitive electronic components inside.
Don't use a damaged HID-2334, such as one with a cracked screen, as it may cause injury.
Setup HID-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 shold 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 dangerious might happen (Ex: fire or explosion).

6. 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

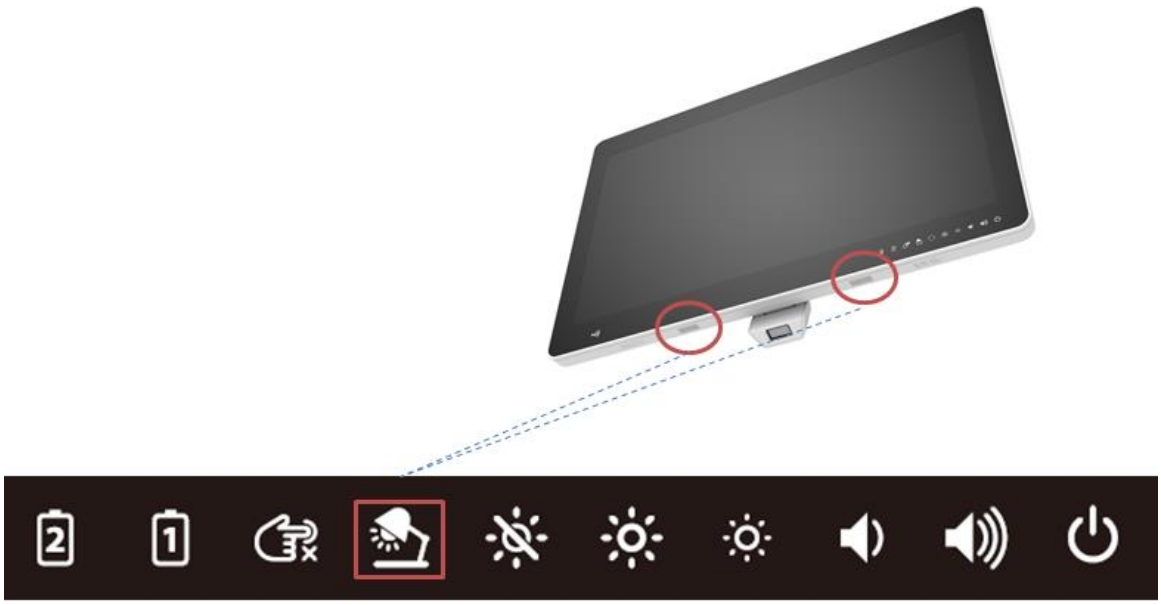
■ Brightness Control

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.

■ Battery Status

Icon Behavior	Indication
Battery status icon shows solid blue light	Without adapter, battery power equals or above 20% With adapter, battery power equals or above 95%
Battery status icon shows solid orange light	Battery power below 20%
Battery status icon shows fast blinking orange light (at 0.5 sec interval)	Battery power below 10%
Battery status icon shows slow blinking orange light (at 2.5 sec interval)	Terminal charging when connected with adapter