

# QBiP-7100A/ QBiP-7200A/ QBiP-7100AT/ QBiP-7200AT/ QBiP-7600A

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3.5" SBC Boards  
User's Manual 1st Ed

## Copyright Notice

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# Packing List

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Before setting up your product, please make sure the following items have been shipped:

For QBiP-7100A/ QBiP-7200A/QBiP-7600A

| Item                                  | Quantity |
|---------------------------------------|----------|
| QBiP-7100A/ QBiP-7200A/ QBiP-7600A MB | 1        |
| SATA power cable                      | 1        |

For QBiP-7100AT/ QBiP-7200AT

| Item                        | Quantity |
|-----------------------------|----------|
| QBiP-7100AT/ QBiP-7200AT MB | 1        |
| Fanless Heatsink            | 1        |
| SATA power cable            | 1        |

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

## About this Document

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This User's Manual contains all the essential information, such as detailed descriptions and explanations on the product's hardware and software features (if any), its specifications, dimensions, jumper/connector settings/definitions, and driver installation instructions (if any), to facilitate users in setting up their product.

Users may refer to the [GIGAIPC.com](http://GIGAIPC.com) for the latest version of this document.

## Safety Precautions

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Please read the following safety instructions carefully. It is advised that you keep this manual for future references


1. All cautions and warnings on the device should be noted.
2. Make sure the power source matches the power rating of the device.
3. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
4. Always completely disconnect the power before working on the system's hardware.
5. No connections should be made when the system is powered as a sudden rush of power may damage sensitive electronic components.
6. If the device is not to be used for a long time, disconnect it from the power supply to avoid damage by transient over-voltage.
7. Always disconnect this device from any AC supply before cleaning.
8. While cleaning, use a damp cloth instead of liquid or spray detergents.
9. Make sure the device is installed near a power outlet and is easily accessible.
10. Keep this device away from humidity.
11. Place the device on a solid surface during installation to prevent falls
12. Do not cover the openings on the device to ensure optimal heat dissipation.
13. Watch out for high temperatures when the system is running.

14. Do not touch the heat sink or heat spreader when the system is running
15. Never pour any liquid into the openings. This could cause fire or electric shock.
16. As most electronic components are sensitive to static electrical charge, be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and contain all electronic components in any static-shielded containers.
17. If any of the following situations arises, please the contact our service personnel:
  - i. Damaged power cord or plug
  - ii. Liquid intrusion to the device
  - iii. Exposure to moisture
  - iv. Device is not working as expected or in a manner as described in this manual
  - v. The device is dropped or damaged
  - vi. Any obvious signs of damage displayed on the device

**18. DO NOT LEAVE THIS DEVICE IN AN UNCONTROLLED ENVIRONMENT WITH TEMPERATURES BEYOND THE DEVICE'S PERMITTED STORAGE TEMPERATURES (SEE CHAPTER 1) TO PREVENT DAMAGE.**

## FCC Statement

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**Warning!**  This device complies with Part 15 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.

### **Caution:**

*There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions and your local government's recycling or disposal directives.*

### **Attention:**

*Il y a un risque d'explosion si la batterie est remplacée de façon incorrecte. Ne la remplacer qu'avec le même modèle ou équivalent recommandé par le constructeur. Recycler les batteries usées en accord avec les instructions du fabricant et les directives gouvernementales de recyclage.*



## China RoHS Requirements (CN)

产品中有毒有害物质或元素名称及含量

GIGAIPC Main Board/ Daughter Board/ Backplane

| 部件名称            | 有毒有害物质或元素 |           |           |                 |               |                 |
|-----------------|-----------|-----------|-----------|-----------------|---------------|-----------------|
|                 | 铅<br>(Pb) | 汞<br>(Hg) | 镉<br>(Cd) | 六价铬<br>(Cr(VI)) | 多溴联苯<br>(PBB) | 多溴二苯醚<br>(PBDE) |
| 印刷电路板<br>及其电子组件 | ○         | ○         | ○         | ○               | ○             | ○               |
| 外部信号<br>连接器及线材  | ○         | ○         | ○         | ○               | ○             | ○               |

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。

备注: 此产品所标示之环保使用期限, 系指在一般正常使用状况下。

# China RoHS Requirement (EN)

## Poisonous or Hazardous Substances or Elements in Products GIGAIPC Main Board/ Daughter Board/ Backplane

| Component                                   | Poisonous or Hazardous Substances or Elements |              |              |                              |                                |                                       |
|---|---|--------------|--------------|------------------------------|--------------------------------|---------------------------------------|
|   | Lead (Pb)                                     | Mercury (Hg) | Cadmium (Cd) | Hexavalent Chromium (Cr(VI)) | Polybrominated Biphenyls (PBB) | Polybrominated Diphenyl Ethers (PBDE) |
| PCB & Other Components                      | ○   | ○            | ○            | ○                            | ○                              | ○                                     |
| Wires & Connectors for External Connections | ○   | ○            | ○            | ○                            | ○                              | ○                                     |

O : The quantity of poisonous or hazardous substances or elements found in each of the component's parts is below the SJ/T 11363-2006-stipulated requirement.  
X: The quantity of poisonous or hazardous substances or elements found in at least one of the component's parts is beyond the SJ/T 11363-2006-stipulated requirement.  
Note: The Environment Friendly Use Period as labeled on this product is applicable under normal usage only

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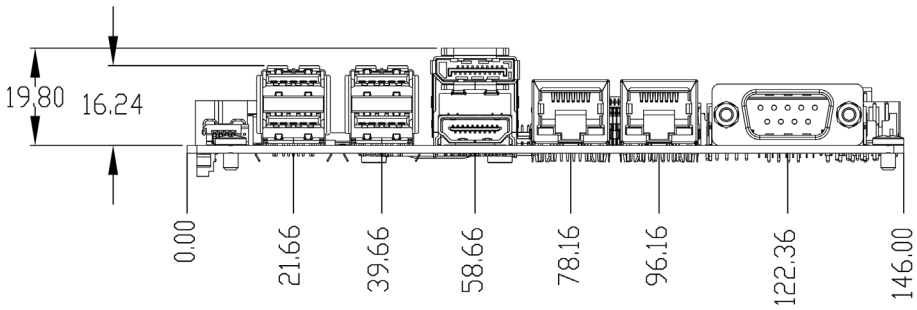
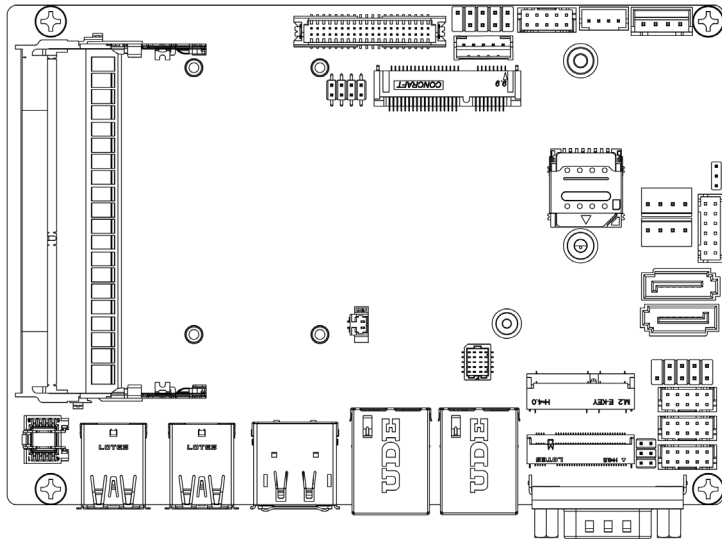
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# Chapter 1

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Chapter1 - Product Specifications  
QBiP-7100A/ QBiP-7200A/ QBiP-7100AT/ QBiP-7200AT/  
QBiP-7600A



## 1.2 Specifications- QBiP-7100A/ QBiP-7200A

| Motherboard     | QBiP-7100A  | QBiP-7200A   |
|-----------------|---|--|
| Form Factor     | 3.5" SBC<br>146W x 101.7Dmm   |  |
| CPU             | Intel® Core™ i3-7100U Processor<br>14nm, 2 cores, 4 threads, 2.4 GHz<br>TDP 15W<br>3 MB SmartCache  | Intel® Core™ i5-7200U Processor<br>14nm, 2 cores, 4 threads, up to 3.1 GHz<br>TDP 15W<br>3 MB SmartCache |
| Socket          | 1 x FCBGA1356   |  |
| Chipset         | —   |  |
| Memory          | 2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB<br>Support Dual channel DDR4 2133 MHz memory modules  |  |
| Ethernet        | 2 x GbE LAN Ports (Intel® I219V and Intel® I211AT)  |  |
| Video           | Integrated Graphics Processor - Intel® HD Graphics 620:<br>1 x HDMI 2.0 port, supporting a maximum resolution of 4096x2160 @60Hz<br>1 x DP port, supporting a maximum resolution of 4096x2160 @60Hz<br>1 x LVDS port, supporting a maximum resolution of 1920x1080 @60Hz<br><br>(3 independent display outputs) |  |
| Audio           | Realtek® Audio Codec  |  |
| Storage         | 2 x SATA 6Gb/s Ports  |  |
| Raid            | Intel® SATA RAID 0/1/5  |  |
| Expansion Slots | 1 x 2280 M.2 M-Key (PCIe x4, SATA 6Gb/s)<br>1 x 2230 M.2 E-Key<br>1 x Full-size Mini PCIe with SIM slot (PCIe x1 + USB2.0) -- support 3G/4G module  |  |

| Motherboard          | QBiP-7100A  | QBiP-7200A |
|----------------------|---|------------|
| Internal I/O         | 1 x 4-pin box power connector (+9V~36VDC)<br>2 x SATA Power headers<br>1 x CPU fan header<br>1 x System fan header<br>1 x Front panel header<br>1 x Front panel audio header<br>1 x 2W Speaker out header<br>2 x USB 2.0 headers<br>3 x COM headers (RS-232)<br>1 x Backlight Control header<br>1 x AT/ATX mode select jumper<br>1 x GPIO (8-bits) & SMBUS header |            |
| Rear I/O             | 1 x COM Port (RS-232/422/485 & RI/5V/12V)<br>1 x HDMI<br>1 x Display Port<br>2 x RJ45 LAN Ports<br>4 x USB 3.2 Gen 1  |            |
| TPM                  | 1 x TPM Header  |            |
| OS Compatibility     | Windows 10 (x64)  |            |
| PSU Connectors       | 1 x 4-pin Box header power connector (9~36V)  |            |
| Operating Properties | Operating temperature: 0°C to 60°C<br>Operating humidity: 0-90% (non-condensing)<br>Non-operating temperature: -40°C to 85°C<br>Non-operating humidity: 0%-95% (non-condensing)   |            |



### 1.3 Specifications- QBiP-7100AT/ QBiP-7200AT

| Motherboard     | QBiP-7100AT   | QBiP-7200AT  |
|-----------------|---|--|
| Form Factor     | 3.5" SBC<br>146W x 101.7Dmm   |  |
| CPU             | Intel® Core™ i3-7100U Processor<br>14nm, 2 cores, 4 threads, 2.4 GHz<br>TDP 15W<br>3 MB SmartCache  | Intel® Core™ i5-7200U Processor<br>14nm, 2 cores, 4 threads, up to 3.1 GHz<br>TDP 15W<br>3 MB SmartCache |
| Socket          | 1 x FCBGA1356   |  |
| Chipset         | —   |  |
| Memory          | 2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB<br>Support Dual channel DDR4 2133 MHz memory modules  |  |
| Ethernet        | 2 x GbE LAN Ports (Intel® I219V and Intel® I211AT)  |  |
| Video           | Integrated Graphics Processor - Intel® HD Graphics 620:<br>1 x HDMI 2.0 port, supporting a maximum resolution of 4096x2160 @60Hz<br>1 x DP port, supporting a maximum resolution of 4096x2160 @60Hz<br>1 x LVDS port, supporting a maximum resolution of 1920x1080 @60Hz<br><br>(3 independent display outputs) |  |
| Audio           | Realtek® Audio Codec  |  |
| Storage         | 2 x SATA 6Gb/s Ports  |  |
| Raid            | Intel® SATA RAID 0/1/5  |  |
| Expansion Slots | 1 x 2280 M.2 M-Key (PCIe x4, SATA 6Gb/s)<br>1 x 2230 M.2 E-Key<br>1 x Full-size Mini PCIe with SIM slot (PCIe x1 + USB2.0) -- support 3G/4G module  |  |

| Motherboard          | QBiP-7100AT   | QBiP-7200AT |
|----------------------|---|-------------|
| Internal I/O         | 1 x 4-pin box power connector (+9V~36VDC)<br>2 x SATA Power headers<br>1 x CPU fan header<br>1 x System fan header<br>1 x Front panel header<br>1 x Front panel audio header<br>1 x 2W Speaker out header<br>2 x USB 2.0 headers<br>3 x COM headers (RS-232)<br>1 x Backlight Control header<br>1 x AT/ATX mode select jumper<br>1 x GPIO (8-bits) & SMBUS header |             |
| Rear I/O             | 1 x COM Port (RS-232/422/485 & RI/5V/12V)<br>1 x HDMI<br>1 x Display Port<br>2 x RJ45 LAN Ports<br>4 x USB 3.2 Gen 1  |             |
| TPM                  | 1 x TPM Header  |             |
| OS Compatibility     | Windows 10 (x64)  |             |
| PSU Connectors       | 1 x 4-pin Box header power connector (9~36V)  |             |
| Operating Properties | Operating temperature: -20°C to 70°C<br>Operating humidity: 0-90% (non-condensing)<br>Non-operating temperature: -20°C to 70°C<br>Non-operating humidity: 0%-95% (non-condensing)   |             |

### 1.3 Specifications- QBiP-7600A

| Motherboard     | QBiP-7600A  |
|-----------------|---|
| Form Factor     | 3.5" SBC<br>146W x 101.7Dmm   |
| CPU             | Intel® Core™ i7-7600U Processor<br>14nm, 2 cores, 4 threads, up to 3.9 GHz<br>vPro support, TDP 15W<br>3 MB SmartCache  |
| Socket          | 1 x FCBGA1356   |
| Chipset         | —   |
| Memory          | 2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB<br>Support Dual channel DDR4 2133 MHz memory modules  |
| Ethernet        | 2 x GbE LAN Ports (Intel® I219LM and Intel® I211AT)   |
| Video           | Integrated Graphics Processor - Intel® HD Graphics 620:<br>1 x HDMI 2.0 port, supporting a maximum resolution of 4096x2160 @60Hz<br>1 x DP port, supporting a maximum resolution of 4096x2160 @60Hz<br>1 x LVDS port, supporting a maximum resolution of 1920x1080 @60Hz<br><br>(3 independent display outputs) |
| Audio           | Realtek® Audio Codec  |
| Storage         | 2 x SATA 6Gb/s Ports  |
| Raid            | Intel® SATA RAID 0/1/5  |
| Expansion Slots | 1 x 2280 M.2 M-Key (PCIe x4, SATA 6Gb/s)<br>1 x 2230 M.2 E-Key<br>1 x Full-size Mini PCIe with SIM slot (PCIe x1 + USB2.0) -- support 3G/4G module  |

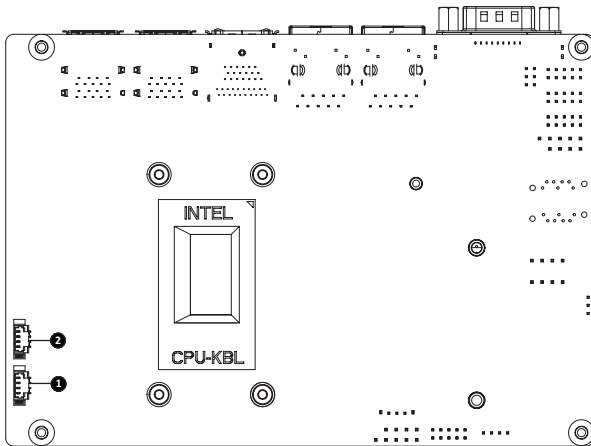
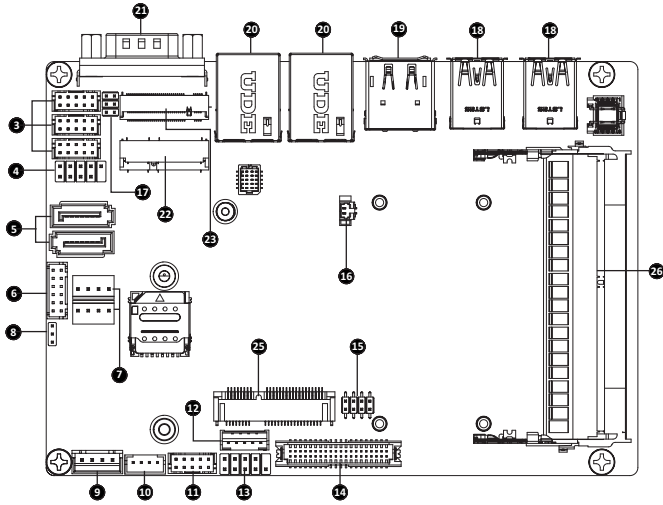
| Motherboard          | QBiP-7600A  |
|----------------------|---|
| Internal I/O         | 1 x 4-pin box power connector (+9V~36VDC)<br>2 x SATA Power headers<br>1 x CPU fan header<br>1 x System fan header<br>1 x Front panel header<br>1 x Front panel audio header<br>1 x 2W Speaker out header<br>2 x USB 2.0 headers<br>3 x COM headers (RS-232)<br>1 x Backlight Control header<br>1 x AT/ATX mode select jumper<br>1 x GPIO (8-bits) & SMBUS header |
| Rear I/O             | 1 x COM Port (RS-232/422/485 & RI/5V/12V)<br>1 x HDMI<br>1 x Display Port<br>2 x RJ45 LAN Ports<br>4 x USB 3.2 Gen 1  |
| TPM                  | 1 x TPM Header  |
| OS Compatibility     | Windows 10 (x64)  |
| PSU Connectors       | 1 x 4-pin Box header power connector (9~36V Full Range)   |
| Operating Properties | Operating temperature: 0°C to 60°C<br>Operating humidity: 0-90% (non-condensing)<br>Non-operating temperature: -40°C to 85°C<br>Non-operating humidity: 0%-95% (non-condensing)   |

# Chapter 2

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## Chapter 2 – Hardware Information

# 2.1 Jumpers and Connectors



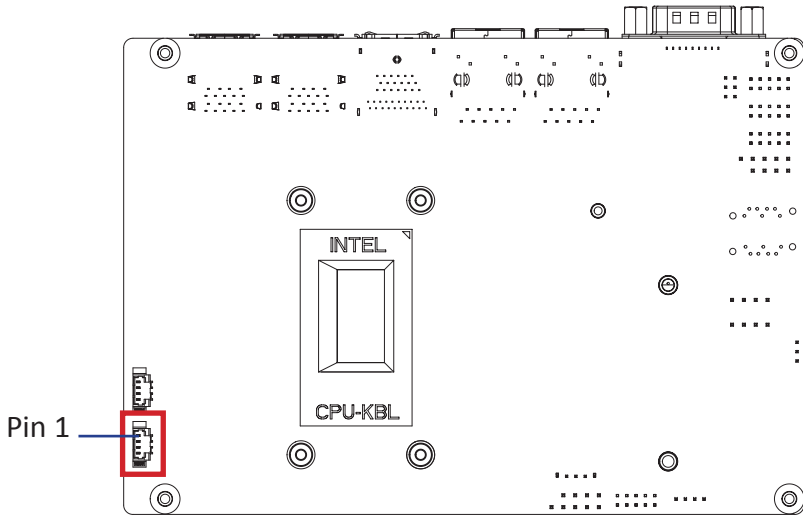
| No | Code                 | Description                                  |
|----|----------------------|--|
| 1  | CPU FAN              | CPU FAN connector                            |
| 2  | SYS FAN              | System FAN connector                         |
| 3  | COM2<br>COM3<br>COM4 | Serial port header                           |
| 4  | FUSB                 | USB 2.0 header                               |
| 5  | SATAIII1<br>SATAIII0 | SATA 6GB/S Connector                         |
| 6  | GPIO_CNT             | General purpose input/output header          |
| 7  | SATAPW1<br>SATAPW2   | SATA 6Gb/s power connector                   |
| 8  | AT_CN                | AT/ATX power mode select jumper              |
| 9  | DC_IN                | DC IN 1x4pin power connector                 |
| 10 | SPK_OUT              | Speaker out connector                        |
| 11 | FP_Audio             | Front Audio connector                        |
| 12 | BKL_CN               | Back light brightness control connector      |
| 13 | SYS_PANEL            | Front panel header                           |
| 14 | LVDS                 | LVDS connector                               |
| 15 | LSW                  | LVDS resolution jumper                       |
| 16 | BATTERY              | Battery cable connector                      |
| 17 | JCOM1                | COM1 (COM RI# pin RI#/5V/12V Select)         |
| 18 | RUSB1<br>RUSB2       | USB3.0 Connector                             |
| 19 | HDMI2_DP             | HDMI connector (Bottom) & DP connector (Top) |
| 20 | LAN1, LAN2           | LAN connector                                |

| No | Code               | Description  |
|----|--------------------|--|
| 21 | COM1               | Serial Port connector                              |
| 22 | M2E1               | M.2 Slot, E-key, NGFF2230, WiFi & Bluetooth module |
| 23 | M2M1               | M.2 Slot, SATA/PCIeX4, NGFF2280                    |
| 24 | SIM-CARD           | Sim Card slot                                      |
| 25 | MPCIE              | Mini PCIe full size, support 3G/4G module          |
| 26 | SODIMM1<br>SODIMM2 | DDR4 SO-DIMM Slot                                  |

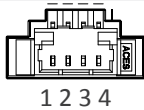


## 2.2.1 CPU FAN (CPU FAN connector)

1



CPU FAN connector

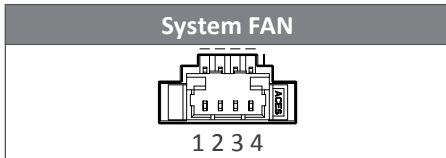
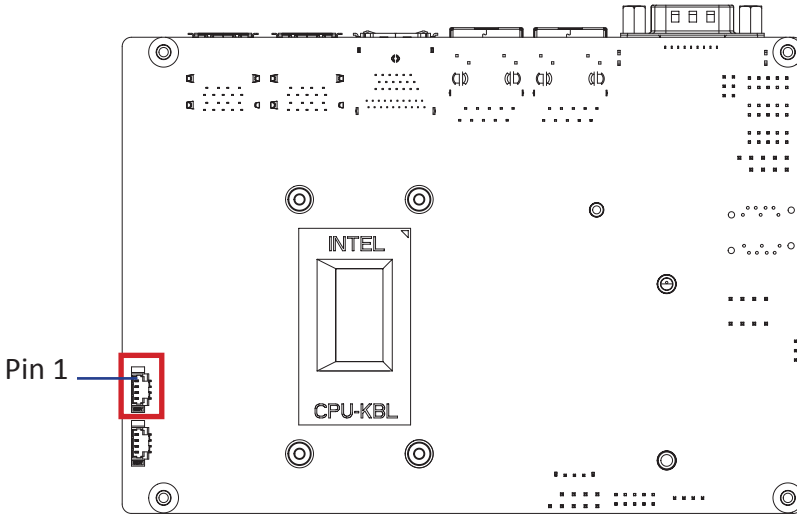


| Connector PN   | Vendor     |
|----------------|------------|
| 85205-0470N    | ACES       |
| A1250WV-S-04PC | JOINT-TECH |

| Pin No. | Definition    |
|---------|---------------|
| 1       | GND           |
| 2       | 12V           |
| 3       | Detect        |
| 4       | Speed Control |

## 2.2.2 System FAN (System FAN connector)

2

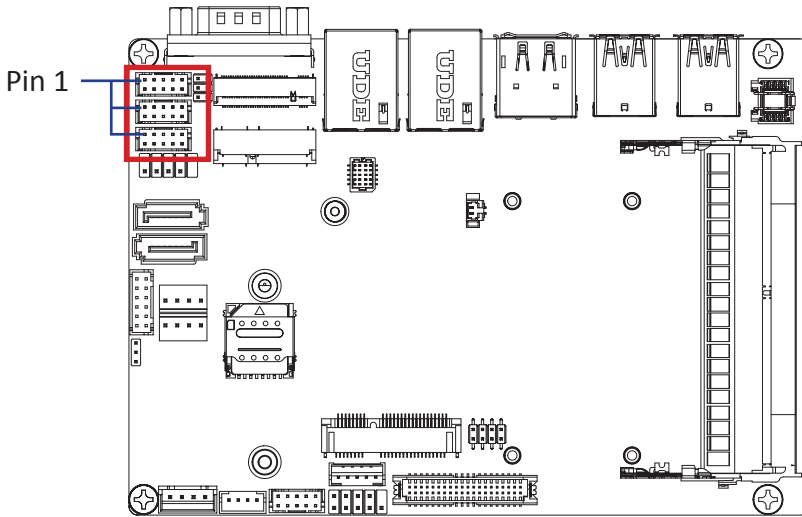


| Connector PN   | Vendor     |
|----------------|------------|
| 85205-0470N    | ACES       |
| A1250WV-S-04PC | JOINT-TECH |

| Pin No. | Definition    |
|---------|---------------|
| 1       | GND           |
| 2       | 12V           |
| 3       | Detect        |
| 4       | Speed Control |

## 2.2.3 COM2, COM3, COM4 (Serial port header)

3



Serial Port Cable Connector



Connector PN

725-81-10TW00

Vendor

PINREX

A2004WV-2X05P46

JOINT-TECH

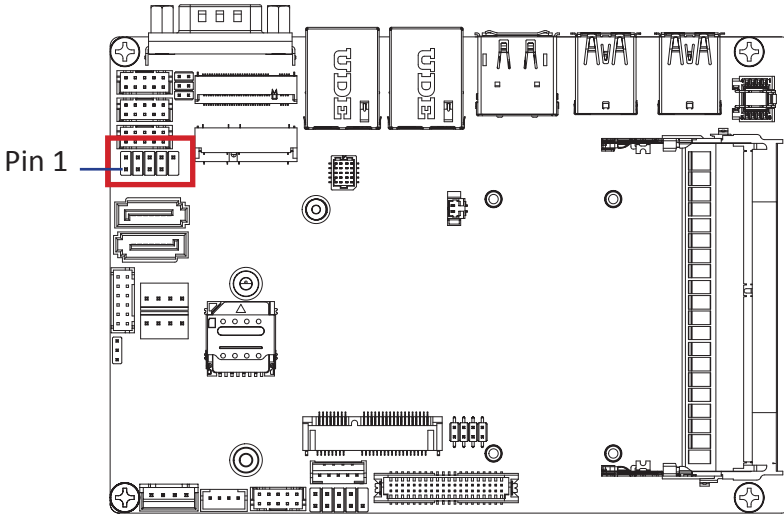
Pin No.

Definition

|    |             |
|----|-------------|
| 1  | RXD         |
| 2  | DCD         |
| 3  | DTR         |
| 4  | TXD         |
| 5  | DSR         |
| 6  | GND         |
| 7  | CTS         |
| 8  | RTS         |
| 9  | No Connect  |
| 10 | RI/ 5V/ 12V |

## 2.2.4 FUSB (USB 2.0 header)

4



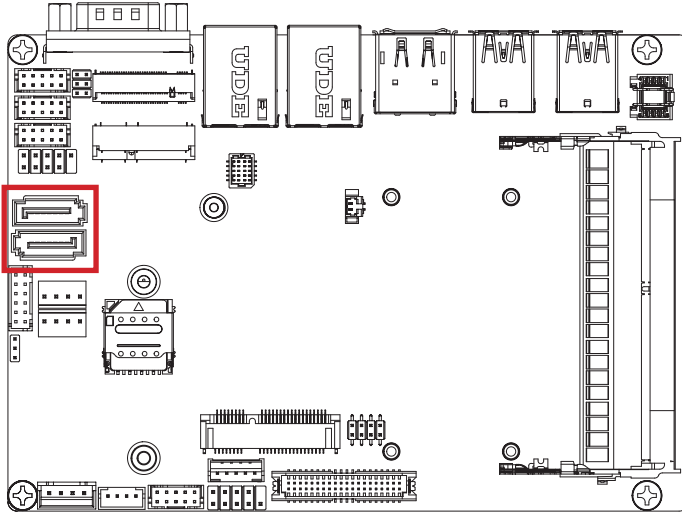
| USB 2.0 Header |
|----------------|
|                |

| Connector PN  | Vendor    |
|---------------|-----------|
| 210-92-05GB04 | PINREX    |
| PH10R53BAZ009 | HORNGTONG |

| Pin No. | Definition |
|---------|------------|
| 1       | 5V         |
| 2       | 5V         |
| 3       | DX-        |
| 4       | DY-        |
| 5       | DX+        |
| 6       | DY+        |
| 7       | GND        |
| 8       | GND        |
| 9       | No Pin     |
| 10      | No Connect |

## 2.2.5 SATAIII\_0, SATAIII\_1 (SATA 6GB/S Connector)

5



SATA Connector



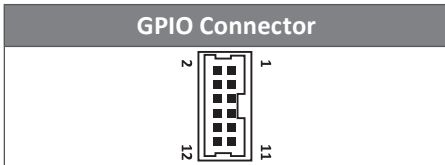
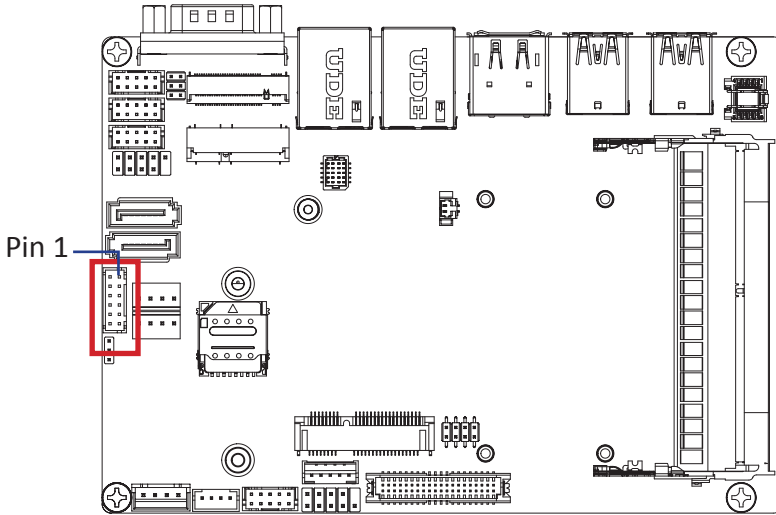
SATAIII\_1,SATAIII\_0

| Connector PN      | Vendor |
|-------------------|--------|
| WATM-07ABNB2BAUW3 | WINWIN |
| 770-83-07SW19     | PINREX |

| Pin No. | Definition |
|---------|------------|
| 1       | GND        |
| 2       | TXP        |
| 3       | TXN        |
| 4       | GND        |
| 5       | RXN        |
| 6       | RXP        |
| 7       | GND        |

## 2.2.6 GPIO\_CNT (General Purpose input/output header )

6

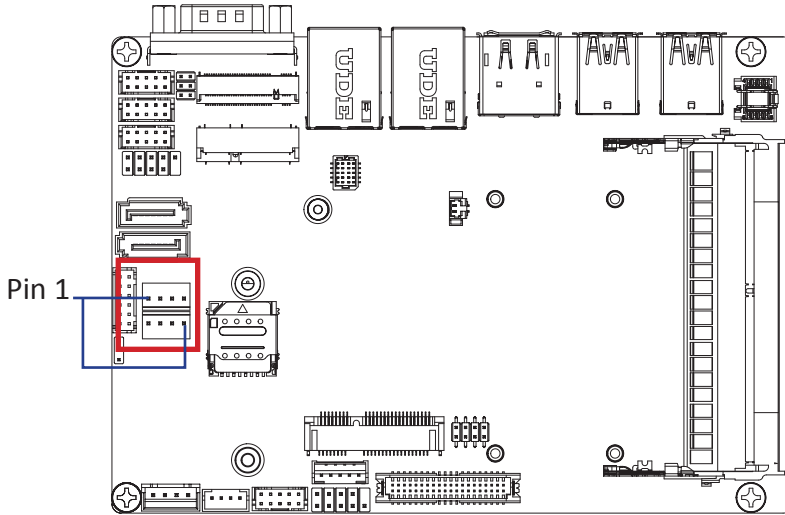


| Connector PN    | Vendor     |
|-----------------|------------|
| 725-81-12TW00   | PINREX     |
| A2004WV-2X06P46 | JOINT-TECH |

| Pin No. | Definition |
|---------|------------|
| 1       | GPO1       |
| 2       | GPI1       |
| 3       | GPO2       |
| 4       | GPI2       |
| 5       | GPO3       |
| 6       | GPI3       |
| 7       | GPO4       |
| 8       | GPI4       |
| 9       | SMB_CLK    |
| 10      | SMB_DATA   |
| 11      | 5V/1A      |
| 12      | GND        |

## 2.2.7 SATAPW1, SATAPW2 (SATA 6Gb/s power connector)

7



Hard Disk Power Connector



Connector PN

743-81-04TW00

WF04Q2-3BJQ000

Vendor

PINREX

HORNGTONG

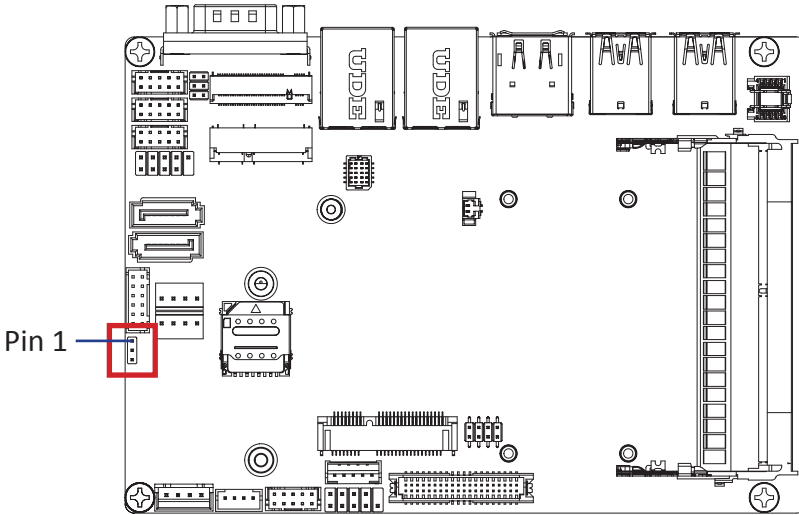
Pin No.

Definition

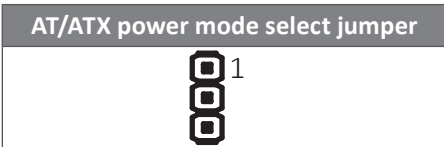
|   |     |
|---|-----|
| 1 | 12V |
| 2 | GND |
| 3 | GND |
| 4 | 5V  |

## 2.2.8 AT\_CN (AT/ATX power mode select jumper)

8



Pin 1



| Connector PN   | Vendor    |
|----------------|-----------|
| 220-96-03GB01  | PINREX    |
| PH03N2-7BAN000 | HORNGTONG |

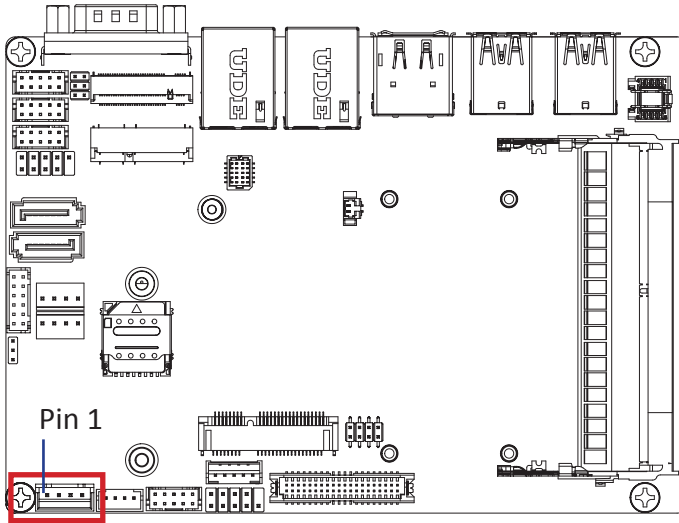
| Pin No. | Definition |
|---------|------------|
| 1       | AT MODE    |
| 2       | TXD5       |
| 3       | ATX MODE   |

Jumper setting  
 1-2 Close : AT mode.  
 2-3 Close : ATX mode.(Default setting)



## 2.2.9 DC\_IN (DC IN 1x4-pin power connector)

9



DC in connector



Connector PN

753-81-04TW00

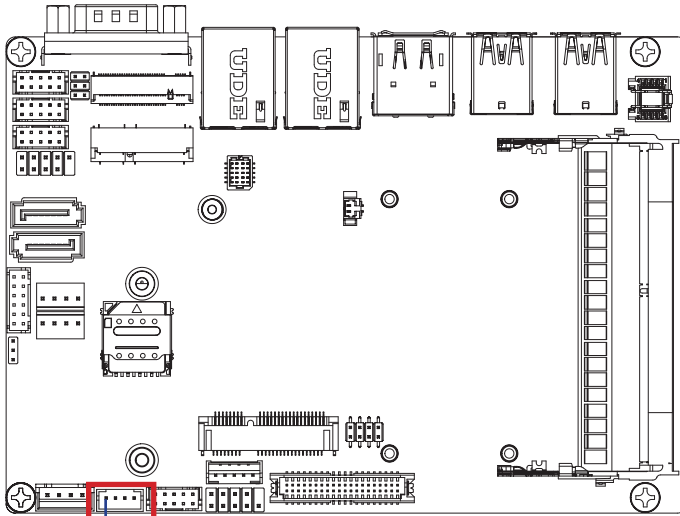
Vendor

PINREX

| Pin No. | Definition |
|---------|------------|
| 1       | GND        |
| 2       | Power      |
| 3       | Power      |
| 4       | GND        |

## 2.2.10 SPK\_OUT (Speaker out connector)

10



Pin 1

### Audio Amplifier Connector



### Connector PN

721-81-045W00

A2001WV-04P146

### Vendor

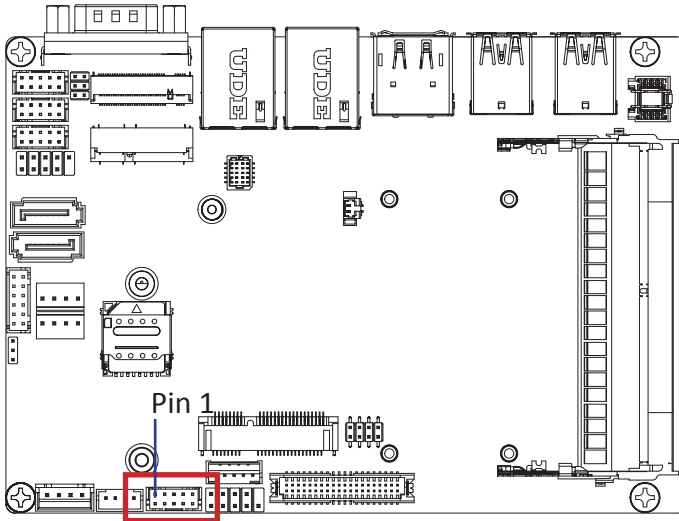
PINREX

JOINT-TECH

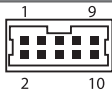
| Pin No. | Definition     |
|---------|----------------|
| 1       | Speaker Out L+ |
| 2       | Speaker Out L- |
| 3       | Speaker Out R- |
| 4       | Speaker Out R+ |

## 2.2.11 FP\_Audio (Front Audio connector)

11



Front Audio Connector



| Pin No. | Definition |
|---------|------------|
| 1       | MIC_L      |
| 2       | GND        |
| 3       | MIC_R      |
| 4       | Detect     |
| 5       | HPOUT_R    |
| 6       | GND        |
| 7       | FAUDIO_JD  |
| 8       | No Connect |
| 9       | HPOUT_L    |
| 10      | GND        |

Connector PN

725-81-10TW00

A2004WV-2X05P46

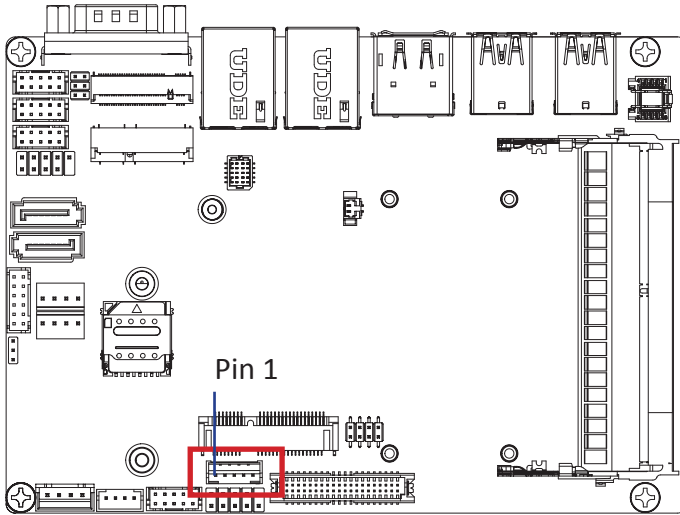
Vendor

PINREX

JOINT-TECH

## 2.2.12 BKL\_CN (Back light brightness control connector)

12



| Back light brightness control connector |   |
|---|---|
| 1                                       | 5 |

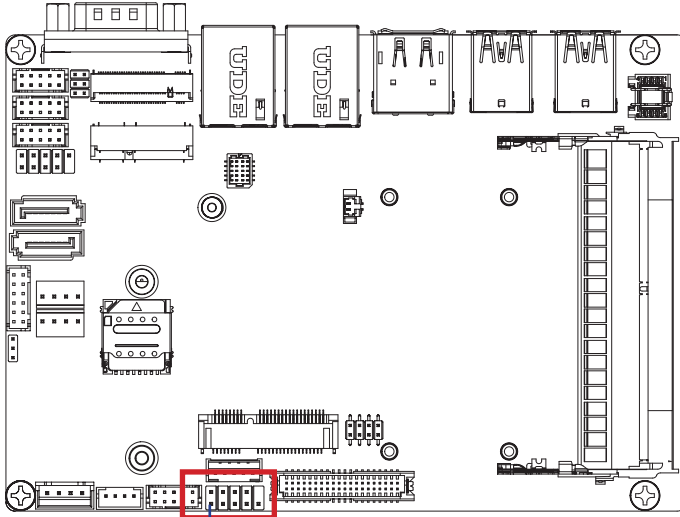
| Connector PN   | Vendor     |
|----------------|------------|
| A2001WV-05P146 | JOINT-TECH |

| Pin No. | Definition        |
|---------|-------------------|
| 1       | 5V                |
| 2       | PWM               |
| 3       | Back Light Enable |
| 4       | GND               |
| 5       | 12V               |

| Connector PN  | Vendor |
|---------------|--------|
| 721-81-05TW00 | PINREX |

## 2.2.13 SYS\_PANEL (Front panel header)

13



Pin 1

System Panel Header



Connector PN

210-92-05G111

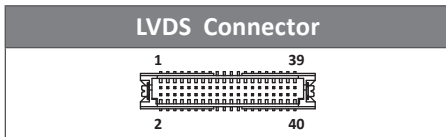
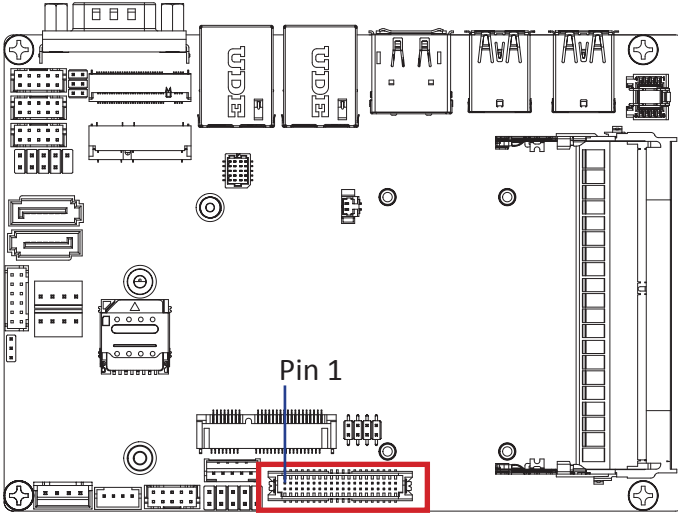
Vendor

PINREX

| Pin No. | Definition    |
|---------|---------------|
| 1       | HDD LED+      |
| 2       | Power LED+    |
| 3       | HDD LED-      |
| 4       | Power LED-    |
| 5       | GND           |
| 6       | Power Button+ |
| 7       | Reset Button  |
| 8       | Power Button- |
| 9       | No Connect    |
| 10      | No Pin        |

## 2.2.14 LVDS (LVDS connector)

14



| Pin No. | Definition | Pin No. | Definition |
|---------|------------|---------|------------|
| 1       | 3.3V       | 21      | A5+        |
| 2       | 5V         | 22      | A4+        |
| 3       | 3.3V       | 23      | A5-        |
| 4       | 5V         | 24      | A4-        |
| 5       | SPECO      | 25      | GND        |
| 6       | SPEDO      | 26      | GND        |
| 7       | GND        | 27      | A7+        |
| 8       | GND        | 28      | A6+        |
| 9       | A1+        | 29      | A7-        |
| 10      | A0+        | 30      | A6-        |
| 11      | A1-        | 31      | GND        |
| 12      | A0-        | 32      | GND        |
| 13      | GND        | 33      | CLK2+      |
| 14      | GND        | 34      | CLK1+      |
| 15      | A3+        | 35      | CLK2-      |
| 16      | A2+        | 36      | CLK1-      |
| 17      | A3-        | 37      | GND        |
| 18      | A2-        | 38      | GND        |
| 19      | GND        | 39      | 12V        |
| 20      | GND        | 40      | 12V        |

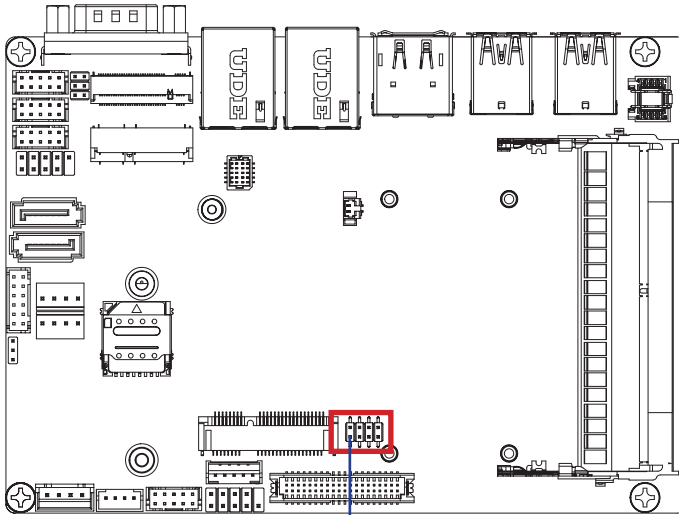
| Connector PN        | Vendor     |
|---------------------|------------|
| 712-76-40GWE0       | PINREX     |
| A1252WV-SF-2X20PD01 | JOINT-TECH |

For each model support LVDS function.  
 But below model no need to add.  
 A0~A3 is odd channel 0~3, A4~A7 is even channel.

















**Note:** \*The LVDS output connector of the unit is only intended to be connected to an UL/IEC/EN approval equipment with fire enclosure.

## 2.2.15 LSW (LVDS resolution jumper)

15



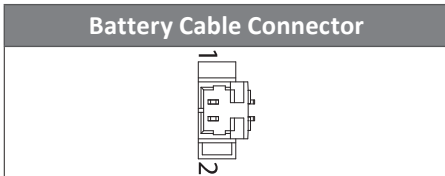
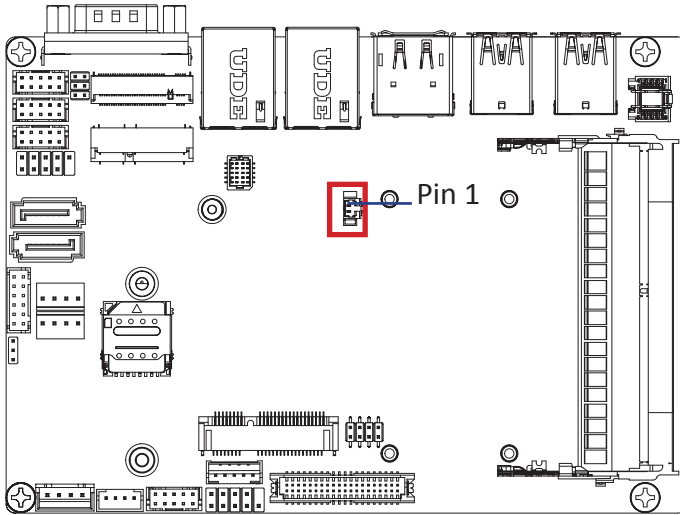
Pin 1

| LVDS Resolution Jumper  |                      |   |                      |
|---|----------------------|---|----------------------|
| Jumper Setting  | Resolution           | Jumper Setting  | Resolution           |
| 1   | 800 x 600<br>18bit   | 1   | 1366 x 768<br>24bit  |
| 1  | 1024 x 768<br>18bit  | 1  | 1440 x 900<br>24bit  |
| 1  | 1024 x 768<br>24bit  | 1  | 1400 x 1050<br>24bit |
| 1  | 1024 x 600<br>18bit  | 1  | 1600 x 900<br>24bit  |
| 1  | 1280 x 800<br>18bit  | 1  | 1680 x 1050<br>24bit |
| 1  | 1280 x 960<br>18bit  | 1  | 1600 x 1200<br>24bit |
| 1  | 1280 x 1024<br>24bit | 1  | 1920 x 1080<br>24bit |
| 1  | 1366 x 768<br>18bit  | 1  | 1920 x 1200<br>24bit |

| Connector PN  | Vendor |
|---------------|--------|
| 222-97-04GBE1 | PINREX |

## 2.2.16 BATTERY (Battery cable connector)

16



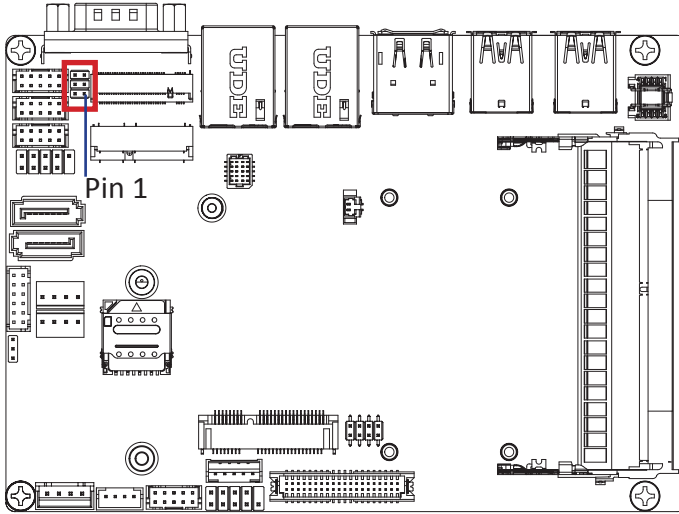
| Connector PN   | Vendor     |
|----------------|------------|
| 85205-0270L    | ACES       |
| A1250WV-S-02PC | JOINT-TECH |

| Pin No. | Definition |
|---------|------------|
| 1       | 3.3V       |
| 2       | GND        |



## 2.2.17 JCOM1 (COM1 RI# pin RI#/5V/12V Select)

17



| JCOM11 Jumper Select  |   |   |   |   |   |   |   |   |                               |
|---|---|---|---|---|---|---|---|---|-------------------------------|
| <table border="1"> <tr><td>5</td><td>6</td></tr> <tr><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td></tr> <tr><td>1</td><td>2</td></tr> </table> | 5 | 6 | □ | □ | ■ | ■ | 1 | 2 | 1-2 Close:<br>5V (Power COM)  |
| 5   | 6 |   |   |   |   |   |   |   |                               |
| □   | □ |   |   |   |   |   |   |   |                               |
| ■   | ■ |   |   |   |   |   |   |   |                               |
| 1   | 2 |   |   |   |   |   |   |   |                               |
| <table border="1"> <tr><td>5</td><td>6</td></tr> <tr><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td></tr> <tr><td>1</td><td>2</td></tr> </table> | 5 | 6 | □ | □ | ■ | ■ | 1 | 2 | 3-4 Close:<br>RI (Stand COM)  |
| 5   | 6 |   |   |   |   |   |   |   |                               |
| □   | □ |   |   |   |   |   |   |   |                               |
| ■   | ■ |   |   |   |   |   |   |   |                               |
| 1   | 2 |   |   |   |   |   |   |   |                               |
| <table border="1"> <tr><td>5</td><td>6</td></tr> <tr><td>■</td><td>■</td></tr> <tr><td>□</td><td>□</td></tr> <tr><td>1</td><td>2</td></tr> </table> | 5 | 6 | ■ | ■ | □ | □ | 1 | 2 | 5-6 Close:<br>12V (Power COM) |
| 5   | 6 |   |   |   |   |   |   |   |                               |
| ■   | ■ |   |   |   |   |   |   |   |                               |
| □   | □ |   |   |   |   |   |   |   |                               |
| 1   | 2 |   |   |   |   |   |   |   |                               |

| Connector PN  | Vendor    |
|---------------|-----------|
| 220-97-03GB01 | PINREX    |
| PH06N53BAZ000 | HORNGTONG |

