# UP 15.6" Touch Panel PC

UP Touch Panel PC
UPPC-ASLN15

User's Manual 1st Ed

*Last Updated: April 7, 2026*

## Copyright Notice

## Acknowledgement

## Packing List

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

| Item | Quantity |
| --- | --- |
| ● UPPC-ASLN15 | 1 |

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

## About this Document

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 product page at AAEON.com for the latest version of this document.

## Safety Precautions

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


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**

AAEON System QO4-381 Rev.A2

| 部件名称 | 有毒有害物质或元素 | | | | | |
|---|---|---|---|---|---|---|
| | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr(VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 印刷电路板及其电子组件 | × | ○ | ○ | ○ | ○ | ○ |
| 外部信号连接器及线材 | × | ○ | ○ | ○ | ○ | ○ |
| 外壳 | ○ | ○ | ○ | ○ | ○ | ○ |
| 中央处理器与内存 | × | ○ | ○ | ○ | ○ | ○ |
| 硬盘 | × | ○ | ○ | ○ | ○ | ○ |
| 液晶模块 | × | ○ | ○ | ○ | ○ | ○ |
| 光驱 | × | ○ | ○ | ○ | ○ | ○ |
| 触控模块 | × | ○ | ○ | ○ | ○ | ○ |
| 电源 | × | ○ | ○ | ○ | ○ | ○ |
| 电池 | × | ○ | ○ | ○ | ○ | ○ |

本表格依据 SJ/T 11364 的规定编制。

○：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 GB/T 26572 标准规定的限量要求以下。

×：表示该有害物质的某一均质材料超出了 GB/T 26572 的限量要求，然而该部件仍符合欧盟指令 2011/65/EU 的规范。

环保使用期限(EFUP (Environmental Friendly Use Period)) : 10 年

备注：

一、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。

二、上述部件物质中央处理器、内存、硬盘、光驱、电源为选购品。

三、上述部件物质液晶模块、触控模块仅一体机产品适用。

## China RoHS Requirement (EN)

Name and content of hazardous substances in product

AAEON System QO4-381 Rev.A2

| Part Name | Hazardous Substances | | | | | |
|---|---|---|---|---|---|---|
| | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr(VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| PCB Assemblies | × | ○ | ○ | ○ | ○ | ○ |
| Connector and Cable | × | ○ | ○ | ○ | ○ | ○ |
| Chassis | ○ | ○ | ○ | ○ | ○ | ○ |
| CPU and Memory | × | ○ | ○ | ○ | ○ | ○ |
| Hard Disk | × | ○ | ○ | ○ | ○ | ○ |
| LCD Modules | × | ○ | ○ | ○ | ○ | ○ |
| CD-ROM/DVD-ROM | × | ○ | ○ | ○ | ○ | ○ |
| Touch Modules | × | ○ | ○ | ○ | ○ | ○ |
| Power | × | ○ | ○ | ○ | ○ | ○ |
| Battery | × | ○ | ○ | ○ | ○ | ○ |

The table is prepared in accordance with the provisions of SJ/T 11364.

○：Indicates that said hazardous substance contained in all of the homogenous materials for this product is below the limit requirement of GB/T 26572.

×：Indicates that said hazardous substance contained in at least one of the homogenous materials used for this part is above the limit requirement of GB/T 26572. But this product still be compliance with 2011/65/EU Directive (allowed with 2011/65/EU Annex III of RoHS exemption with number 6(c),7(a),7(c)-1).

EFUP (Environment Friendly Use Period) value: 10 years.

Notes：

1. This product defined period of use is under normal condition.
2. In above part, CPU/Memory/ Hard Disk/CD-ROM/DVD-ROM/ Power are optional.
3. In above part, LCD Modules/ Touch Modules are for all-in-one product model.

# Table of Contents

# Chapter 1

Product Specifications

## 1.1 Specifications

| System | |
|---|---|
| CPU | Intel® Core™ i3-N305 (8C/8T, up to 3.8 GHz, 15W) |
| | Intel® Processor N97 (4C, up to 3.6 GHz, 12W) |
| Memory | DDR5 SODIMM x 1, up to 16GB |
| Graphics | Intel® UHD Graphics |
| ECC | Intel In-Band Error Correction Code |
| Light Sensor | Light Sensor for auto brightness |
| Storage | M.2 2280 M-Key x 1 (PCIe Gen 3 [x4]) (NVMe) |
| | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) (NVMe) |
| | Optional 128GB onboard eMMC |
| Ethernet | Intel® Ethernet Controller I226-V, 2.5GbE x 2 |
| Wi-Fi/BT | M.2 2230 E-Key x 1 |
| I/O Port | USB 2.0 (Type-A) x 2 |
| | USB 3.2 Gen 2 (Type-A) x 2 |
| | 2.5GbE RJ-45 x 2 |
| | 8-pin RS-232/422/485 Connector x 2 (RS-232/422/485, SW-selectable) |
| | 10-pin GPIO Connector x 2 (GPIO x 8 + GND x 2) |
| | Rocker Switch x 1 for Power On/Off |
| Expansion | M.2 2280 M-Key x 1 (PCIe Gen 3 [x4]) |
| | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) co-lay M.2 3052 B-Key x 1 (USB 3.2 Gen 2 only) with Nano SIM slot (USB 3.0) |
| OS Support | Windows® 11 IoT Enterprise |
| | Ubuntu 22.04 LTS |

## Mechanical

| | |
|---|---|
| Construction | Aluminum Front Bezel + Metal Chassis |
| Mounting | VESA Mount (VESA 100 x 100) |
| | Panel Mount (optional) |
| Dimension | 15.18" x 9.25" x 1.96" (385.6mm x 235mm x 49.9mm) |
| Carton Dimension | 19.9" x 16.5" x 6.8" (505mm x 420mm x 173mm) |
| Gross Weight | 8.11 lb (3.68 kg) |

## Environmental

| | |
|---|---|
| Operating Temperature | With Cooler: 32°F – 122°F (0°C – 50°C) with 0.5 m/s airflow |
| Storage Temperature | -4°F – 140°F (-20°C – 60°C) |
| Storage Humidity | 90% @40°C; non-condensing |
| EMC | CE/FCC Class A Compatible |

## Power Supply

| | |
|---|---|
| DC Input | 12V or 14V – 36VDC Phoenix Connector with Ground Screw |

## LCD

| | |
|---|---|
| Display Type | 15.6" TFT-LCD, LED |
| Max Resolution | 1920 x 1080 |
| Max. Colors | 262K |
| Luminance | 350 cd/m$^2$ |
| Viewing Angle | 160° (H), 160° (V) |
| Back Light | LED |
| Back Light MTBF (Hours) | 35,000 (Based on 9 hours of usage per day) |

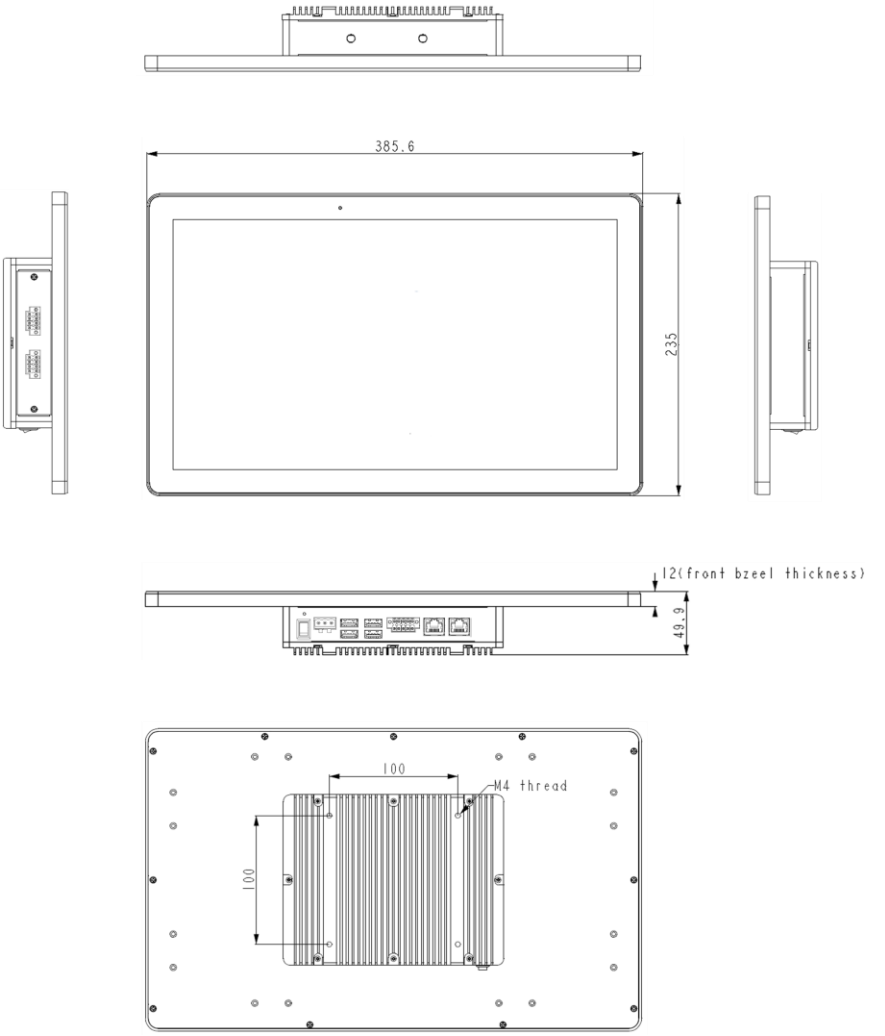
## Touchscreen

| | |
|---|---|
| Type | Projected Capacitive Multi-Touch |
| Light Transmission | 85% |

# Chapter 2

Hardware Information

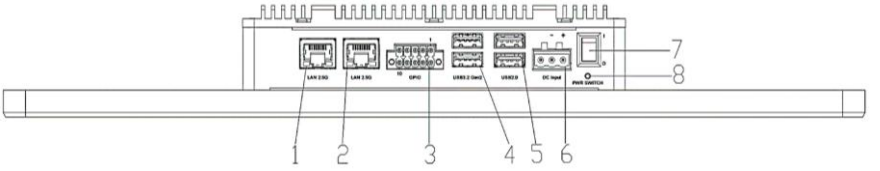
## 2.1 Dimensions



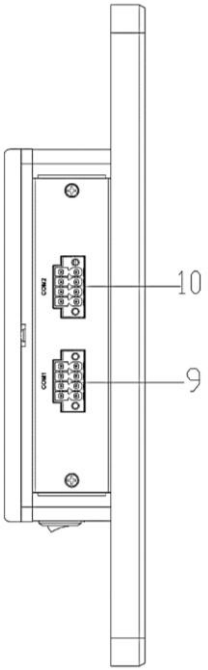
## 2.2 Jumpers and Connectors

System Level

Bottom-Side I/O

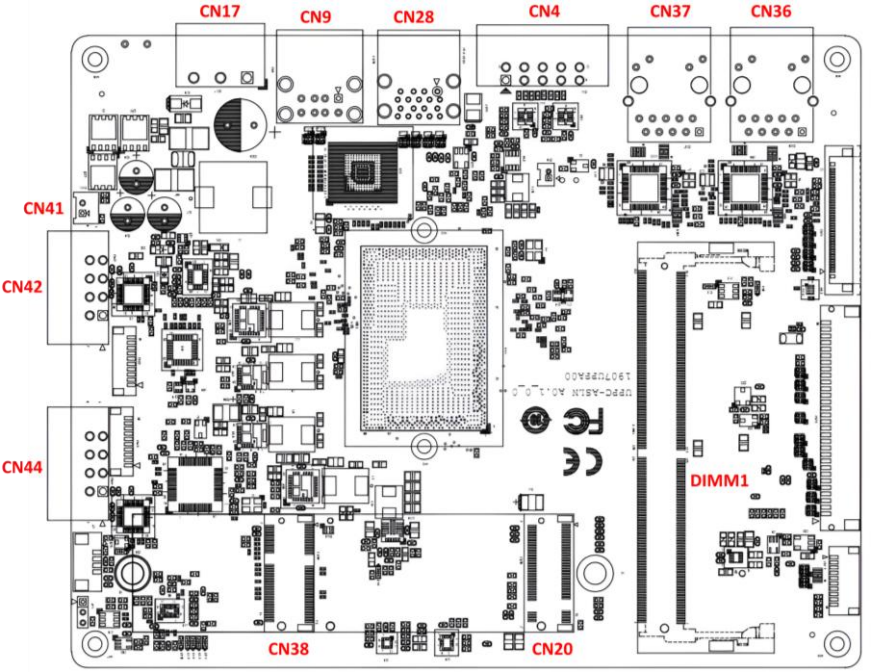



Right-Side Panel I/O

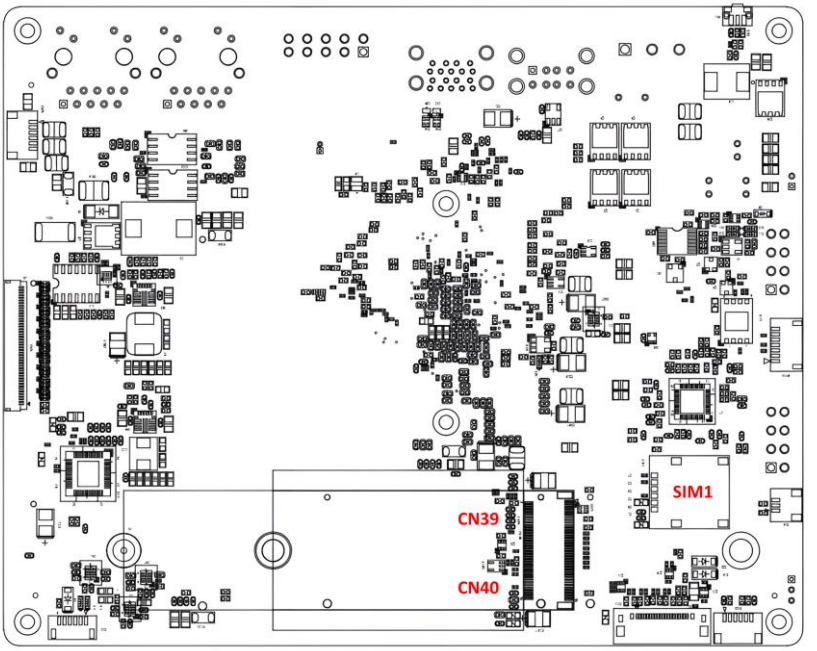


Board Level

Component Side



Solder Side



## 2.3 List of Jumpers, Connectors, & Physical Interfaces

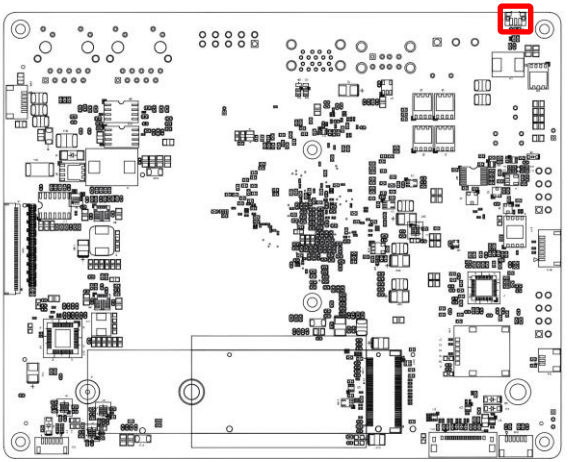
Please refer to the table below for all of the system's physical ports and interfaces.

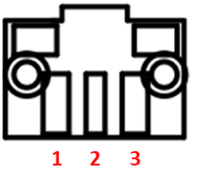
| Label | Function |
|---|---|
| 1/2 | 2.5GbE LAN Port |
| 3 | 10-pin GPIO |
| 4 | Dual USB 3.2 Gen 2 (Type-A) Dual Stack |
| 5 | Dual USB 2.0 Dual Stack |
| 6 | Phoenix Connector |
| 7/8 | Power Switch |
| 9 | COM Port 1 (8-pin RS-232/422/485 Connector) |
| 10 | COM Port 2 (8-pin RS-232/422/485 Connector) |

Please refer to the table below for all of the system's internal connectors.

| Label | Function |
|---|---|
| SW1 | Power Button |
| CN4 | GPIO Connector |
| CN9 | USB 2.0 Dual Stack Connector |
| CN17 | Power Input Connector |
| CN20 | M.2 2280 M-Key Slot |
| CN28 | USB 3.2 Gen2 (Type-A) Dual Stack Connector |
| CN36 | 2.5GbE LAN Port Connector |
| CN37 | 2.5GbE LAN Port Connector |
| CN38 | M.2 2230 E-Key Slot |
| CN39 | M.2 2280 M-Key Slot |
| CN40 | M.2 3052 B-Key Slot |
| CN41 | Power Button |
| CN42 | COM Port 1 Connector |
| CN44 | COM Port 2 Connector |
| DIMM1 | DDR5 SODIMM Slot |
| SIM1 | Nano SIM Card Slot |

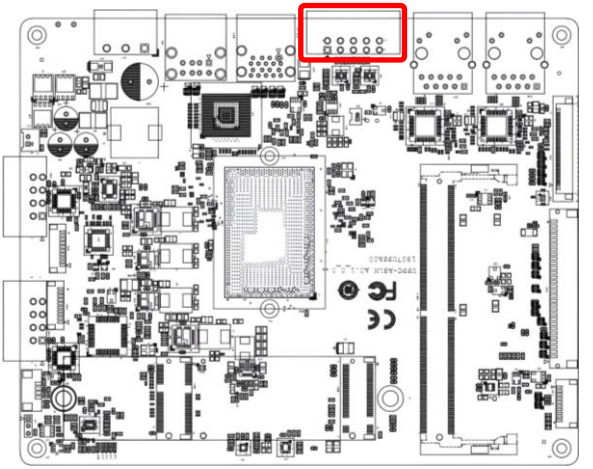
### 2.3.1 Power Button (SW1)

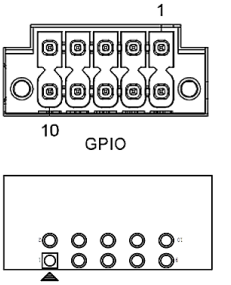





| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | GND | 2 | PWR_SW# |
| 3 | GND | | |

### 2.3.2 GPIO (CN4)

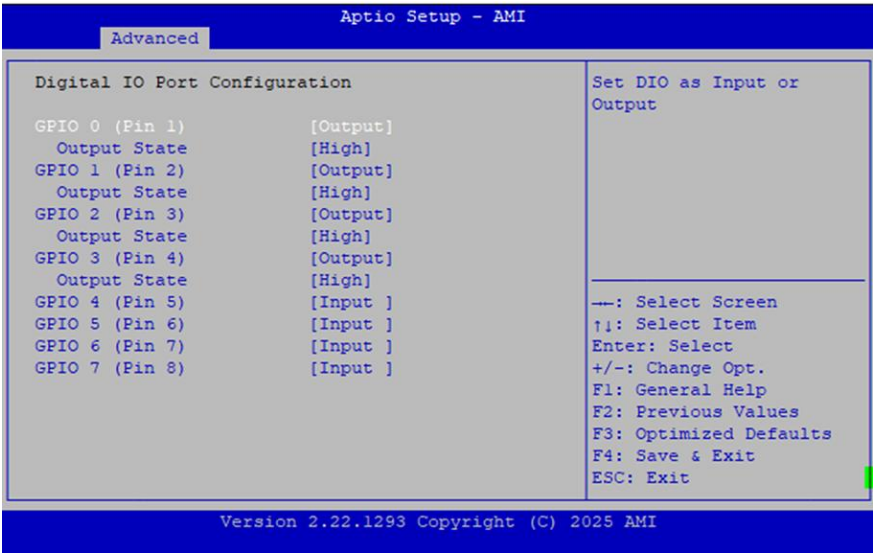




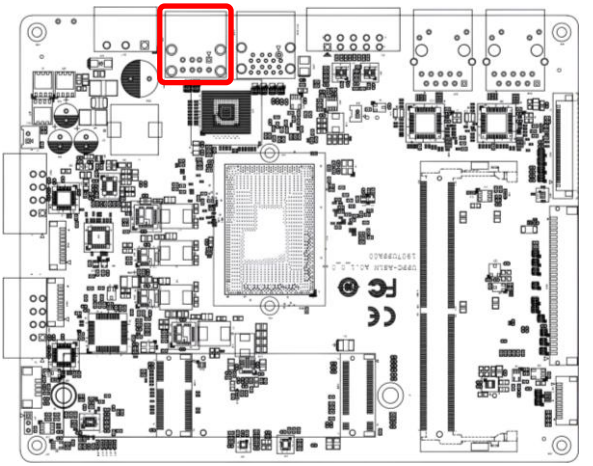

| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | GPIO_0 | 2 | GPIO_1 |

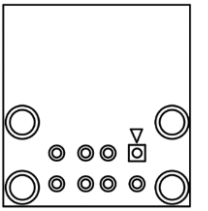
| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 3 | GPIO_2 | 4 | GPIO_3 |
| 5 | GPIO_4 | 6 | GPIO_5 |
| 7 | GPIO_6 | 8 | GPIO_7 |
| 9 | GND | 10 | GND |

GPIO BIOS Settings:



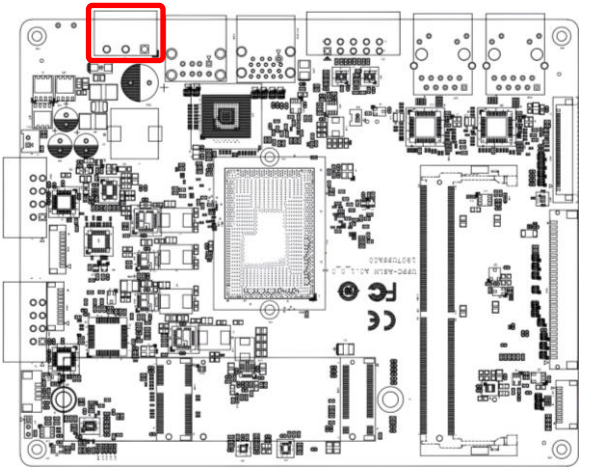
### 2.3.3 USB 2.0 Dual Stack Connector (CN9)

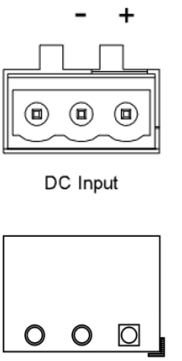




| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | USB_VCC | 2 | USB2_P6_C_DN |
| 3 | USB2_P6_C_DP | 4 | GND |
| 5 | USB_VCC | 6 | USB2_P7_C_DN |
| 7 | USB2_P7_C_DP | 8 | GND |

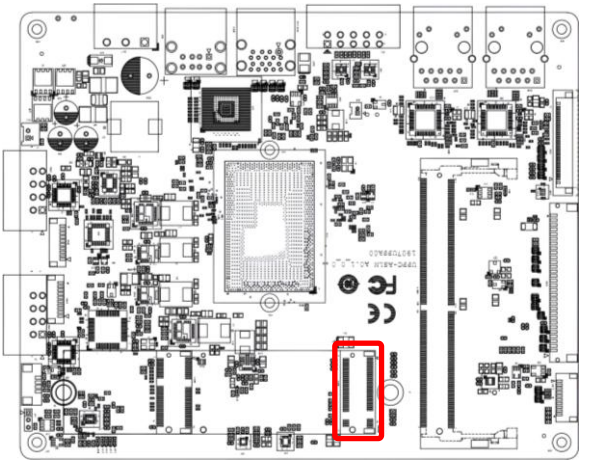
### 2.3.4 Power Input (CN17)

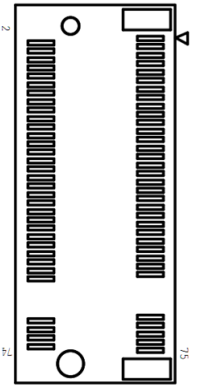




| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | GND | 2 | GND |
| 3 | VCC | | |

### 2.3.5 M.2 2280 M-Key Slot (CN20)



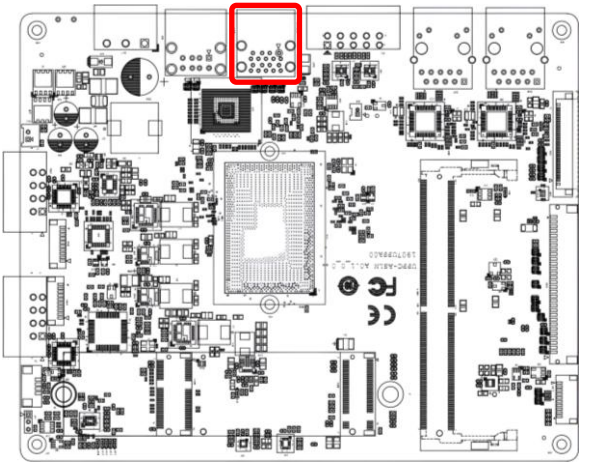


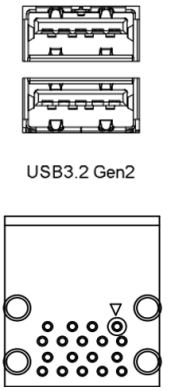
| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 1 | GND | 2 | +3.3V | 3 | NC |
| 4 | +3.3V | 5 | PCIE9_RXN | 6 | NC |
| 7 | PCIE9_RXP | 8 | NC | 9 | GND |
| 10 | NC | 11 | PCIE9_TXN | 12 | +3.3V |
| 13 | PCIE9_TXP | 14 | +3.3V | 15 | GND |
| 16 | +3.3V | 17 | PCIE10_RXN | 18 | +3.3V |
| 19 | PCIE10_RXP | 20 | NC | 21 | GND |
| 22 | NC | 23 | PCIE10_TXN | 24 | NC |
| 25 | PCIE10_TXP | 26 | NC | 27 | GND |
| 28 | NC | 29 | PCIE11_RXN | 30 | NC |
| 31 | PCIE11_RXP | 32 | NC | 33 | GND |
| 34 | NC | 35 | PCIE11_TXN | 36 | NC |
| 37 | PCIE11_TXP | 38 | M.2_2280_DEV | 39 | GND |
| 40 | NC | 41 | PCIE12_RXP | 42 | NC |
| 43 | PCIE12_RXN | 44 | NC | 45 | GND |
| 46 | NC | 47 | PCIE12_TXN | 48 | NC |
| 49 | PCIE12_TXP | 50 | BUF_PLT_RST# | 51 | GND |
| 52 | NC | 53 | PCIE_CLK4_DN | 54 | PCIE_WAKE# |

| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 55 | PCIE_CLK4_DP | 56 | NC | 57 | GND |
| 58 | NC | 59 | Key-M | 60 | Key-M |
| 61 | Key-M | 62 | Key-M | 63 | Key-M |
| 64 | Key-M | 65 | Key-M | 66 | Key-M |
| 67 | NC | 68 | NC | 69 | SATAGP1 |
| 70 | +3.3V | 71 | GND | 72 | +3.3V |
| 73 | GND | 74 | +3.3V | 75 | GND |

Note: Total 2.5A for M.2 M-Key slot.

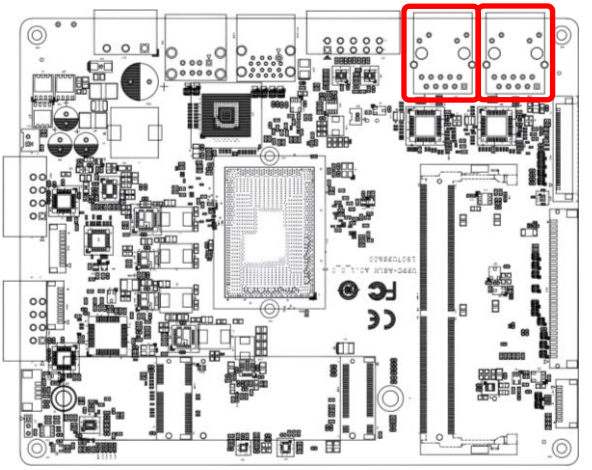
### 2.3.6 USB 3.2 Gen 2 (Type-A) Dual Stack Connector (CN28)

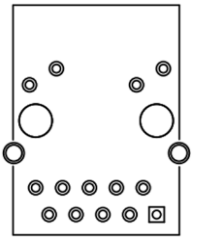





| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | +V5P0_USB_1 | 2 | USB2_C_DN1 |
| 3 | USB2_C_DP1 | 4 | GND |
| 5 | TCP0_RXN_CON | 6 | TCP0_RXP_CON |
| 7 | GND | 8 | TCP0_TXN_CON |
| 9 | TCP0_TXP_CON | 10 | +V5P0_USB_1 |
| 11 | USB2_C_DN2 | 12 | USB2_C_DP2 |
| 13 | GND | 14 | TCP1_RXN_CON |
| 15 | TCP1_RXP_CON | 16 | GND |
| 17 | TCP1_TXN_CON | 18 | TCP1_TXP_CON |

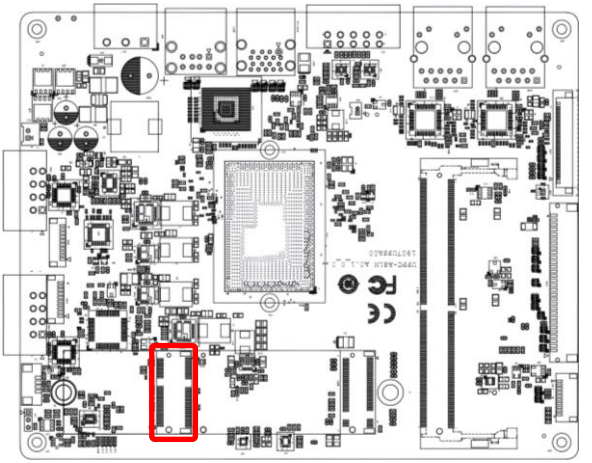
## 2.3.7 2.5GbE LAN Port (CN36/CN37)

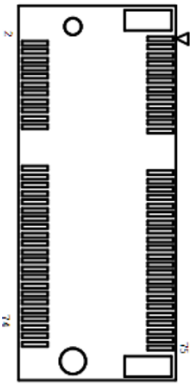




| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | NC | 2 | LAN_MDI0P |
| 3 | LAN_MDI0N | 4 | LAN_MDI1P |
| 5 | LAN_MDI1N | 6 | LAN_MDI2P |
| 7 | LAN_MDI2N | 8 | LAN_MDI3P |
| 9 | LAN_MDI3N | 10 | GND |
| 11 | LAN_LED_1000# | 12 | LAN_LED_100# |
| 13 | LAN_LED_LNK_ACT | 14 | LAN_LED_LNK#_ACT |

### 2.3.8 M.2 2230 E-Key Slot (CN38)



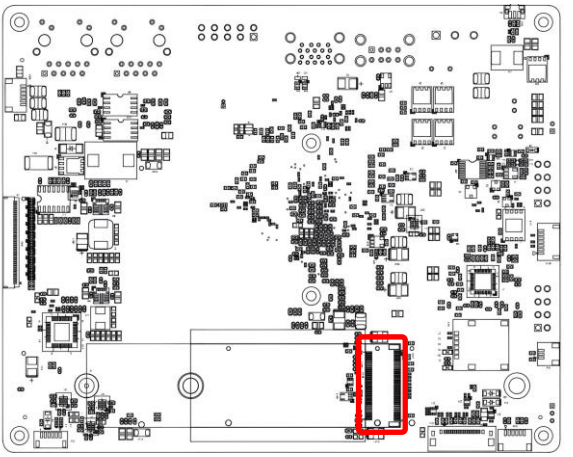


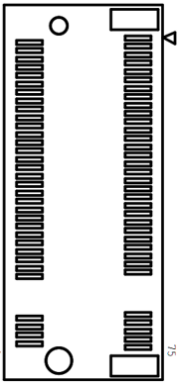
| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 1 | GND | 2 | +3.3VAUX_WIFI | 3 | USB_PP8 |
| 4 | +3.3VAUX_WIFI | 5 | USB_PN8 | 6 | NC |
| 7 | GND | 8 | NC | 9 | CNV_WR_LANE1_DN |
| 10 | M.2_CNV_RF_RESET | 11 | CNV_WR_LANE1_DP | 12 | NC |
| 13 | GND | 14 | CNV_MODEM_CLK REQ | 15 | CNV_WR_LANE0_DN |
| 16 | NC | 17 | CNV_WR_LANE0_DP | 18 | GND |
| 19 | GND | 20 | NC | 21 | CNV_WR_CLK_DN |
| 22 | M.2_CNV_BRI_RSP | 23 | CNV_WR_CLK_DP | 24 | Key-E |
| 25 | Key-E | 26 | Key-E | 27 | Key-E |
| 28 | Key-E | 29 | Key-E | 30 | Key-E |
| 31 | Key-E | 32 | M.2_CNV_RGI_DT | 33 | GND |
| 34 | M.2_CNV_RGI_RSP | 35 | PCIE1_TXP | 36 | M.2_CNV_BRI_DT |
| 37 | PCIE1_TXN | 38 | NC | 39 | GND |
| 40 | NC | 41 | PCIE1_RXP | 42 | NC |
| 43 | PCIE1_RXN | 44 | CNV_PA_BLANKING | 45 | GND |
| 46 | NC | 47 | PCIE_CLK2_DP | 48 | NC |
| 49 | PCIE_CLK2_DN | 50 | NC | 51 | GND |
| 52 | BUF_PLT_RST# | 53 | NC | 54 | BT_EN |
| 55 | PCIE_WAKE# | 56 | WIFI_EN | 57 | GND |
| 58 | NC | 59 | CNV_WT_LANE1_DN | 60 | NC |
| 61 | CNV_WT_LANE1_DP | 62 | NC | 63 | GND |

| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 64 | NC | 65 | CNV_WT_LANE0_DN | 66 | NC |
| 67 | CNV_WT_LANE0_DP | 68 | NC | 69 | GND |
| 70 | NC | 71 | CNV_WT_CLK_DN | 72 | +3.3VAUX_WIFI |
| 73 | CNV_WT_CLK_DP | 74 | +3.3VAUX_WIFI | 75 | GND |

**Note:** Total 2.5A for M.2 E-Key slot.

### 2.3.9 M.2 2280 M-Key Slot (CN39)

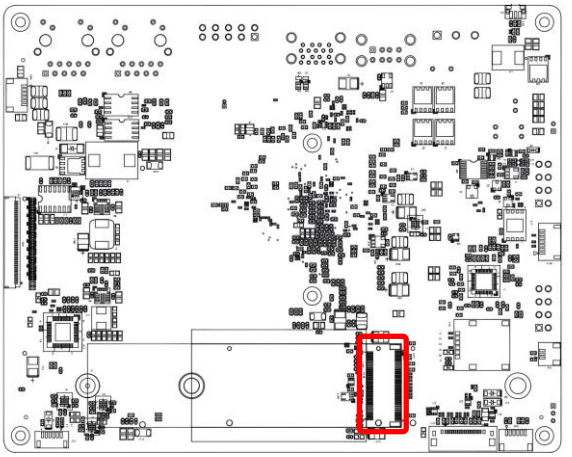


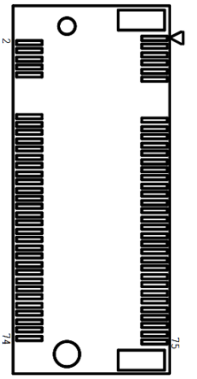


| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 1 | GND | 2 | +3.3V_NGFF | 3 | GND |
| 4 | +3.3V_NGFF | 5 | NC | 6 | NC |
| 7 | NC | 8 | 3GPW_EN | 9 | NC |
| 10 | NC | 11 | NC | 12 | +3.3V_NGFF |
| 13 | NC | 14 | +3.3V_NGFF | 15 | GND |
| 16 | +3.3V_NGFF | 17 | NC | 18 | +3.3V_NGFF |
| 19 | NC | 20 | NC | 21 | GND |
| 22 | NC | 23 | NC | 24 | NC |
| 25 | NC | 26 | NC | 27 | GND |
| 28 | NC | 29 | USB3_RXN | 30 | P_UIM_RST |
| 31 | USB3_RXP | 32 | P_UIM_CLK | 33 | GND |
| 34 | P_UIM_DAT | 35 | USB3_TXN | 36 | P_UIM_PWR |
| 37 | USB3_TXP | 38 | NC | 39 | GND |
| 40 | NC | 41 | PCIE4_RX_N | 42 | NC |

| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 43 | PCIE4_RX_P | 44 | NC | 45 | GND |
| 46 | NC | 47 | PCIE4_TX_N | 48 | NC |
| 49 | PCIE4_TX_P | 50 | BUF_PLT_RST# | 51 | GND |
| 52 | NC | 53 | PCIE_CLK3_DN | 54 | PCIE_WAKE# |
| 55 | PCIE_CLK3_DP | 56 | NC | 57 | GND |
| 58 | NC | 59 | KEY-M | 60 | KEY-M |
| 61 | KEY-M | 62 | KEY-M | 63 | KEY-M |
| 64 | KEY-M | 65 | KEY-M | 66 | KEY-M |
| 67 | NC | 68 | NC | 69 | NC |
| 70 | +3.3V_NGFF | 71 | GND | 72 | +3.3V_NGFF |
| 73 | GND | 74 | +3.3V_NGFF | 75 | GND |

### 2.3.10 M.2 3052 B-Key Slot (CN40)

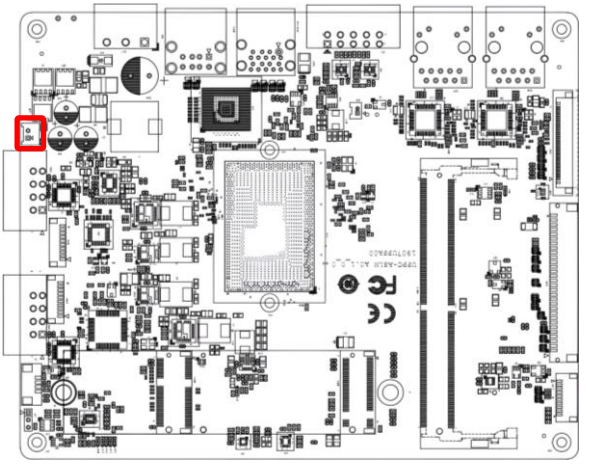


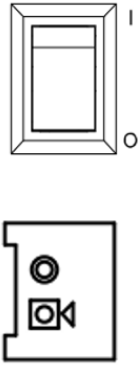


| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 1 | NC | 2 | +3.3V | 3 | GND |
| 4 | +3.3V | 5 | NC | 6 | FULL_CARD_POWER |
| 7 | USB_DP | 8 | 3GPW_EN | 9 | USB_DM |
| 10 | NC | 11 | GND | 12 | KEY-B |
| 13 | KEY-B | 14 | KEY-B | 15 | KEY-B |
| 16 | KEY-B | 17 | KEY-B | 18 | KEY-B |
| 19 | KEY-B | 20 | NC | 21 | NC |
| 22 | NC | 23 | NC | 24 | NC |
| 25 | NC | 26 | NC | 27 | GND |

| Pin | Signal Description | Pin | Signal Description | Pin | Signal Description |
|---|---|---|---|---|---|
| 28 | NC | 29 | USB3_RXN_5G | 30 | P_UIM_RST |
| 31 | USB3_RXP_5G | 32 | P_UIM_CLK | 33 | GND |
| 34 | P_UIM_DAT | 35 | USB3_TXN_5G | 36 | P_UIM_PWR |
| 37 | USB3_TXP_5G | 38 | PCIe_BOOT_Disable | 39 | GND |
| 40 | SMB_CLK_1V8 | 41 | PCIE_P4_RX_DN | 42 | SMB_DATA_1V8 |
| 43 | PCIE_P4_RX_DP | 44 | NC | 45 | GND |
| 46 | NC | 47 | PCIE_P4_TX_DN | 48 | NC |
| 49 | PCIE_P4_TX_DP | 50 | 5G_WWAN_PERSTNC | 51 | GND |
| 52 | NC | 53 | PCIE_CLK3_DN | 54 | Wake_M2 |
| 55 | PCIE_CLK3_DP | 56 | NC | 57 | GND |
| 58 | NC | 59 | NC | 60 | NC |
| 61 | NC | 62 | NC | 63 | NC |
| 64 | NC | 65 | NC | 66 | NC |
| 67 | WWAN_RESET | 68 | SUSCLK_M2 | 69 | PEDET |
| 70 | +3.3V | 71 | GND | 72 | +3.3V |
| 73 | GND | 74 | +3.3V | 75 | NC |

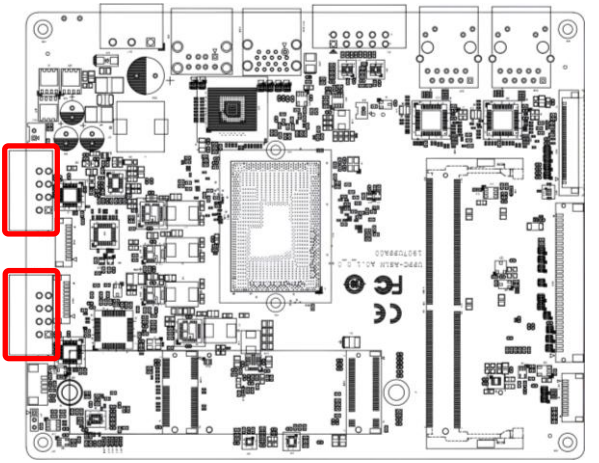
### 2.3.11 Power Switch (CN41)

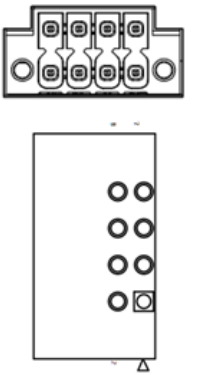




| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | VCC | 2 | PWR_ON# |

## 2.3.12 COM Port 1/COM Port 2 (CN42/CN44)





| Pin | Signal | RS-422 | RS-485 |
|---|---|---|---|
| 1 | DCD | (TxD-) | D- |
| 2 | RX | (TxD+) | D+ |
| 3 | TX | (RxD+) | |
| 4 | DTR | (RxD-) | |
| 5 | DSR | | |
| 6 | RTS | | |
| 7 | CTS | | |
| 8 | GND | | |

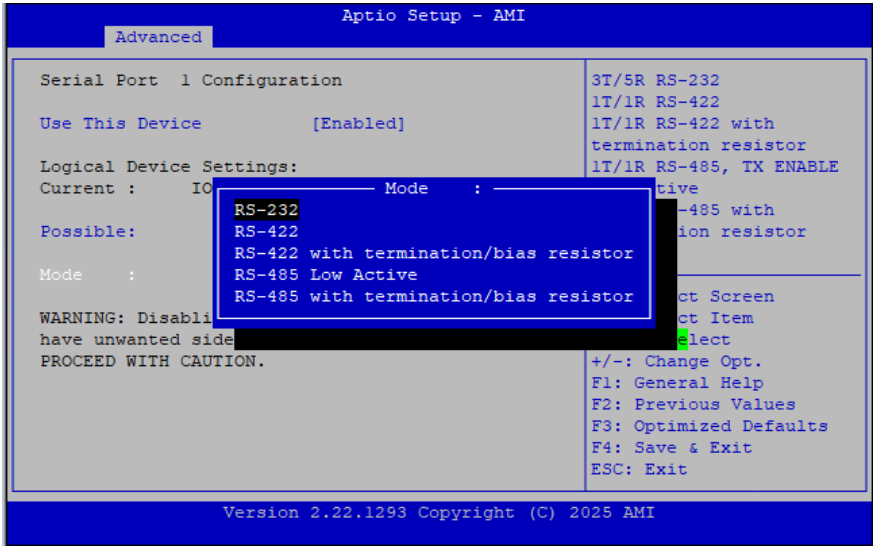
COM 1/COM 2: RS-232/422/485 BIOS Configuration

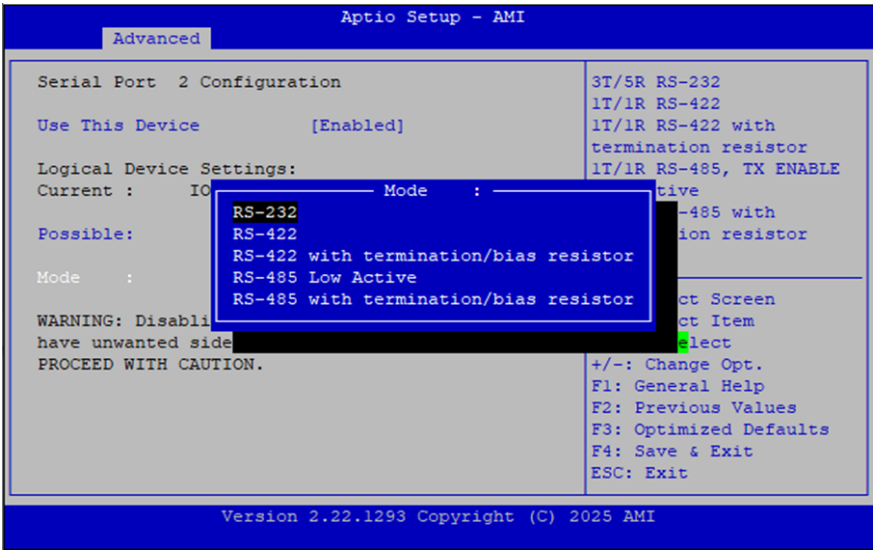
To configure the interface mode for Serial Port 1 (COM1) or Serial Port 2 (COM2) in the BIOS, follow the procedure below:

1. Enter BIOS Setup
   Power on the Panel PC and press the **[Del]** key during startup to enter the BIOS setup utility.
2. Navigate to SIO Configuration
   From the BIOS main menu, select **[Advanced]**, then choose **[SIO Configuration]**.
3. Select the Target Serial Port
   In the **[SIO Configuration]** menu, select:
   - **[Active] Serial Port 1** to configure COM1, or
   - **[Active] Serial Port 2** to configure COM2.

4. Choose Interface Mode

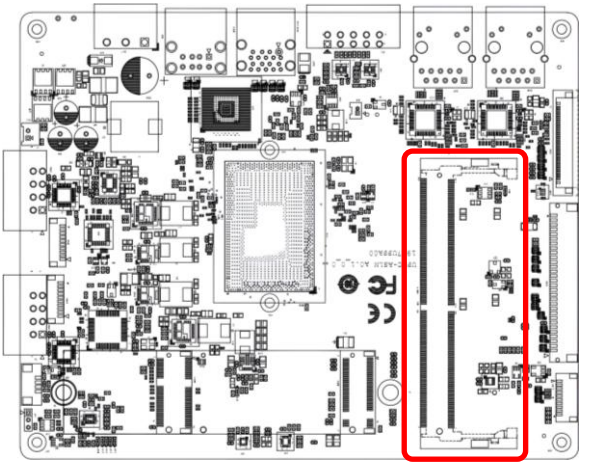
   Within the selected serial port settings, choose the desired interface mode. Five configuration options are available, as illustrated in the corresponding reference image.




After completing the configuration, save the changes and exit the BIOS setup to apply the selected settings.

## 2.3.13 DDR5 SODIMM Slot (DIMM1)



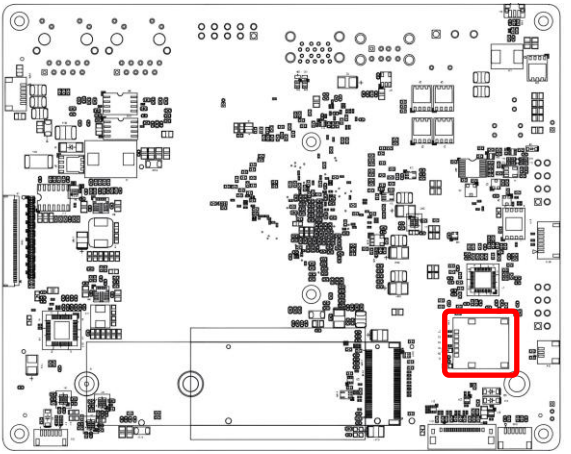
| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | VIN_DDR5 | 2 | DIMM1_C0_SA0 |
| 3 | VIN_DDR5 | 4 | SMB_CLK_S |
| 5 | NC | 6 | SMB_DATA_S |
| 7 | DRAM_PWR_GOOD | 8 | DRAM0_PWR_EN |
| 9 | GND | 10 | GND |
| 11 | DDR2_DQ1_0 | 12 | DDR2_DQ1_2 |
| 13 | GND | 14 | GND |
| 15 | DDR2_DQ1_1 | 16 | DDR2_DQ1_3 |
| 17 | GND | 18 | GND |
| 19 | GND | 20 | DDR2_DQSN_1 |
| 21 | GND | 22 | DDR2_DQSP_1 |
| 23 | DDR2_DQ1_4 | 24 | GND |
| 25 | GND | 26 | DDR2_DQ1_6 |
| 27 | DDR2_DQ1_5 | 28 | GND |
| 29 | GND | 30 | DDR2_DQ1_7 |
| 31 | DDR2_DQ0_4 | 32 | GND |
| 33 | GND | 34 | DDR2_DQ0_7 |
| 35 | DDR2_DQ0_0 | 36 | GND |
| 37 | GND | 38 | DDR2_DQ0_5 |
| 39 | DDR2_DQSN_0 | 40 | GND |
| 41 | DDR2_DQSP_0 | 42 | GND |
| 43 | GND | 44 | GND |

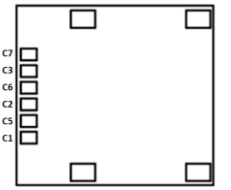
| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 45 | DDR2_DQ0_6 | 46 | DDR2_DQ0_3 |
| 47 | GND | 48 | GND |
| 49 | DDR2_DQ0_2 | 50 | DDR2_DQ0_1 |
| 51 | GND | 52 | GND |
| 53 | DDR2_DQ2_2 | 54 | DDR2_DQ2_0 |
| 55 | GND | 56 | GND |
| 57 | DDR2_DQ2_1 | 58 | DDR2_DQ2_3 |
| 59 | GND | 60 | GND |
| 61 | GND | 62 | DDR2_DQSP_2 |
| 63 | GND | 64 | DDR2_DQSP_2 |
| 65 | DDR2_DQ2_5 | 66 | GND |
| 67 | GND | 68 | DDR2_DQ2_4 |
| 69 | DDR2_DQ2_7 | 70 | GND |
| 71 | GND | 72 | DDR2_DQ2_6 |
| 73 | DDR2_DQ3_6 | 74 | GND |
| 75 | GND | 76 | DDR2_DQ3_5 |
| 77 | DDR2_DQ3_7 | 78 | GND |
| 79 | GND | 80 | DDR2_DQ3_0 |
| 81 | DDR2_DQSN_3 | 82 | GND |
| 83 | DDR2_DQSP_3 | 84 | GND |
| 85 | GND | 86 | GND |
| 87 | DDR2_DQ3_1 | 88 | DDR2_DQ3_3 |
| 89 | GND | 90 | GND |
| 91 | DDR2_DQ3_2 | 92 | DDR2_DQ3_4 |
| 93 | GND | 94 | GND |
| 95 | NC | 96 | NC |
| 97 | GND | 98 | GND |
| 99 | NC | 100 | NC |
| 101 | GND | 102 | NC |
| 103 | NC | 104 | GND |
| 105 | GND | 106 | DDR2_CS0 |
| 107 | DDR2_CA0 | 108 | NC |
| 109 | DDR2_CA1 | 110 | DDR2_CS1 |
| 111 | GND | 112 | GND |
| 113 | DDR2_CA2 | 114 | DDR2_CA3 |
| 115 | DDR2_CA4 | 116 | DDR2_CA5 |
| 117 | GND | 118 | GND |
| 119 | DDR2_CA6 | 120 | DDR2_CA7 |
| 121 | DDR2_CA8 | 122 | DDR2_CA9 |

| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 123 | GND | 124 | GND |
| 125 | DDR2_CA10 | 126 | DDR2_CA11 |
| 127 | DDR2_CA12 | 128 | NC |
| 129 | GND | 130 | GND |
| 131 | DDR2_CLK_P_0 | 132 | NC |
| 133 | DDR2_CLK_N_0 | 134 | NC |
| 135 | GND | 136 | GND |
| 137 | DDR3_CLK_P_0 | 138 | NC |
| 139 | DDR3_CLK_N_0 | 140 | NC |
| 141 | GND | 142 | GND |
| 143 | NC | 144 | DDR3_CA12 |
| 145 | DDR3_CA11 | 146 | DDR3_CA10 |
| 147 | GND | 148 | GND |
| 149 | DDR3_CA9 | 150 | DDR3_CA8 |
| 151 | DDR3_CA7 | 152 | DDR3_CA6 |
| 153 | GND | 154 | GND |
| 155 | DDR3_CA5 | 156 | DDR3_CA4 |
| 157 | DDR3_CA3 | 158 | DDR3_CA2 |
| 159 | GND | 160 | GND |
| 161 | DDR3_CS0 | 162 | DDR3_CA1 |
| 163 | DRAM_RST_N_R | 164 | DDR3_CA0 |
| 165 | DDR3_CS1 | 166 | GND |
| 167 | GND | 168 | NC |
| 169 | NC | 170 | GND |
| 171 | NC | 172 | NC |
| 173 | GND | 174 | GND |
| 175 | NC | 176 | NC |
| 177 | GND | 178 | GND |
| 179 | DDR3_DQ2_1 | 180 | DDR3_DQ2_2 |
| 181 | GND | 182 | GND |
| 183 | DDR3_DQ2_3 | 184 | DDR3_DQ2_0 |
| 185 | GND | 186 | GND |
| 187 | GND | 188 | DDR3_DQSN_2 |
| 189 | GND | 190 | DDR3_DQSP_2 |
| 191 | DDR3_DQ2_6 | 192 | GND |
| 193 | GND | 194 | DDR3_DQ2_7 |
| 195 | DDR3_DQ2_5 | 196 | GND |
| 197 | GND | 198 | DDR3_DQ2_4 |
| 199 | DDR3_DQ3_0 | 200 | GND |

| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 201 | GND | 202 | DDR3_DQ3_5 |
| 203 | DDR3_DQ3_3 | 204 | GND |
| 205 | GND | 206 | DDR3_DQ3_4 |
| 207 | DDR3_DQSN_3 | 208 | GND |
| 209 | DDR3_DQSP_3 | 210 | GND |
| 211 | GND | 212 | GND |
| 213 | DDR3_DQ3_6 | 214 | DDR3_DQ3_7 |
| 215 | GND | 216 | GND |
| 217 | DDR3_DQ3_1 | 218 | DDR3_DQ3_2 |
| 219 | GND | 220 | GND |
| 221 | DDR3_DQ0_0 | 222 | DDR3_DQ0_2 |
| 223 | GND | 224 | GND |
| 225 | DDR3_DQ0_1 | 226 | DDR3_DQ0_3 |
| 227 | GND | 228 | GND |
| 229 | GND | 230 | DDR3_DQSN_0 |
| 231 | GND | 232 | DDR3_DQSP_0 |
| 233 | DDR3_DQ0_4 | 234 | GND |
| 235 | GND | 236 | DDR3_DQ0_6 |
| 237 | DDR3_DQ0_7 | 238 | GND |
| 239 | GND | 240 | DDR3_DQ0_5 |
| 241 | DDR3_DQ1_5 | 242 | GND |
| 243 | GND | 244 | DDR3_DQ1_7 |
| 245 | DDR3_DQ1_6 | 246 | GND |
| 247 | GND | 248 | DDR3_DQ1_4 |
| 249 | DDR3_DQSN_1 | 250 | GND |
| 251 | DDR3_DQSP_1 | 252 | GND |
| 253 | GND | 254 | GND |
| 255 | DDR3_DQ1_2 | 256 | DDR3_DQ1_3 |
| 257 | GND | 258 | GND |
| 259 | DDR3_DQ1_0 | 260 | DDR3_DQ1_1 |
| 261 | GND | 262 | GND |

### 2.3.14 Nano SIM Card Slot (SIM1)






| Pin | Signal | Pin | Signal |
|---|---|---|---|
| C1 | UIM_PWR | C2 | UIM_RST |
| C3 | UIM_CLK | C5 | UIM_GND |
| C6 | NC | C7 | UIM_DAT |

# Chapter 3

Software Installation

## 3.1 Linux Setup

The UPPC-ASLN15 is compatible with Linux operating systems (refer to Chapter 1 for detailed specifications). Follow the steps below to install Linux on your Panel PC:

1. Access the official Ubuntu release page: https://releases.ubuntu.com/jammy/
2. Locate the file ubuntu-22.04.5-desktop-amd64.iso and copy it to a USB drive.
3. Insert the USB drive into the UPPC-ASLN15 and boot the system from the USB device.
4. Follow the on-screen prompts. Click **Next** where required and complete the installation process according to the instructions provided by the installer.

## 3.2 Windows Drivers Installation

Drivers for the UPPC-ASLN15 can be downloaded from UPPC-ASLN_Driver_Package.zip and navigating to the Downloads section.

# Appendix A

Cables and Connectors

## A.1 Cables and Connectors

This table provides detailed information about the cables and connectors used by the UPPC-ASLN15. If you have any questions about the configuration of your system, please contact your AAEON sales representative.

| Function | Mating Connector | | AAEON P/N |
|---|---|---|---|
| | Vendor | Model No. | |
| COM Wafer | DINKLE | 0159-0108 | 16522X0055 |
| GPIO Wafer | DINKLE | 0159-0110 | 16522X0104 |
| Power Wafer | DINKLE | 2ESDV-03P-BK | 16522X0111 |