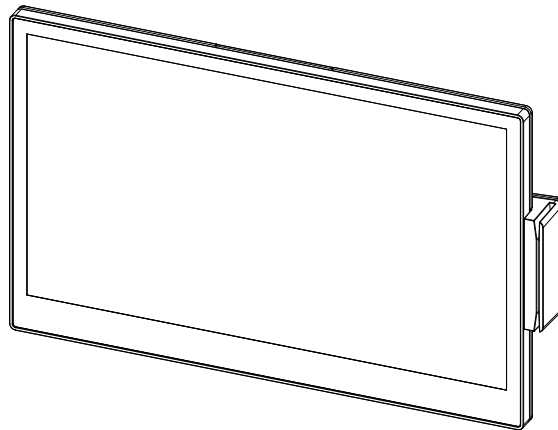


# USER MANUAL

VERSION 2.1 October 2021

## Panel PC Hardware System



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## Safety

### IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrical power supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
10. To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
11. No modification of this equipment is allowed.
12. Power supply is specified as part of medical equipment.

13. The medical PC can be cleaned in accordance with normal clinical cleaning practices, including wiping with water or medical grade wipes, provided no substance containing acids or cleaning alkali liquids is used.
14. Medical grade wipes must not contain more than 80% alcohol content measured against the total content of the wipe.
15. Operator shall not contact patient simultaneously when in use with the medical computer.

## Sécurité

### INSTRUCTIONS IMPORTANTES RELATIVES À LA SECURITE

1. Pour débrancher la machine de l'alimentation électrique, éteignez l'interrupteur d'alimentation et retirez le cordon d'alimentation de la prise murale. La prise murale doit être facilement accessible et à proximité de la machine.
2. Lisez attentivement ces instructions. Conservez ces instructions pour une référence future.
3. Suivez tous les avertissements et les instructions indiquées sur le produit.
4. Ne pas utiliser ce produit à proximité de l'eau.
5. Ne pas placer ce produit sur un chariot, un support ou une table. Le produit peut tomber, causant de graves dommages à l'appareil.
6. Les fentes et les ouvertures dans le boîtier, l'arrière ou le fond sont prévues pour la ventilation afin d'assurer un fonctionnement fiable du produit et le protéger de la surchauffe. Ces ouvertures ne doivent pas être obstruées ou couvertes. Les ouvertures ne doivent jamais être bloquées en plaçant l'appareil sur un lit, un canapé, un tapis ou autre surface similaire. Ce produit ne doit jamais être placé : à proximité ou sur un radiateur, sur un registre de chaleur ou dans une installation intégrée à moins qu'une ventilation adéquate soit prévue.
7. Ce produit doit être utilisé avec le type d'alimentation indiqué sur l'étiquette. Si vous n'êtes pas sûr du type d'alimentation disponible, consultez votre revendeur ou représentant local de l'entreprise.
8. Ne laissez rien reposer sur le cordon d'alimentation. Ne placez pas ce produit là où des personnes peuvent marcher sur le cordon.
9. N'introduisez jamais d'objets d'aucune sorte dans ce produit à travers les fentes du coffret car ils pourraient entrer en contact avec des points sous tension dangereux ou court-circuiter des pièces. Ne renversez jamais de liquide d'aucune sorte sur le produit.
10. Pour éviter tout risque de choc électrique, cet équipement ne doit être branché que sur une prise secteur avec terre.
11. Aucune modification de cet équipement n'est autorisée.
12. L'alimentation est spécifiée comme faisant partie du matériel médical.
13. L'ordinateur médical peut être nettoyé conformément aux pratiques de nettoyage cliniques habituelles, notamment en essuyant avec de l'eau ou des lingettes de qualité médicale, à condition qu'aucune substance contenant des acides ou des liquides de nettoyage alcalins ne soient utilisés.
14. Les lingettes de qualité médicale ne doivent pas contenir plus de 80% d'alcool par rapport au contenu total de la lingette.
15. L'opérateur ne doit pas toucher le patient lorsqu'il utilise l'ordinateur médical.



This device complies with the requirements of the EEC directive 2014/30/EU with regard to “Electromagnetic compatibility” and 2014/35/EU “Low Voltage Directive”.



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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

## CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer’s instructions.



### Battery Caution

Risk of explosion if battery is replaced by an incorrectly type. Dispose of used battery according to the local disposal instructions.



### Safety Caution

Note: To comply with IEC60950-1 Clause 2.5 (limited power sources, L.P.S) related legislation, peripherals shall be 4.7.3.2 “Materials for fire enclosure” compliant.

#### 4.7.3.2 Materials for fire enclosures

For MOVABLE EQUIPMENT having a total mass not exceeding 18kg, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of V-1 CLASS MATERIAL or shall pass the test of Clause A.2.

For MOVABLE EQUIPMENT having a total mass exceeding 18kg and for all STATIONARY EQUIPMENT, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of 5VB CLASS MATERIAL or shall pass the test of Clause A.1

## AVERTISSEMENT SUR LES BATTERIES AU LITHIUM

Il y a un danger d’explosion si la batterie n’est pas remplacée correctement. Remplacez-la uniquement par une batterie identique ou de type équivalent recommandée par le fabricant. Les batteries usagées doivent être mises au rebut conformément aux instructions du fabricant.



### **Avertissement Batterie**

Risque d'explosion si la batterie est remplacée par un élément incompatible.  
Jetez les batteries usagées selon les instructions des dispositions locales .



### **Avertissement de sécurité**

Remarque: Pour répondre à la norme IEC60950-1 alinéa 2.5 (sources d'énergie limitées, LPS) liés la législation, les périphériques doivent être conforme 4.7.3.2 "Matériaux pour enceinte coupe-feu»

#### 4.7.3.2 "Matériaux pour équipements coupe-feu»

Pour les équipements mobiles ayant une masse totale n'excédant pas 18kg :

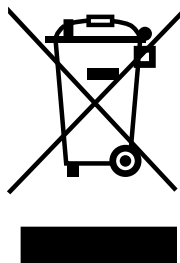
Les matériaux d'un équipement coupe-feu, dans l'épaisseur de paroi retenue la plus significativement mince, doivent être des matériels de CLASSE V-1 ou doivent passer le test de l'article A.2.

Pour équipements mobiles ayant une masse totale supérieure à 18 kg et pour tous les équipements FIXES :

Les matériaux d'un équipement coupe-feu dans l'épaisseur de paroi retenue la plus significativement mince, doivent être des matériels de CLASSE V-1, doivent être de classe Matériel 5VB ou doivent passer le test de l'article A.1

## **LEGISLATION AND WEEE SYMBOL**

2012/19/EU Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dust bin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

## Troubleshooting

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 system.
- Your computer has been dropped or 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.

Repair of the device may only be carried out by the manufacture. We recommend that a service contract be obtained with supplier and that all repairs also be carried out by them. Otherwise the correct functioning of the device may be compromised.

# Revision History

Changes to the original user manual are listed below:

| Revision | Description  | Date          |
|----------|--|---------------|
| 1.0      | <ul style="list-style-type: none"><li>Initial release</li></ul>  | June 2020     |
| 1.1      | <ul style="list-style-type: none"><li>F14 motherboard added</li><li>PoE module added</li></ul>   | August 2020   |
| 2.0      | <ul style="list-style-type: none"><li>F64U motherboard added</li></ul>   | November 2020 |
| 2.1      | <ul style="list-style-type: none"><li>F64U motherboard removed</li><li>F34 motherboard added</li><li>New camera peripheral added</li></ul> | October 2021  |

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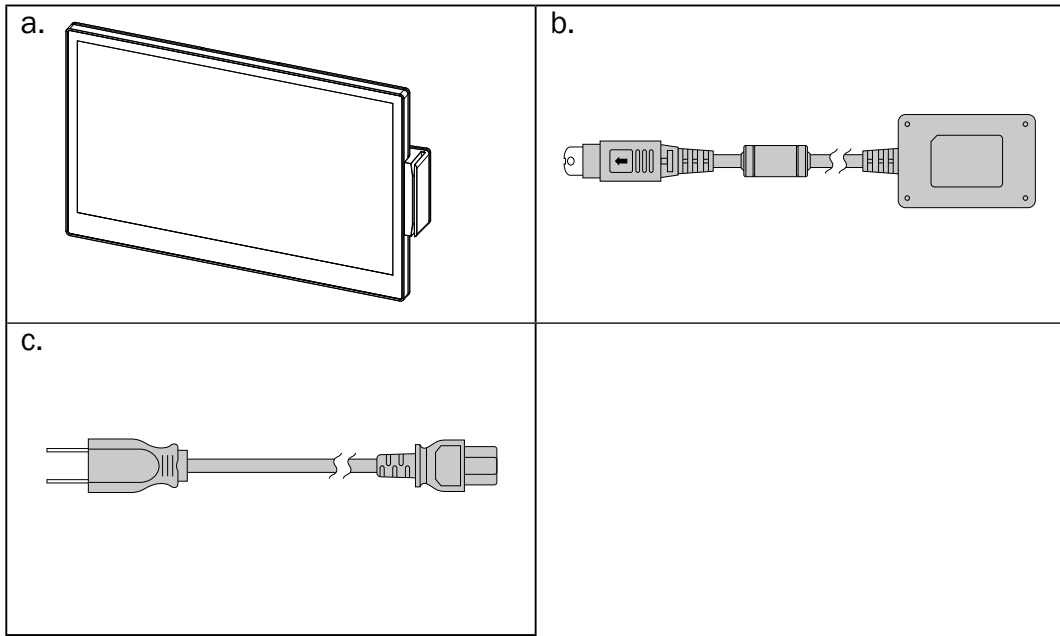
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# 1. Packing List

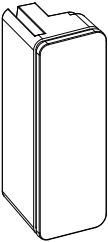
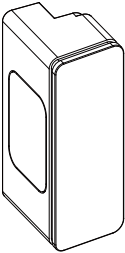
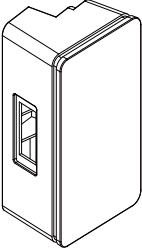
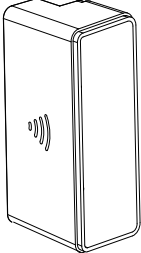
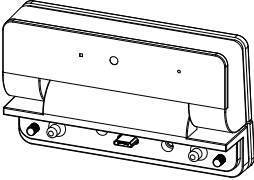
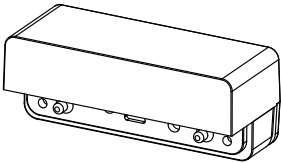
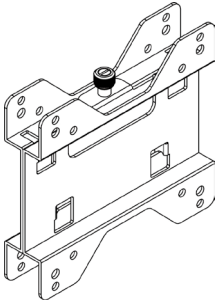
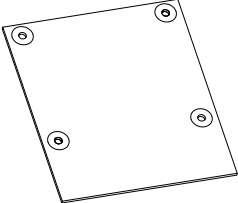
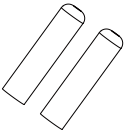
## 1-1. Standard Items



- a. System
- b. Power adapter
- c. Power cord

**Note:** Power cord will be supplied differently according to various region or country.

# 1-2. Optional Items

|   |  |
|---|--|
| a.<br>   | b.<br>  |
| c.<br>   | d.<br>  |
| e.<br>  | f.<br>  |
| g.<br> | h.<br> |
| i.<br> |  |

- a. MSR

b. Fingerprint

c. 2D scanner

d. NFC

e. Camera
- f. Light bar

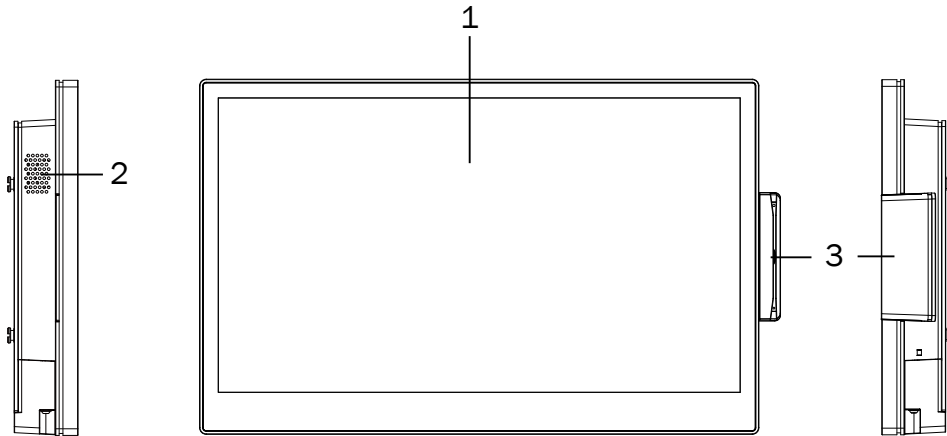
g. Wall mount kits

h. PoE module

i. Antenna (x2)

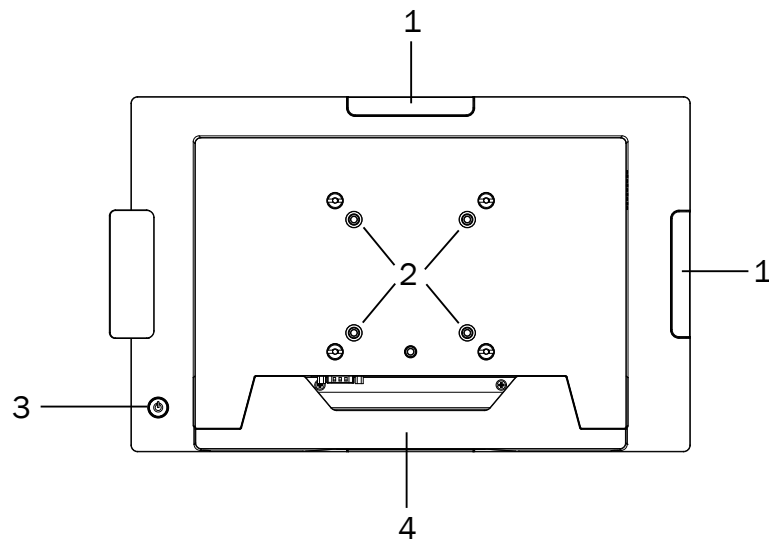
## 2. System View

### 2-1. Front & Side View



| Item No. | Description                          |
|----------|--------------------------------------|
| 1        | Touch panel                          |
| 2        | Speaker                              |
| 3        | MSR / Fingerprint / NFC / 2D scanner |

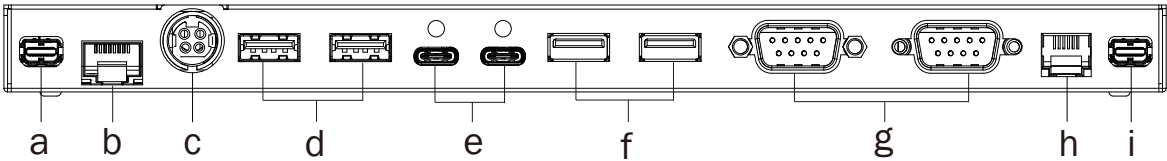
### 2-2. Rear & Bottom View



| Item No. | Description                                 |
|----------|---|
| 1        | Dummy cover of MSR/ Fingerprint/ Scanner    |
| 2        | 75 x 75 mm /100 x 100mm VESA mounting holes |
| 3        | Power button                                |
| 4        | Cable cover                                 |

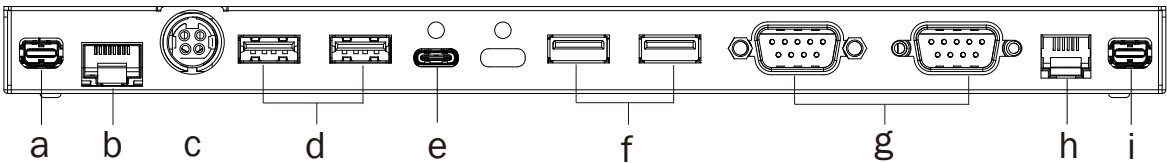
# 2-3. I/O View

## D84U & F34 Motherboard



| No. | Description                    |
|-----|--------------------------------|
| a   | FeDP (2 <sup>nd</sup> display) |
| b   | LAN                            |
| c   | DC 19V in                      |
| d   | USB 2.0 x 2                    |
| e   | USB Type C x 2                 |
| f   | USB 3.0 x 2                    |
| g   | COM x 2                        |
| h   | Cash drawer                    |
| i   | FeDP (Main display)            |

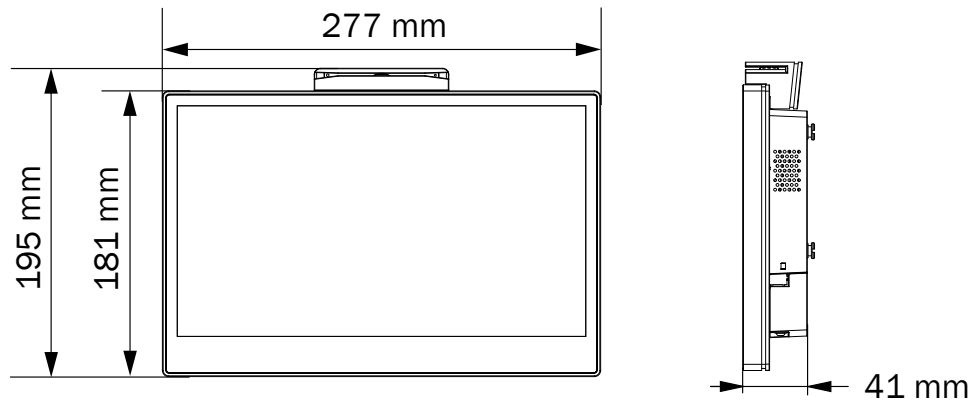
## F14 Motherboard



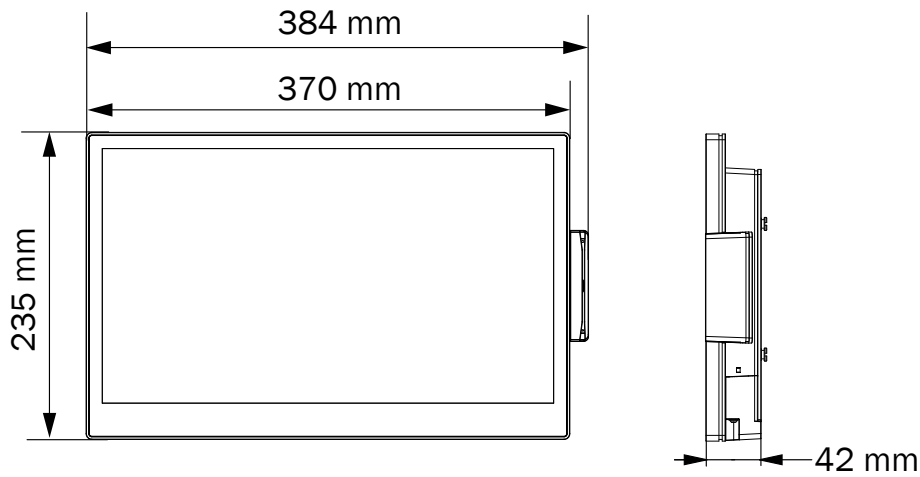
| No. | Description                    |
|-----|--------------------------------|
| a   | FeDP (2 <sup>nd</sup> display) |
| b   | LAN                            |
| c   | DC 19V in                      |
| d   | USB 2.0 x 2                    |
| e   | USB Type C                     |
| f   | USB 3.0 x 2                    |
| g   | COM x 2                        |
| h   | Cash drawer                    |
| i   | FeDP (Main display)            |

## 2-4. Dimensions

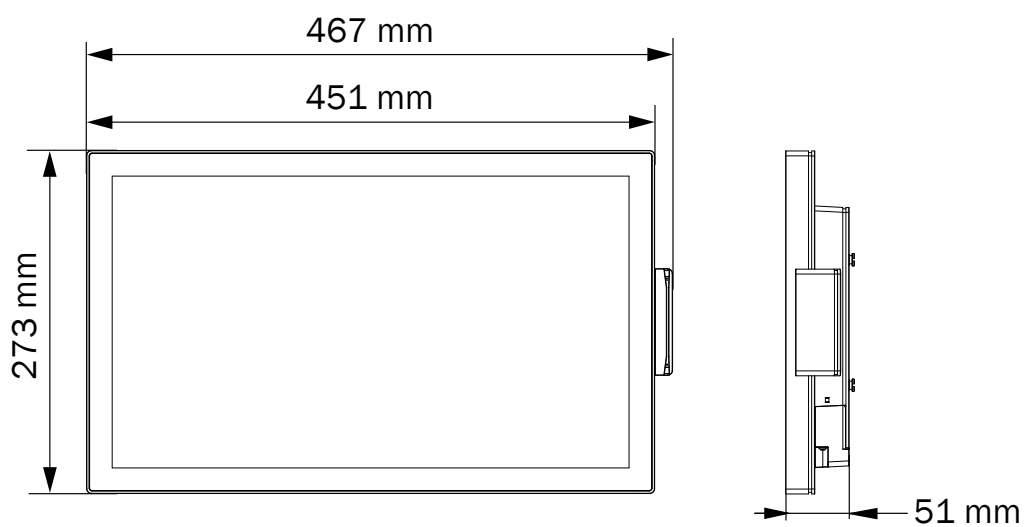
**K736 - 11.6" LED panel**



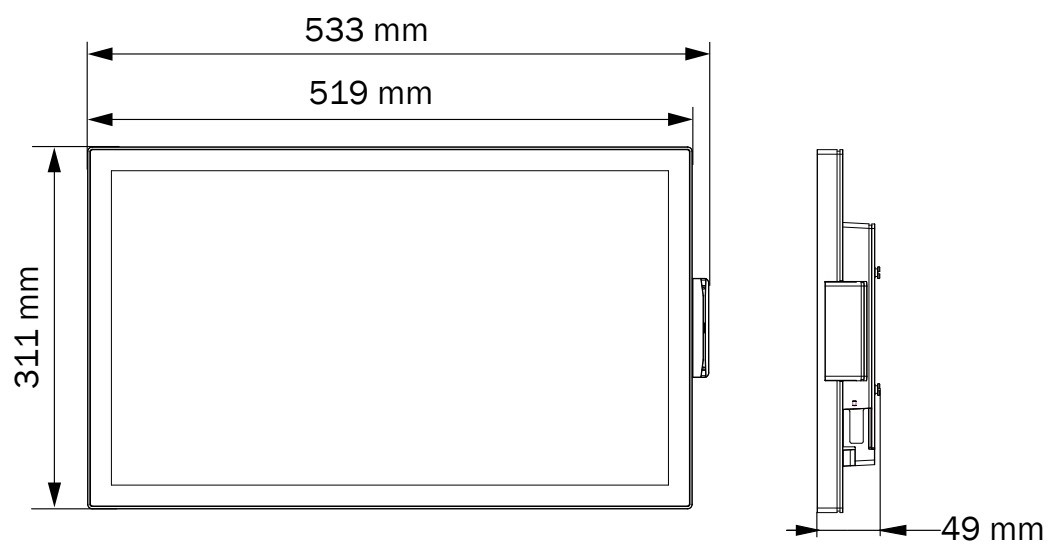
**K737 - 15.6" LED panel**



**K738 - 18.5" LED panel**

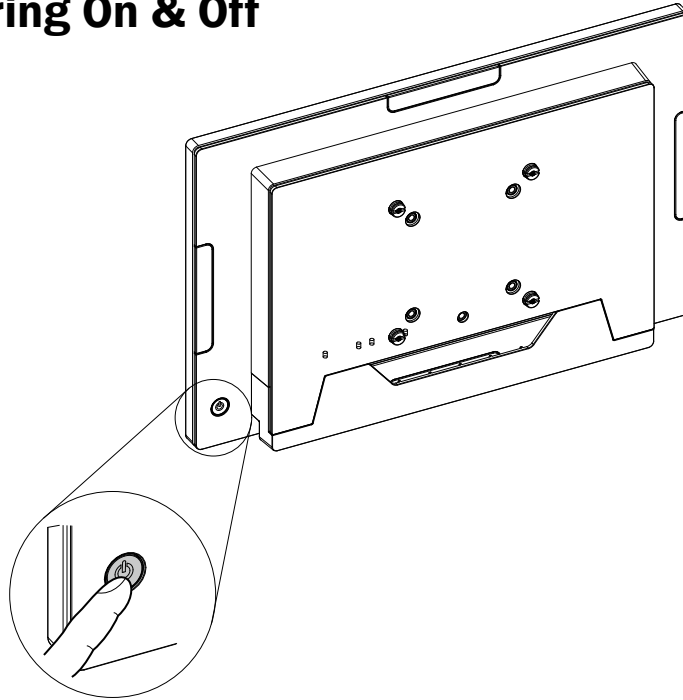


**K739 - 21.5" LED panel**



## 3. System Assembly

### 3-1. Powering On & Off

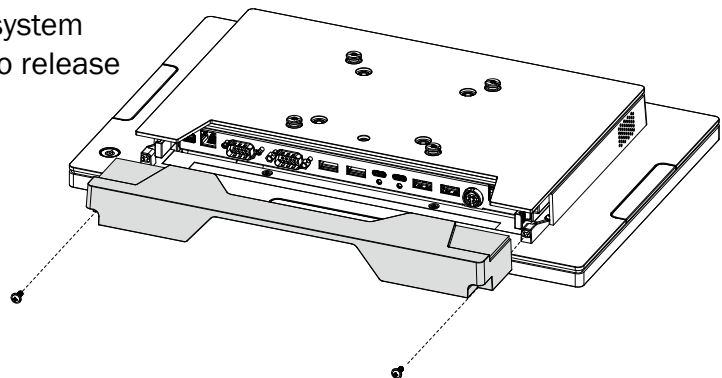


To activate the system, push and quickly release the power button and the display will come on in a few seconds. **NOTE:** The system must be plugged into power adapter before turning on for the first time.

To turn off the system, power off the device safely using software function that “shuts down computer” provided in the operating system.

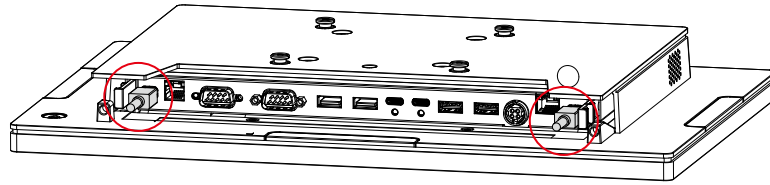
### 3-2. Remove the Cable Cover

1. Turn to the back side of the system and loosen the screws (x2) to release the cable cover.

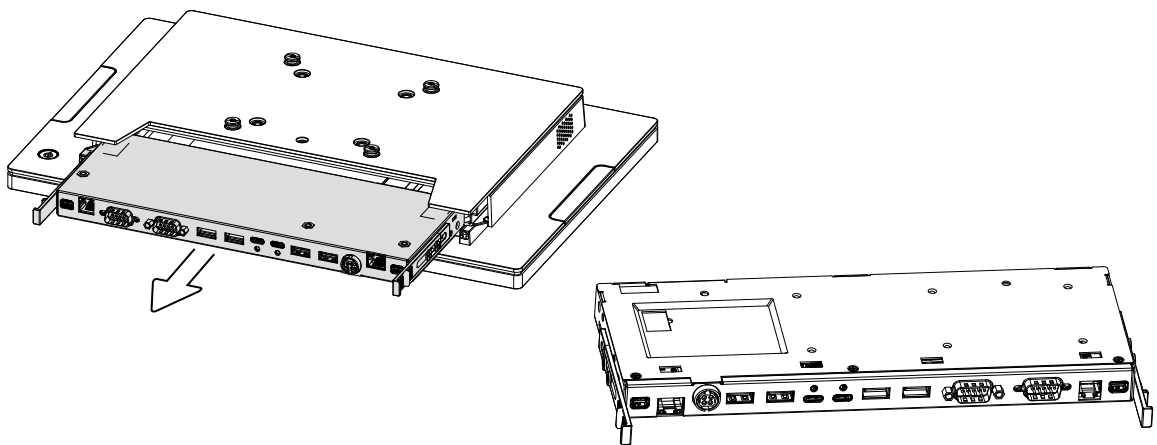




### 3-3. Remove the Motherboard Box



1. To remove the motherboard box, please remove the cable cover firstly as steps dscribed in chapter 3-2.
2. Unplug the FeDP cables (x2) connected directly to the ports on the I/O panel. Always power down the system before releasing the cables or it may cause damage to the motherboard inside.

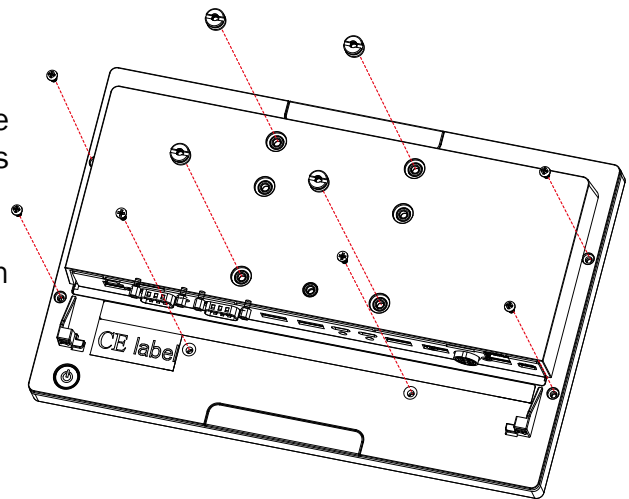


3. Push the plastic holder of the motherboard box and pull it outward to release the motherboard box from the system.

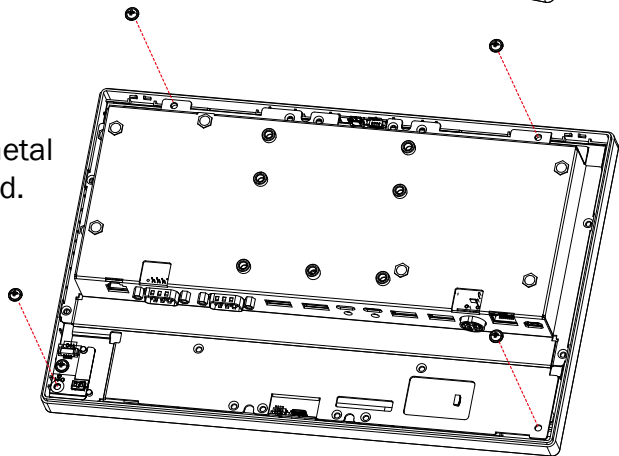
## 3-4. Replace the RAM Module

### K736 Model

1. To replace the RAM, please remove the cable cover firstly as steps dscribed in chapter 3-2.
2. Remove the screws (x10) to open the rear cover of the touch panel.

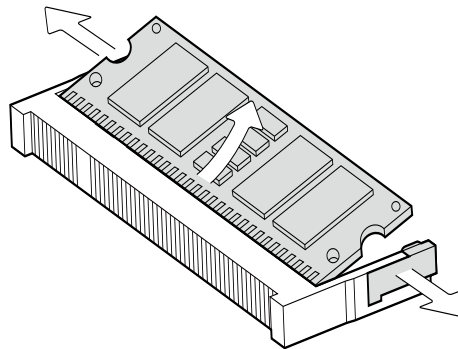


3. Remove the screws (x4) of the metal bracket to access the motherboard.



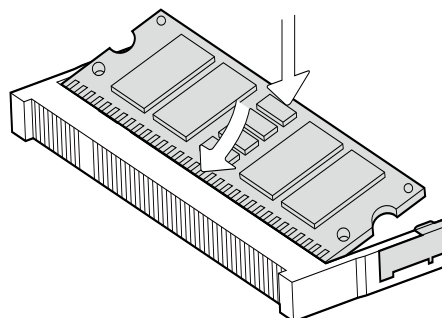
### Removing a RAM module

1. Flip the ejector clips outwards to remove the memory module from the memory slot.

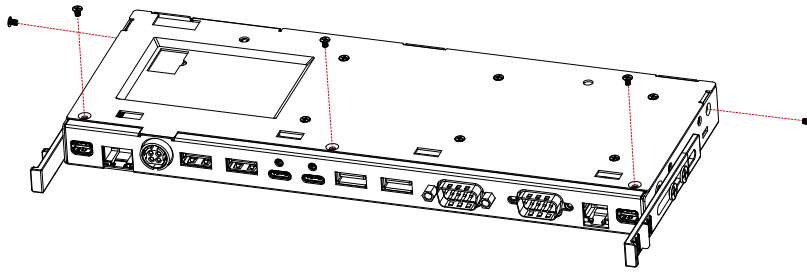


### Installing a RAM module

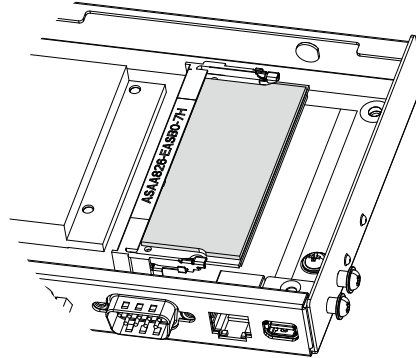
2. Slide the memory module into the memory slot and press down until the ejector clips snaps in place.



## K737 / K738 / K739 Model

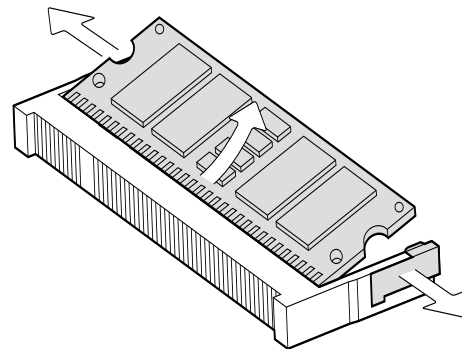


1. To replace the RAM, please release the motherboard box firstly as steps dscribed in chapter 3-3.
2. Remove the screws (x5) to open the metal cover of the motherboard box.
3. Find the RAM module located at the right side of the motherboard.



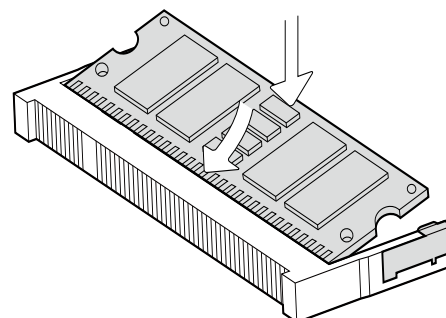
### Removing a RAM module

1. Flip the ejector clips outwards to remove the memory module from the memory slot.

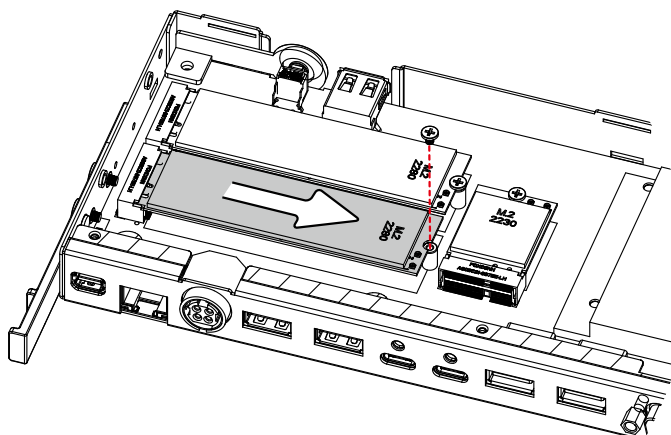


### Installing a RAM module

2. Slide the memory module into the memory slot and press down until the ejector clips snaps in place.



### 3-5. Replace the M.2 SSD Card

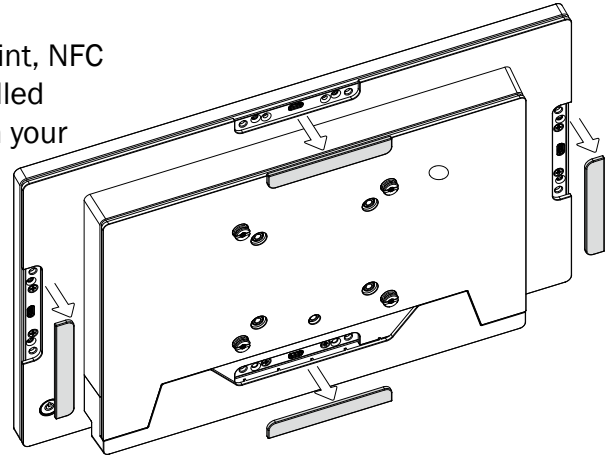


1. To replace the RAM, please release the motherboard box firstly as steps dscribed in chapter 3-3 (K737/K738/K739) and 3-4 (K736).
2. Remove the screws (x1) and pull the M.2 SSD card outwards as shown in the picture.

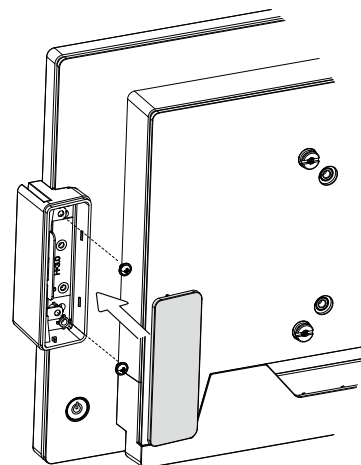
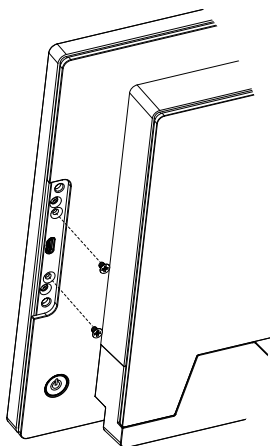
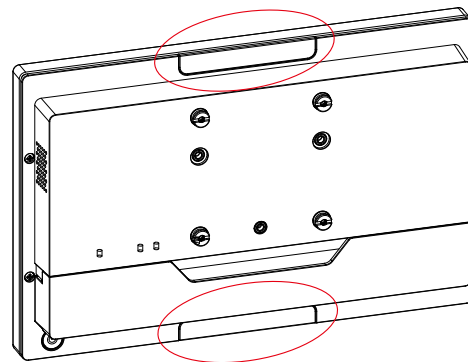
## 4. Peripherals Installation

### 4-1. Install the MSR/ Fingerprint/ NFC / 2D Scanner Module

1. The variety of peripherals MSR, fingerprint, NFC and 2D scanner modules can be installed to each side of the system depends on your preference.
2. Remove the dummy cover.



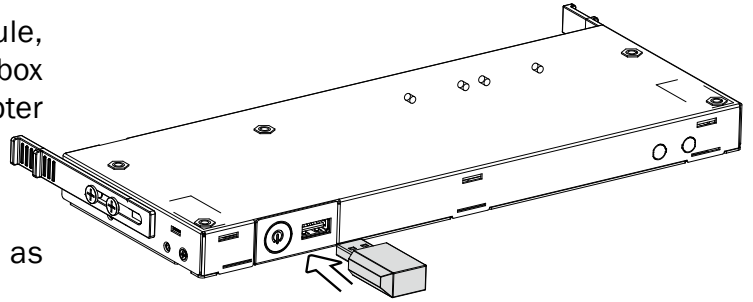
**\*\* The modules can only be installed to the top or bottom side for the K736 model.**



3. Remove the retaining screws (x2).
4. Insert the MSR / fingerprint/ 2D scanner module and fasten the screws (x2). Then attach the top cover of the module.

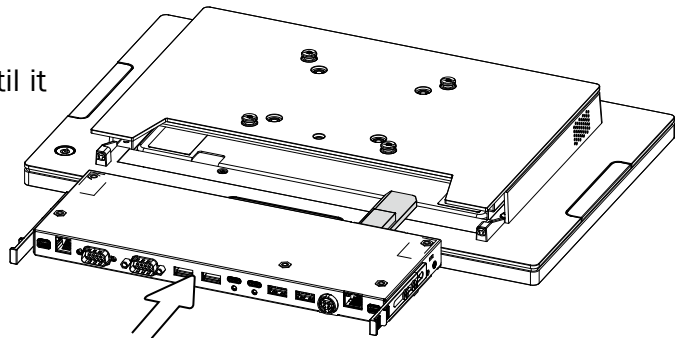
## 4-2. Install the WiFi Dongle Module

1. To install the WiFi dongle module, please release the motherboard box firstly as steps dscribed in chapter 3-3.

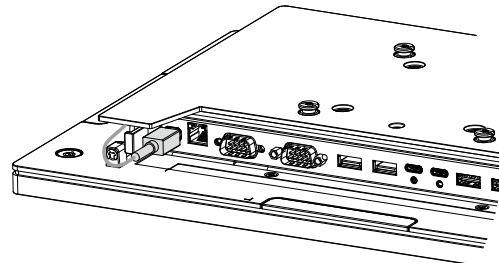


2. Insert the WiFi dongle module as picture shown.

3. Slide the motherboard box in until it clicks in place.

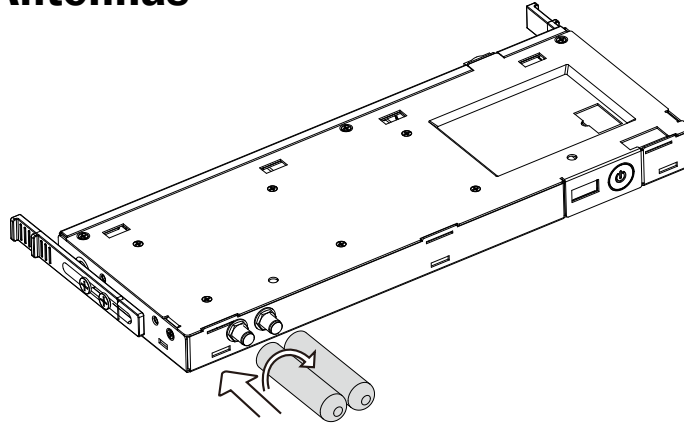


4. Finally connect the FeDP cable.



- **WiFi dongle module is only available for K737/K738/K739 equipped with D84U motherboard. For the above models equipped with F14 motherboard, please install the Antennas.**
- **K736 only supports M.2 WLAN card.**

## 4-3. Install the Antennas



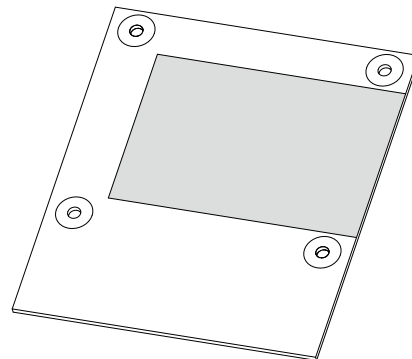
1. To install the antennas, please release the motherboard box firstly as steps dscribed in chapter 3-3.
2. Screw the antennas tight to the Wi-Fi antenna connectors as shown.

## 4-4. Install the PoE Module

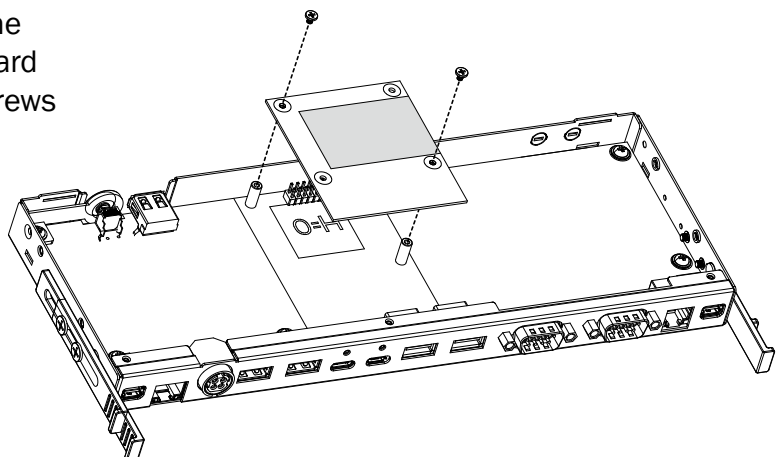
When the PoE module is connected to motherboard, it would change to PoE mode.  
There are two restrictions on PoE mode:

- **No powered COM port**
- **Do not support 2<sup>nd</sup> display**

1. To install the PoE module, please release the motherboard box firstly as steps dscribed in chapter 3-3 (K737/K738/K739) and 3-4 (K736).
2. Attach a thermal pad onto the PoE board.



3. Connect the PoE board to the connector on the motherboard side and then fasten the screws (x2) provided.



# 5. Specification

| Model Name             | K736   | K737                                      | K738              | K739                  |
|------------------------|--|---|-------------------|-----------------------|
| Mainboard              | D84U   |   |                   |                       |
| CPU                    | Intel KabyLakeU CPU Celeron 3965U 2.2GHz, i3-7100U 2.4GHz  |   |                   |                       |
| Chipset                | CPU Integrated   |   |                   |                       |
| System memory          | 1x DDR4 2133MHz SO-DIMM 4GB  |   |                   |                       |
| LCD/Touch Panel        |  |   |                   |                       |
| LCD size               | 11.6" LED panel  | 15.6" LED panel                           | 18.5" LED panel   | 21.5" LED panel       |
| Brightness             | 300 nits   | 300 nits                                  | 250 nits          | 300 nits              |
| Maximal resolution     | 1920 x 1080 (full HD)  | 1920 x 1080 (full HD)                     | 1366 x 768 (HD)   | 1920 x 1080 (full HD) |
| Touch screen type      | True flat PCAP multi touch   |   |                   |                       |
| Storage                |  |   |                   |                       |
| Flash memory           | 1x M.2 SATA SSD module 128GB   |   |                   |                       |
| Peripherals (Option)   |  |   |                   |                       |
| Webcam                 | 2M/5M (USB)  |   |                   |                       |
| MSR                    | 1 (USB)  |   |                   |                       |
| NFC                    | 1 (USB)  |   |                   |                       |
| 2D scanner             | 1 (USB)  |   |                   |                       |
| Fingerprint            | 1 (USB)  |   |                   |                       |
| Status light           | 1 (USB)  |   |                   |                       |
| Communication          |  |   |                   |                       |
| Wireless LAN (option)  | M.2 WiFi/BT module   | USB WiFi/BT dongle (a/b/g/n/ac)           |                   |                       |
| External I/O Ports     |  |   |                   |                       |
| USB Type A             | 2x USB3.0 / 2x USB2.0  |   |                   |                       |
| USB Type C             | 1x USB3.0 Type C (full-functional) PDO 5V@3A / PDO 12V@1.5A / PDO 20V@1A<br>1x USB3.0 Type C (data only) |   |                   |                       |
| Serial / COM           | 2x DB9 (Powered RS232) (default 0V; COM1 5V,COM2 12V)  |   |                   |                       |
| LAN                    | 1x RJ45  |   |                   |                       |
| Cash drawer            | 1x RJ11  |   |                   |                       |
| Mini display port      | 1 (Proprietary)  | 2 (Proprietary)                           |                   |                       |
| DC jack                | 4 pin DIN (with latch)   |   |                   |                       |
| Control/ Indicate      |  |   |                   |                       |
| Power button           | 1  |   |                   |                       |
| LED indicator          | 1  |   |                   |                       |
| Audio                  |  |   |                   |                       |
| Speaker                | 1x 3W  |   |                   |                       |
| Power                  |  |   |                   |                       |
| Power adapter          | 120W/19V   |   |                   |                       |
| Environment            |  |   |                   |                       |
| EMC & Safety           | FCC Class A, CE mark Class A, LVD  |   |                   |                       |
| Operating temperature  | 0°C ~ 35°C (32°F ~ 95°F)   |   |                   |                       |
| Storage temperature    | -20° ~ 60°C (-4°F ~ 140°F)   |   |                   |                       |
| Humidity               | 20% - 85% RH non-condensing  |   |                   |                       |
| Dust & Water proof     | IP 54 (front panel)  |   |                   |                       |
| Weight                 | 1.4 Kg   | 3.0 Kg                                    | 4.4 Kg            | 5.4 Kg                |
| Dimensions (W x D x H) | 277 x 181 x 41 mm  | 370 x 235 x 42 mm                         | 451 x 273 x 51 mm | 519 x 311 x 49mm      |
| Mounting               | VESA mount holes<br>75 x 75 mm   | VESA mount holes 75 x 75 mm /100 x 100 mm |                   |                       |
| OS support             | Windows 10 IoT Enterprise, Linux   |   |                   |                       |

\*This specification is subject to change without prior notice.



| Model Name             | K736  | K737                                      | K738              | K739                  |
|------------------------|---|---|-------------------|-----------------------|
| Mainboard              | F14   |   |                   |                       |
| CPU                    | Qualcomm 450 Octa-Core 1.8GHz (64bits)                |   |                   |                       |
| Chipset                | CPU Integrated  |   |                   |                       |
| System memory          | 3GB LPDDR3  |   |                   |                       |
| Storage device         | 32GB eMMC   |   |                   |                       |
| LCD/Touch Panel        |   |   |                   |                       |
| LCD size               | 11.6" LED panel                                       | 15.6" LED panel                           | 18.5" LED panel   | 21.5" LED panel       |
| Brightness             | 300 nits  | 300 nits                                  | 250 nits          | 300 nits              |
| Maximal resolution     | 1920 x 1080 (full HD)                                 | 1920 x 1080 (full HD)                     | 1366 x 768 (HD)   | 1920 x 1080 (full HD) |
| Touch screen type      | True flat PCAP multi touch                            |   |                   |                       |
| Peripherals (Option)   |   |   |                   |                       |
| Webcam                 | 2M/5M (USB)   |   |                   |                       |
| MSR                    | 1 (USB)   |   |                   |                       |
| NFC                    | 1 (USB)   |   |                   |                       |
| 2D scanner             | 1 (USB)   |   |                   |                       |
| Fingerprint            | 1 (USB)   |   |                   |                       |
| Status light           | 1 (USB)   |   |                   |                       |
| Communication          |   |   |                   |                       |
| Wireless LAN (option)  | System build-in WiFi+BT (a/b/g/n) (Antenna (option))  |   |                   |                       |
| PoE                    |   |   |                   |                       |
| POE module (option)    | POE module 802.3bt Type 3                             |   |                   |                       |
| External I/O Ports     |   |   |                   |                       |
| USB Type A             | 2x USB3.0 / 2x USB2.0                                 |   |                   |                       |
| USB Type C             | 1x USB2.0 Type C (data only)                          |   |                   |                       |
| Serial / COM           | 2x DB9 (Powered RS232) (default 0V; COM1 5V,COM2 12V) |   |                   |                       |
| LAN                    | 1x RJ45   |   |                   |                       |
| Cash drawer            | 1x RJ11   |   |                   |                       |
| Mini display port      | 1 (Proprietary)                                       | 2 (Proprietary)                           |                   |                       |
| DC jack                | 4 pin DIN (with latch)                                |   |                   |                       |
| Control/ Indicate      |   |   |                   |                       |
| Power button           | 1   |   |                   |                       |
| LED indicator          | 1   |   |                   |                       |
| Audio                  |   |   |                   |                       |
| Speaker                | 1x 3W   |   |                   |                       |
| Power                  |   |   |                   |                       |
| Power adapter          | 65W/19V   |   |                   |                       |
| Environment            |   |   |                   |                       |
| EMC & Safety           | FCC Class A, CE mark Class A, LVD                     |   |                   |                       |
| Operating temperature  | 0°C ~ 35°C (32°F ~ 95°F)                              |   |                   |                       |
| Storage temperature    | -20° ~ 60°C (-4°F ~ 140°F)                            |   |                   |                       |
| Humidity               | 20% - 85% RH non-condensing                           |   |                   |                       |
| Dust & Water proof     | IP 54 (front panel)                                   |   |                   |                       |
| Weight                 | 1.4 Kg  | 3.0 Kg                                    | 4.4 Kg            | 5.4 Kg                |
| Dimensions (W x D x H) | 277 x 181 x 41 mm                                     | 370 x 235 x 42 mm                         | 451 x 273 x 51 mm | 519 x 311 x 49mm      |
| Mounting               | VESA mount holes<br>75 x 75 mm                        | VESA mount holes 75 x 75 mm /100 x 100 mm |                   |                       |
| OS support             | Android 9.0   |   |                   |                       |

\*This specification is subject to change without prior notice.

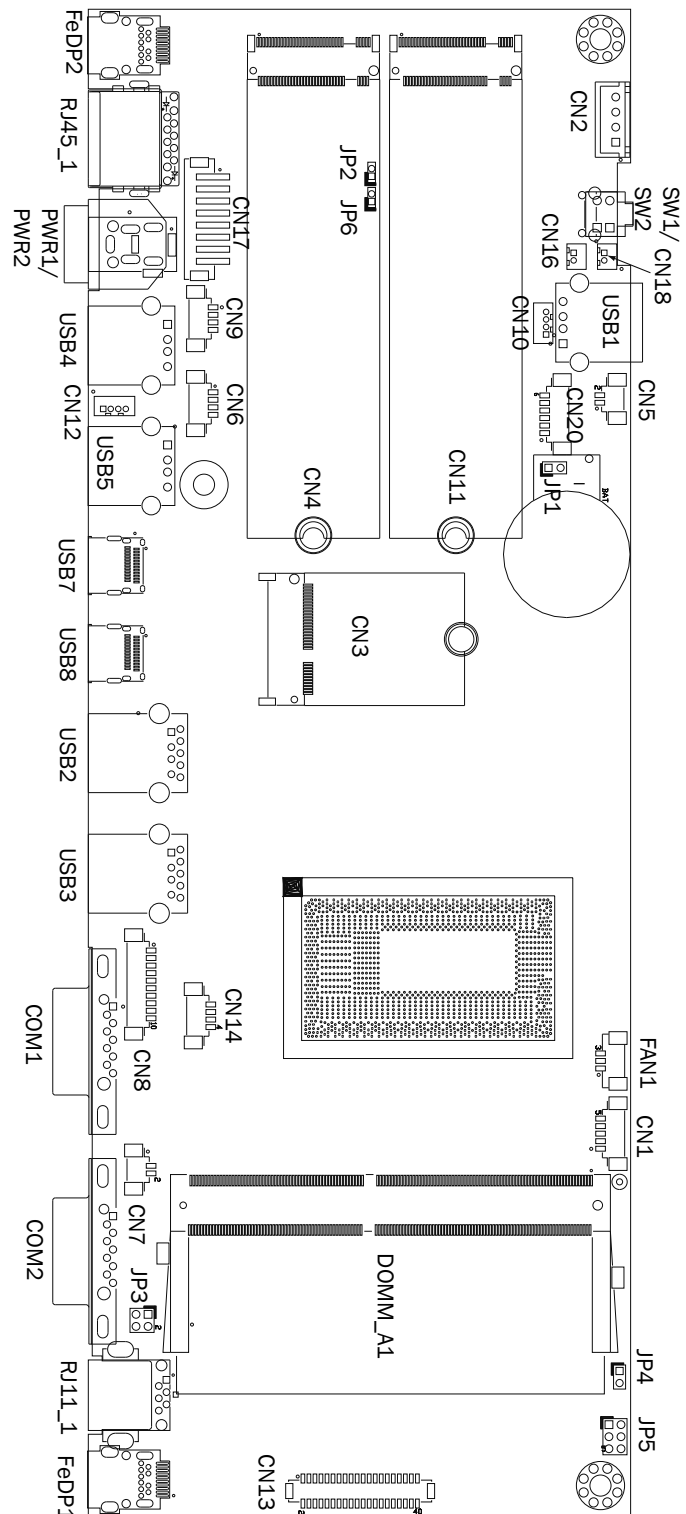
| Model Name             | K736  | K737                                      | K738              | K739                  |
|------------------------|---|---|-------------------|-----------------------|
| Mainboard              | F34   |   |                   |                       |
| CPU                    | Intel Elkhart Lake CPU J6412 2.60 GHz                       |   |                   |                       |
| Chipset                | CPU Integrated  |   |                   |                       |
| System memory          | 1x DDR4 2133MHz SO-DIMM 4GB                                 |   |                   |                       |
| LCD/Touch Panel        |   |   |                   |                       |
| LCD size               | 11.6" LED panel   | 15.6" LED panel                           | 18.5" LED panel   | 21.5" LED panel       |
| Brightness             | 300 nits  | 300 nits                                  | 250 nits          | 300 nits              |
| Maximal resolution     | 1920 x 1080 (full HD)                                       | 1920 x 1080 (full HD)                     | 1366 x 768 (HD)   | 1920 x 1080 (full HD) |
| Touch screen type      | True flat PCAP multi touch                                  |   |                   |                       |
| Storage                |   |   |                   |                       |
| Flash memory           | 1x M.2 SATA SSD module 128GB                                |   |                   |                       |
| Peripherals (Option)   |   |   |                   |                       |
| Webcam                 | 2M/5M (USB)   |   |                   |                       |
| MSR                    | 1 (USB)   |   |                   |                       |
| NFC                    | 1 (USB)   |   |                   |                       |
| 2D scanner             | 1 (USB)   |   |                   |                       |
| Fingerprint            | 1 (USB)   |   |                   |                       |
| Status light           | 1 (USB)   |   |                   |                       |
| Communication          |   |   |                   |                       |
| Wireless LAN (option)  | M.2 WiFi/BT module  | USB WiFi/BT dongle (a/b/g/n/ac)           |                   |                       |
| External I/O Ports     |   |   |                   |                       |
| USB Type A             | 2x USB3.0 / 2x USB2.0                                       |   |                   |                       |
| USB Type C             | 1x USB2.0 Type C (data only) / 1x USB3.0 Type C (data only) |   |                   |                       |
| Serial / COM           | 2x DB9 (Powered RS232) (default 0V; COM1 5V,COM2 12V)       |   |                   |                       |
| LAN                    | 1x RJ45   |   |                   |                       |
| Cash drawer            | 1x RJ11   |   |                   |                       |
| Mini display port      | 1 (Proprietary)   | 2 (Proprietary)                           |                   |                       |
| DC jack                | 4 pin DIN (with latch)                                      |   |                   |                       |
| Control/ Indicate      |   |   |                   |                       |
| Power button           | 1   |   |                   |                       |
| LED indicator          | 1   |   |                   |                       |
| Audio                  |   |   |                   |                       |
| Speaker                | 1x 3W   |   |                   |                       |
| Power                  |   |   |                   |                       |
| Power adapter          | 65W/19V   |   |                   |                       |
| Environment            |   |   |                   |                       |
| EMC & Safety           | FCC Class A, CE mark Class A, LVD                           |   |                   |                       |
| Operating temperature  | 0°C ~ 35°C (32°F ~ 95°F)                                    |   |                   |                       |
| Storage temperature    | -20° ~ 60°C (-4°F ~ 140°F)                                  |   |                   |                       |
| Humidity               | 20% - 85% RH non-condensing                                 |   |                   |                       |
| Dust & Water proof     | IP 54 (front panel)   |   |                   |                       |
| Weight                 | 1.4 Kg  | 3.0 Kg                                    | 4.4 Kg            | 5.4 Kg                |
| Dimensions (W x D x H) | 277 x 181 x 41 mm   | 370 x 235 x 42 mm                         | 451 x 273 x 51 mm | 519 x 311 x 49mm      |
| Mounting               | VESA mount holes<br>75 x 75 mm                              | VESA mount holes 75 x 75 mm /100 x 100 mm |                   |                       |
| OS support             | Windows 10 IoT Enterprise, Linux                            |   |                   |                       |

\*This specification is subject to change without prior notice.

# 6. Configuration

## 6-1. D84U Motherboard

### 6-1-1. Motherboard Layout



## 6-1-2. Connectors & Functions

| Connector          | Function                               |
|--------------------|--|
| CN1                | EC Debug                               |
| CN2                | SATA power connector                   |
| CN3                | M.2 E-KEY WIFI connector               |
| CN4/11             | M.2 M-KEY PCIE/SATA connector          |
| CN5                | Speaker R output                       |
| CN6                | S0/S5 LED & power button connector     |
| CN7                | Storage LED connectr                   |
| CN9/CN10/CN12/CN14 | Internal USB connector                 |
| CN16               | RTC battery Connector                  |
| CN17               | Wide range & power connector           |
| CN18               | Speaker L output                       |
| CN20               | Line-out/Mic-in connector              |
| PWR1/PWR2          | DC jack (2pin/4pin)                    |
| RJ11_1             | Cash drawer connector                  |
| RJ45_1             | LAN connector                          |
| SW1/SW2            | Power button                           |
| DIMM_A1            | DDR4 SO-DIMM                           |
| FAN1               | CPU FAN connector                      |
| FeDP1              | FeDP main display connector            |
| FeDP2              | FeDP 2 <sup>nd</sup> display connector |
| USB1/USB4/USB5     | USB2.0 connector                       |
| USB2/USB3          | USB3.0 connector                       |
| USB7               | USB-C full function connector          |
| USB8               | USB-C data only connector              |
| COM1/COM2          | COM port connector                     |
| COM3               | Internal COM port connector            |
| MINI_PCIE1         | MINI PCIE                              |
| JP1                | Audio Line-out setting                 |
| JP3                | Cash drawer power setting              |
| JP4                | CPU power setting                      |
| JP5 (1-2)(3-4)     | Speaker cable setting                  |
| JP5(5-6)           | Speaker watt setting                   |

## 6-1-3. Jumper Setting

### Audio Line-out Setting

| Function            | JP1                       |
|---------------------|---------------------------|
| ▲ Stereo            | <div>1</div> <div>2</div> |
| Reserved (line-out) | <div>1</div> <div>2</div> |

### Cash Drawer Power Setting

| Function | JP3  |
|----------|--|
| ▲ +19V   | <div>1</div> 3<br><div>2</div> 4                       |
| +12V     | <div>1</div> <div>3</div><br><div>2</div> <div>4</div> |

### Speaker Watt Setting

| Function | JP5  |
|----------|--|
| 2W       | <div>1</div> 3 5<br><div>2</div> 4 6                       |
| ▲ 3W     | <div>1</div> 3 <div>5</div><br><div>2</div> 4 <div>6</div> |

### Speaker Cable Setting

| Function  | JP5  |
|-----------|--|
| ▲ L=0.58m | <div>1</div> 3<br><div>2</div> 4                       |
| L=2.0m    | <div>1</div> 3<br><div>2</div> 4                       |
| M/B       | <div>1</div> <div>3</div><br><div>2</div> <div>4</div> |

## LCD ID Setting

To set the panel ID, please insert the jumper on the FeDP to LVDS board.

| Panel# | Resolution  | JP3  |
|--------|-------------|--|
| 0      | Reserved    | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 1      | 800 x 600   | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 2      | 800 x 600   | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 3      | 1024 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 4      | 1024 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 5      | 1366 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 6      | 1366 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 7      | 1024 x 600  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 8      | 1280 x 1024 | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 9      | 1440 x 900  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 15     | 1920 x 1080 | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |

1

 Jumper open      

1

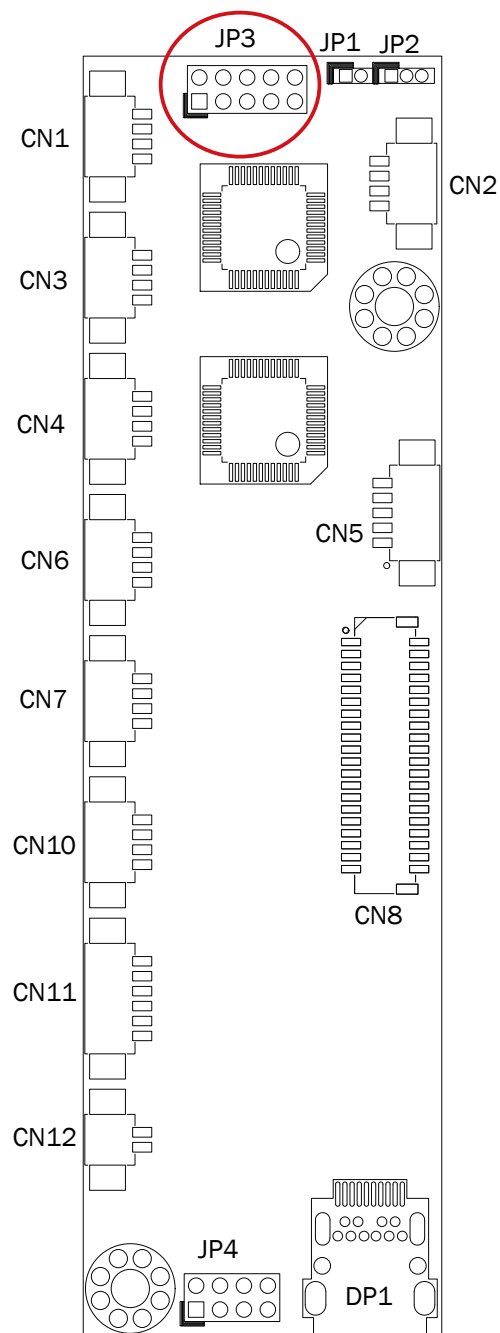
 Jumper short  

2

 Jumper open      

2

 Jumper short



### Panel Backlight Current Setting

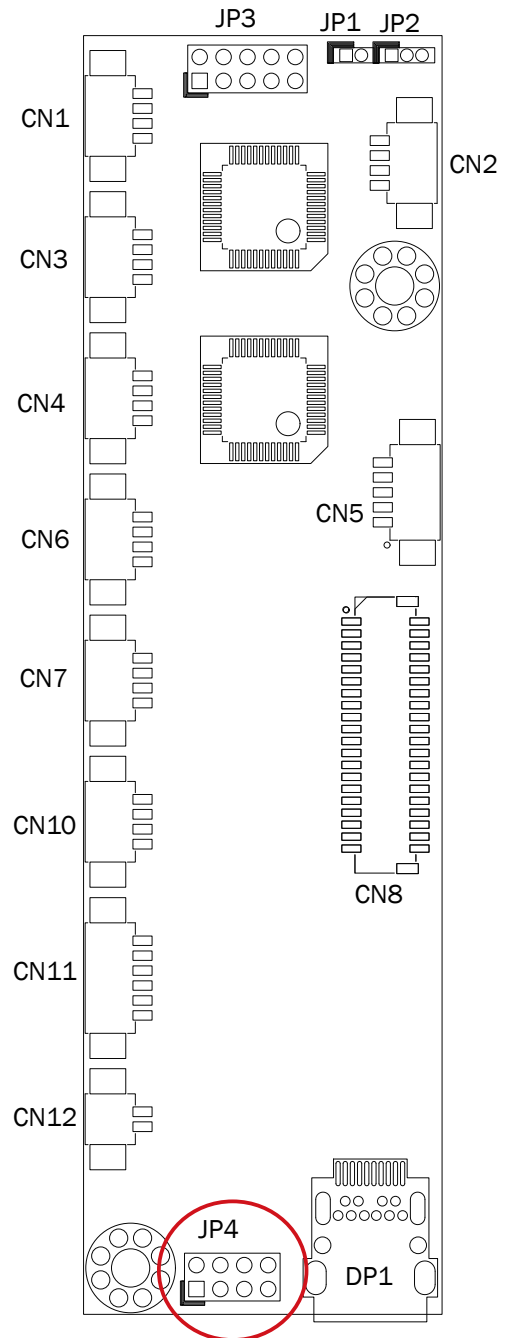
| LED current | JP4                |
|-------------|--------------------|
| 200mA       | 1 3 5 7<br>2 4 6 8 |
| 240mA       | 1 3 5 7<br>2 4 6 8 |
| 280mA       | 1 3 5 7<br>2 4 6 8 |
| 320mA       | 1 3 5 7<br>2 4 6 8 |
| 360mA       | 1 3 5 7<br>2 4 6 8 |
| 400mA       | 1 3 5 7<br>2 4 6 8 |
| 420mA       | 1 3 5 7<br>2 4 6 8 |
| 460mA       | 1 3 5 7<br>2 4 6 8 |
| 500mA       | 1 3 5 7<br>2 4 6 8 |

1  
2

Jumper open

1  
2

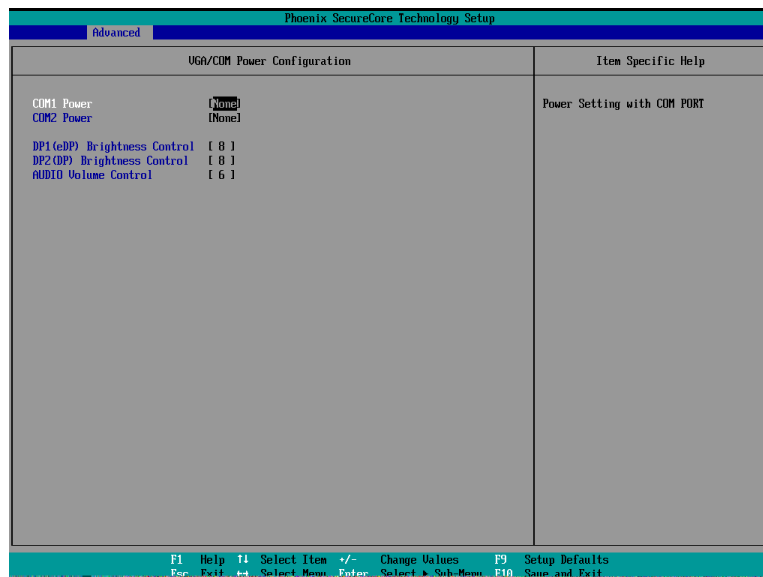
Jumper short



## COM1/COM2 Power Setting

COM1, COM2 can be set to provide power to your serial device.

The voltage can be set to +5V or +12V in the BIOS.

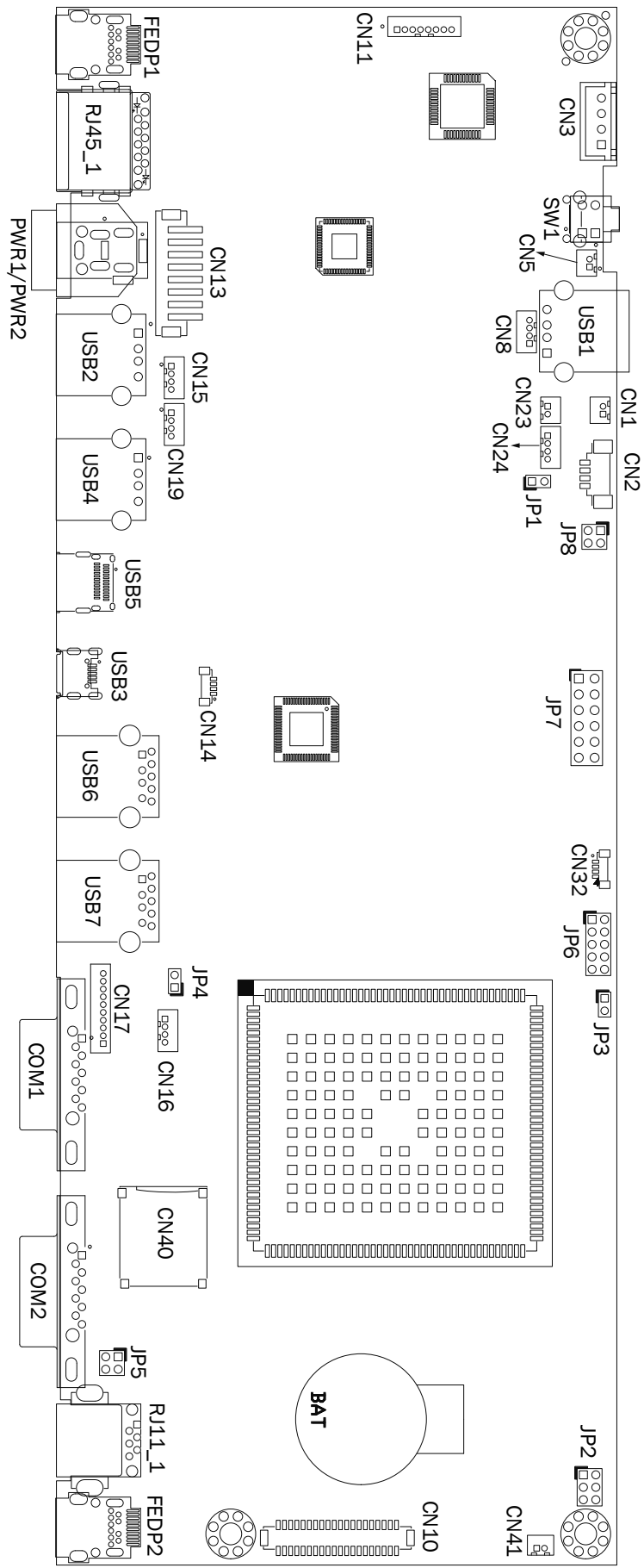


1. Power on the system, and press the <DEL> key when the system is booting up to enter the BIOS Setup utility.
2. Select the Advanced tab.
3. Select **VGA/COM Power Configuration** Ports and press <Enter> to go to display the available options.
4. To enable the power, select COM1 ,COM2 Power setting and press <Enter>. Select Power and press <Enter>. Save the change by pressing F10.



# 6-2. F14 Motherboard

## 6-2-1. Motherboard Layout



## 6-2-2. Connectors & Functions

| Connector      | Function                          |
|----------------|-----------------------------------|
| CN1            | Speaker_R connector               |
| CN2            | Power LED connector               |
| CN3            | SATA power connector              |
| CN5            | Speaker_L connector               |
| CN8/15/16/19   | USB port (internal) connector     |
| CN10           | 40pin external connector          |
| CN11           | MCU debug connector               |
| CN13           | Wide range connector              |
| CN17           | COM3 connector                    |
| CN18           | WIFI 5G connector                 |
| CN21           | WIFI 2.4G connector               |
| CN23           | Analog Mic in connector           |
| CN24           | Line out connector                |
| CN32           | Digital mic connector             |
| CN40           | Micro SD card connector           |
| PWR1           | DC Jack (2 pin) connector         |
| PWR2           | DC Jack (4 pin) connector         |
| RJ11_1         | Cash drawer connector             |
| RJ45_1         | LAN connector                     |
| USB1/USB2/USB4 | USB 2.0 connector                 |
| USB3           | System USB debug connector        |
| USB5           | USB type C                        |
| USB6/USB7      | USB 3.0 connector                 |
| FeDP1          | 2 <sup>nd</sup> display connector |
| FeDP2          | Main display connector            |
| SW1            | Power button                      |
| COM1/COM2      | RS-232 connector                  |
| JP1            | Speaker R/L setting               |
| JP2            | Speaker watt setting              |
| JP5            | Cash drawer power setting         |
| JP8            | PoE watt setting                  |

## 6-2-3. Jumper Setting

### Speaker R/L Setting

| Function                     | JP1                       |
|------------------------------|---------------------------|
| R/L separated (two speakers) | <div>1</div> <div>2</div> |
| ▲ R/L mix(single speaker)    | <div>1</div> <div>2</div> |

### Speaker Watt Setting

| Function           | JP2                               |
|--------------------|-----------------------------------|
| ▲ with FeDP cable  | <div>1 3 5</div> <div>2 4 6</div> |
| without FeDP cable | <div>1 3 5</div> <div>2 4 6</div> |

### PoE Mode Setting

| Function        | JP2                               |
|-----------------|-----------------------------------|
| with PoE module | <div>1 3 5</div> <div>2 4 6</div> |

### PoE Watt Setting

| Function | JP8                           |
|----------|-------------------------------|
| ▲ 40W    | <div>1 3</div> <div>2 4</div> |
| 51W      | <div>1 3</div> <div>2 4</div> |
| 62W      | <div>1 3</div> <div>2 4</div> |

### Cash Drawer Power Setting

| Function | JP5                           |
|----------|-------------------------------|
| ▲ +19V   | <div>1 3</div> <div>2 4</div> |
| +12V     | <div>1 3</div> <div>2 4</div> |

1

2

 Jumper open   
 

1

2

 Jumper short

▲ = Manufacturer Default Setting

## LCD ID Setting

To set the panel ID, please insert the jumper on the FeDP to LVDS board.

| Panel# | Resolution  | JP3  |
|--------|-------------|--|
| 0      | Reserved    | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 1      | 800 x 600   | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 2      | 800 x 600   | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 3      | 1024 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 4      | 1024 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 5      | 1366 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 6      | 1366 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 7      | 1024 x 600  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 8      | 1280 x 1024 | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 9      | 1440 x 900  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 15     | 1920 x 1080 | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |

1

 Jumper open      

1

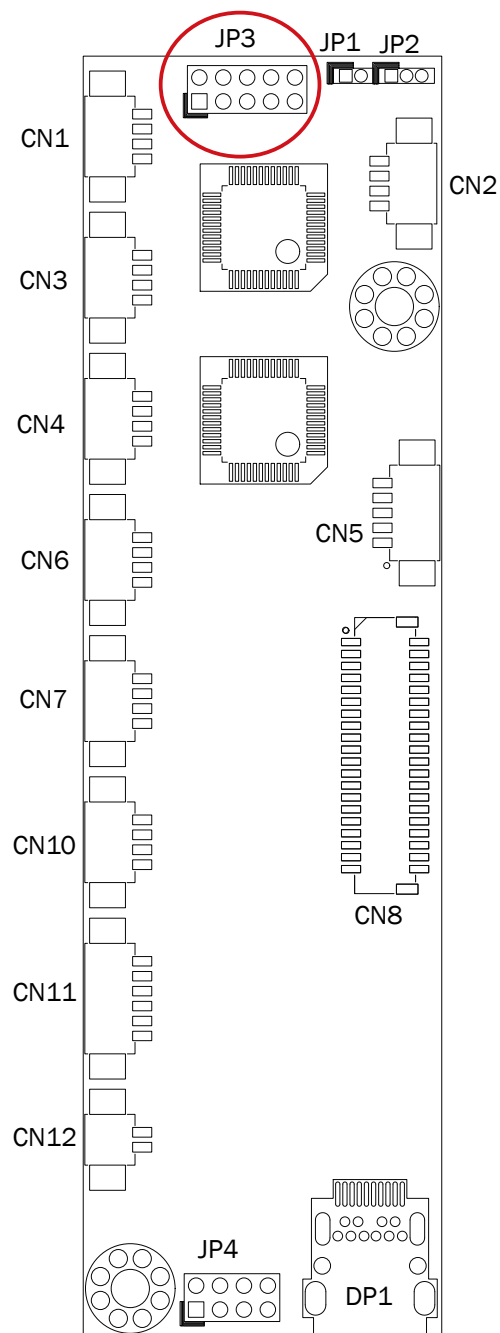
 Jumper short  

2

 Jumper open      

2

 Jumper short



### Panel Backlight Current Setting

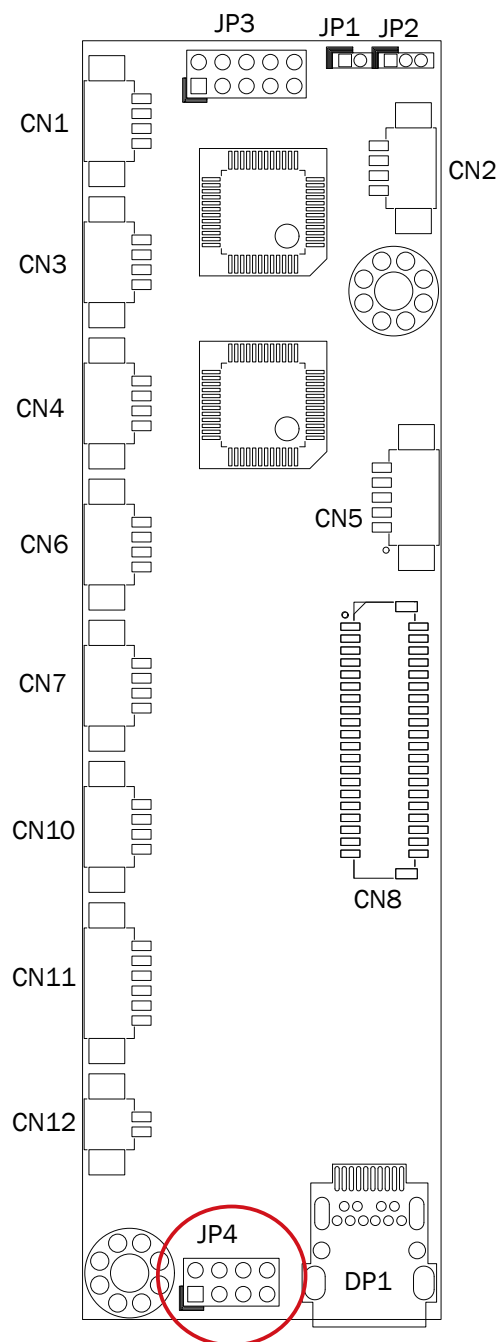
| LED current | JP4                |
|-------------|--------------------|
| 200mA       | 1 3 5 7<br>2 4 6 8 |
| 240mA       | 1 3 5 7<br>2 4 6 8 |
| 280mA       | 1 3 5 7<br>2 4 6 8 |
| 320mA       | 1 3 5 7<br>2 4 6 8 |
| 360mA       | 1 3 5 7<br>2 4 6 8 |
| 400mA       | 1 3 5 7<br>2 4 6 8 |
| 420mA       | 1 3 5 7<br>2 4 6 8 |
| 460mA       | 1 3 5 7<br>2 4 6 8 |
| 500mA       | 1 3 5 7<br>2 4 6 8 |

1  
2

Jumper open

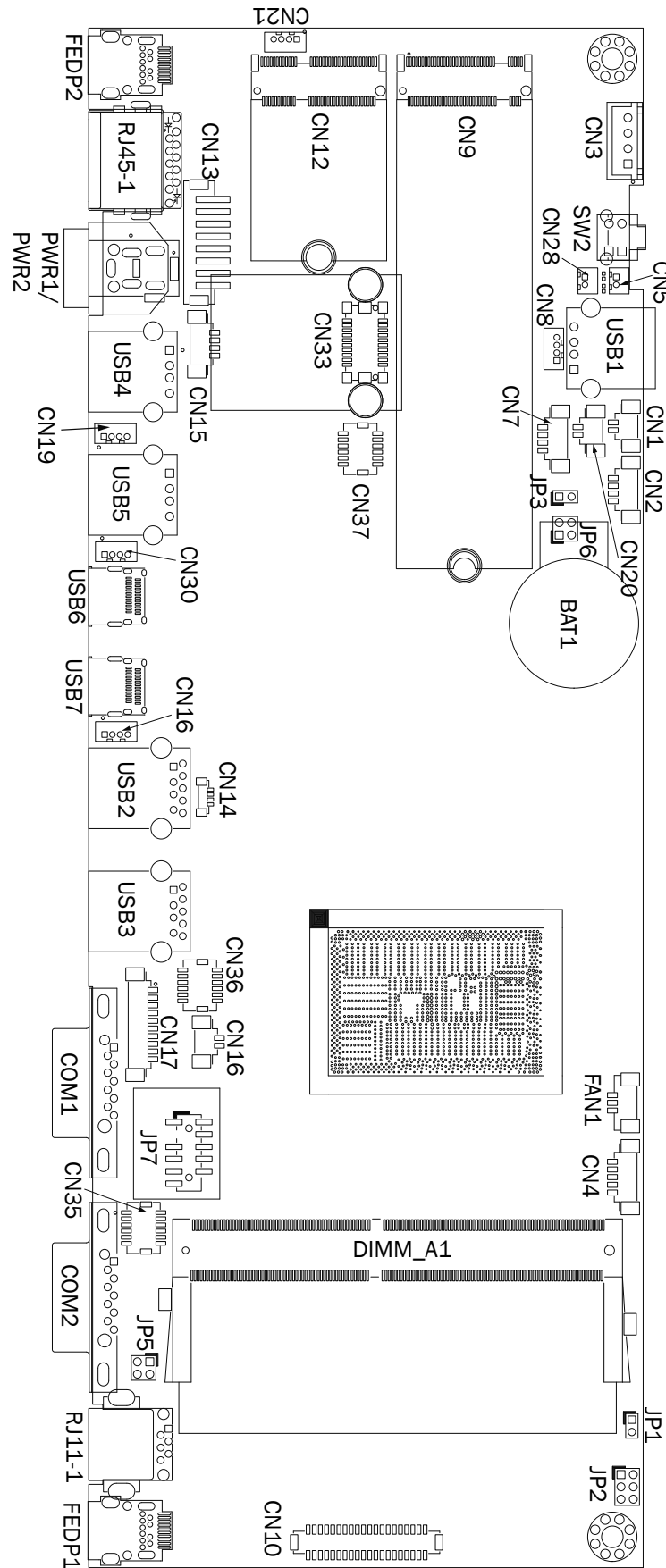
1  
2

Jumper short



# 6-3. F34 Motherboard

## 6-3-1. Motherboard Layout



## 6-3-2. Connectors & Functions

| Connector                        | Function                               |
|----------------------------------|--|
| CN1                              | Speaker R output                       |
| CN2                              | S0/S5 LED & power button connector     |
| CN3                              | SATA power connector                   |
| CN4                              | EC Debug                               |
| CN5                              | Speaker L output                       |
| CN7                              | Earphone connector                     |
| CN8/CN15/CN16/CN19/<br>CN29/CN30 | Internal USB connector                 |
| CN9                              | M.2 M-KEY PCIE/SATA connector          |
| CN10                             | Internal eDP connector                 |
| CN12                             | M.2 E-KEY WIFI connector               |
| CN13                             | Wide range & power connector           |
| CN18                             | Storage LED connector                  |
| CN20                             | Mic-out connector                      |
| CN28                             | RTC battery                            |
| CN33                             | OOB BD connector                       |
| CN35/CN36                        | USB COM BD connector                   |
| CN37                             | USB LAN BD connector                   |
| PWR1/PWR2                        | DC jack (2pin/4pin)                    |
| RJ11_1                           | Cash drawer connector                  |
| RJ45_1                           | LAN connector                          |
| SW1/SW2                          | Power button                           |
| DIMM_A1                          | DDR4 SO-DIMM                           |
| FAN1                             | CPU FAN connector                      |
| FeDP1                            | FeDP main display connector            |
| FeDP2                            | FeDP 2 <sup>nd</sup> display connector |
| USB1/USB4/USB5                   | USB2.0 connector                       |
| USB2/USB3                        | USB3.0 connector                       |
| USB6                             | USB-C data only connector (USB3.0/2.0) |
| USB7                             | USB-C data only connector (USB2.0)     |
| COM1/COM2                        | COM port connector                     |
| COM3 (CN17)                      | Internal COM port connector            |
| JP2                              | Speaker watt setting                   |
| JP3                              | Audio Line-out setting                 |
| JP5                              | Cash drawer power setting              |
| JP7                              | TPM BD connector                       |

### 6-3-3. Jumper Setting

#### Speaker Watt Setting

| Function  | JP2                              |
|-----------|----------------------------------|
| ▲ L=0.58m | 1 3<br>2 4                       |
| L=2.0m    | <div>1 3</div> <div>2 4</div>    |
| M/B       | 1 <div>3</div><br>2 <div>4</div> |

#### Audio Line-out Setting

| Function            | JP3                       |
|---------------------|---------------------------|
| ▲ Stereo            | <div>1</div> <div>2</div> |
| Reserved (line-out) | <div>1</div> <div>2</div> |

#### Cash Drawer Power Setting

| Function | JP5                              |
|----------|----------------------------------|
| ▲ +19V   | <div>1 3</div> <div>2 4</div>    |
| +12V     | 1 <div>3</div><br>2 <div>4</div> |

▲ = Manufacturer Default Setting

1

2

 Jumper open    

1

2

 Jumper short



## LCD ID Setting

To set the panel ID, please insert the jumper on the FeDP to LVDS board.

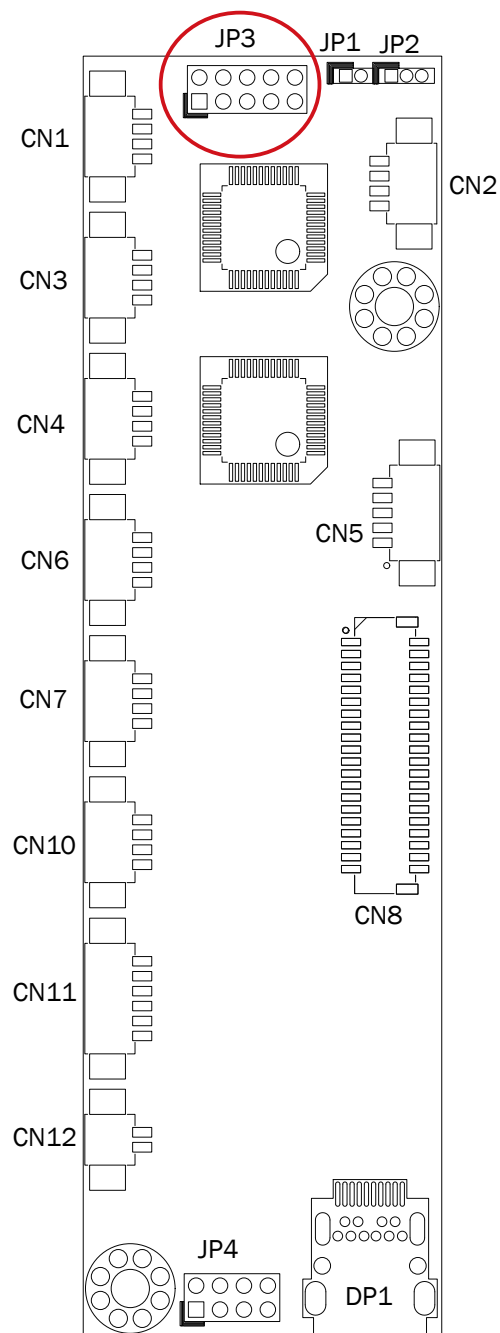
| Panel# | Resolution  | JP3  |
|--------|-------------|--|
| 0      | Reserved    | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 1      | 800 x 600   | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 2      | 800 x 600   | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 3      | 1024 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 4      | 1024 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 5      | 1366 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 6      | 1366 x 768  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 7      | 1024 x 600  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 8      | 1280 x 1024 | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 9      | 1440 x 900  | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |
| 15     | 1920 x 1080 | <div>1 3 5 7 9</div> <div>2 4 6 8 10</div> |

1  
2

Jumper open

1  
2

Jumper short



### Panel Backlight Current Setting

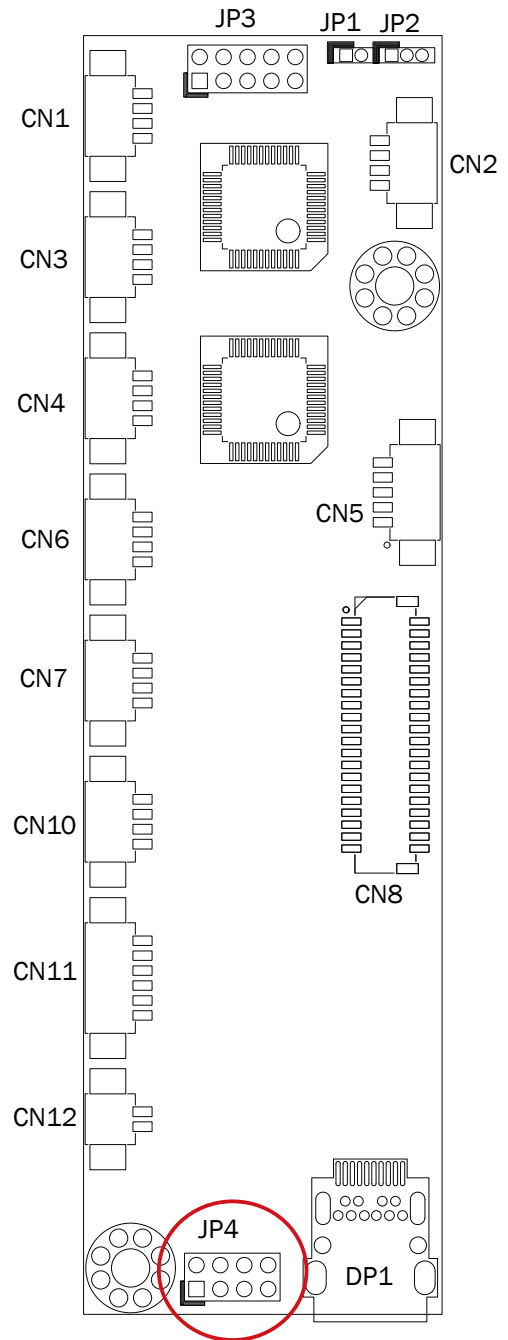
| LED current | JP4                |
|-------------|--------------------|
| 200mA       | 1 3 5 7<br>2 4 6 8 |
| 240mA       | 1 3 5 7<br>2 4 6 8 |
| 280mA       | 1 3 5 7<br>2 4 6 8 |
| 320mA       | 1 3 5 7<br>2 4 6 8 |
| 360mA       | 1 3 5 7<br>2 4 6 8 |
| 400mA       | 1 3 5 7<br>2 4 6 8 |
| 420mA       | 1 3 5 7<br>2 4 6 8 |
| 460mA       | 1 3 5 7<br>2 4 6 8 |
| 500mA       | 1 3 5 7<br>2 4 6 8 |

1  
2

Jumper open

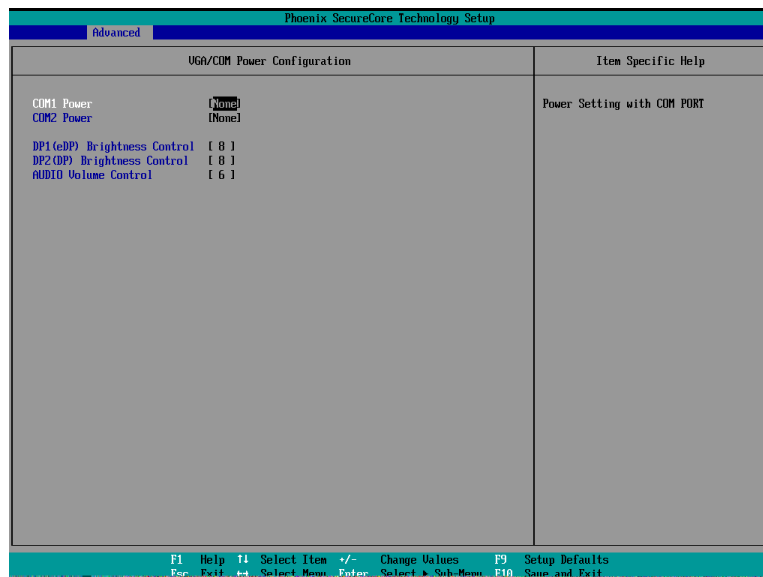
1  
2

Jumper short



## COM1/COM2 Power Setting

COM1, COM2 can be set to provide power to your serial device.  
The voltage can be set to +5V or +12V in the BIOS.



1. Power on the system, and press the <DEL> key when the system is booting up to enter the BIOS Setup utility.
2. Select the Advanced tab.
3. Select **VGA/COM Power Configuration** Ports and press <Enter> to go to display the available options.
4. To enable the power, select COM1 ,COM2 Power setting and press <Enter>. Select Power and press <Enter>. Save the change by pressing F10.