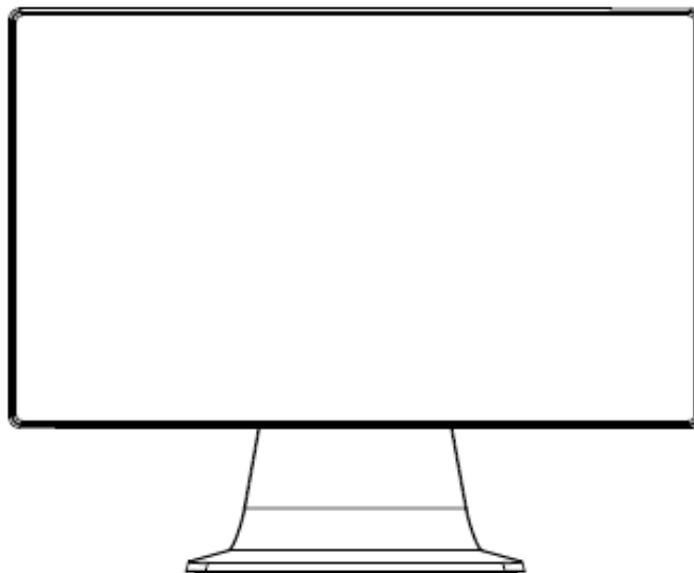


USER MANUAL

VERSION 1.0

PT58 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.

WARNING

- CAUTION - Risk of explosion if the battery is replaced by an incorrect type.
- Replacement of a battery with an incorrect type that can defeat a safeguard (for example, in the case of some lithium battery types).
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;
A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

Revision History

Version	Change Date	Change Content
V1.0	JUL. 2023	First release

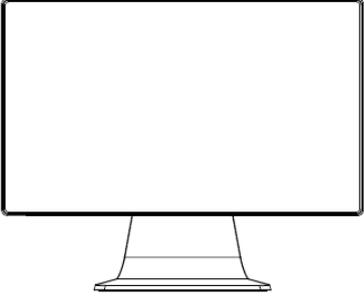
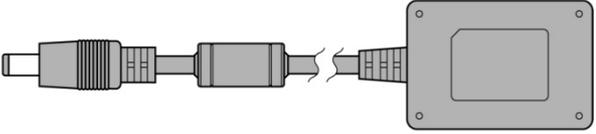
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Packing List

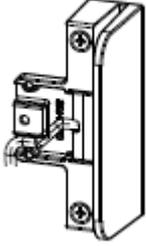
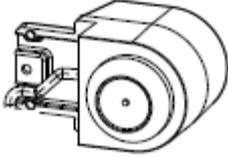
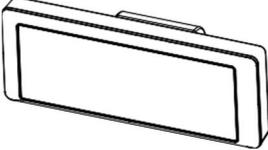
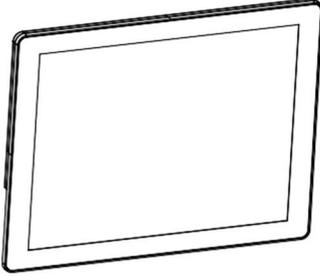
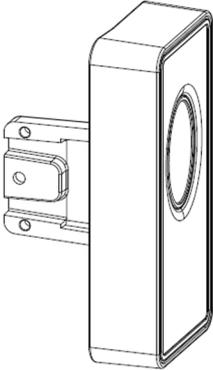
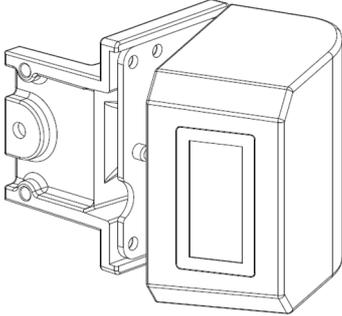
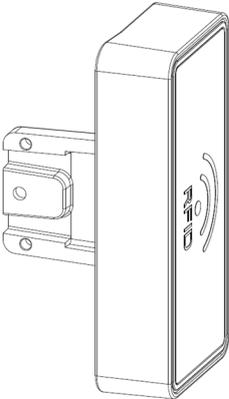
Package contents

【 PT58 】

	
PT58 System	Power adapter
	
Power cord	RJ48 to DB9*2

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

Optional Accessory

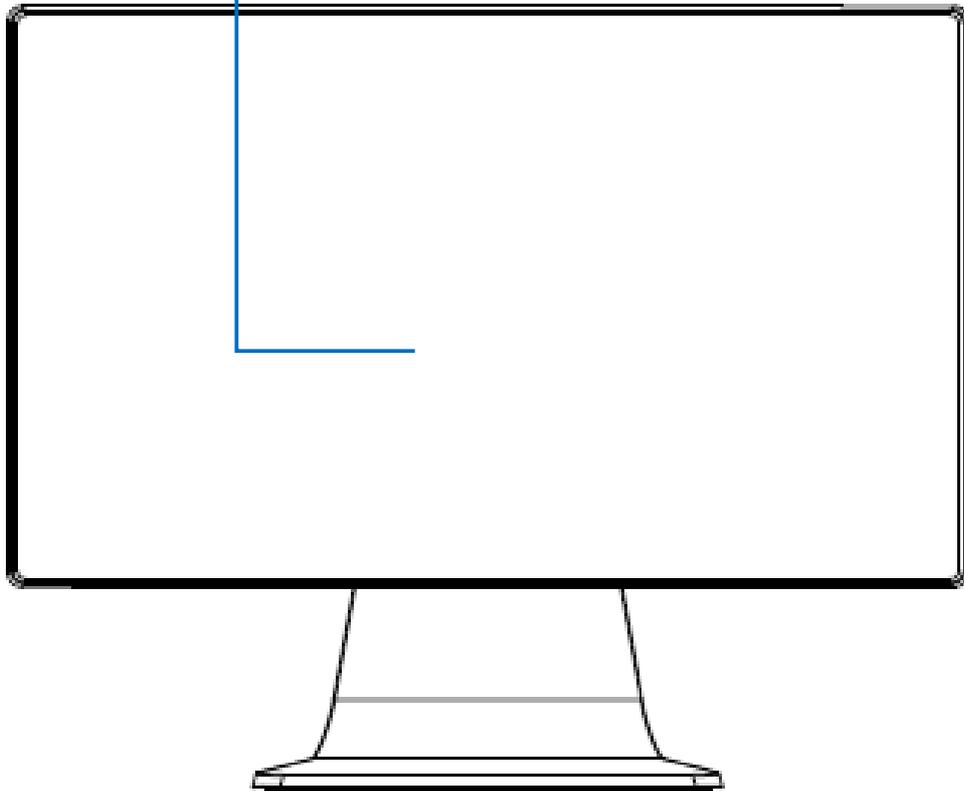
	
MSR Module	I-Button Module
	
Customer Display (LCM Module)	Second Display
	
Fingerprint	Barcode Scanner
	
RFID	

Getting to know your PT58

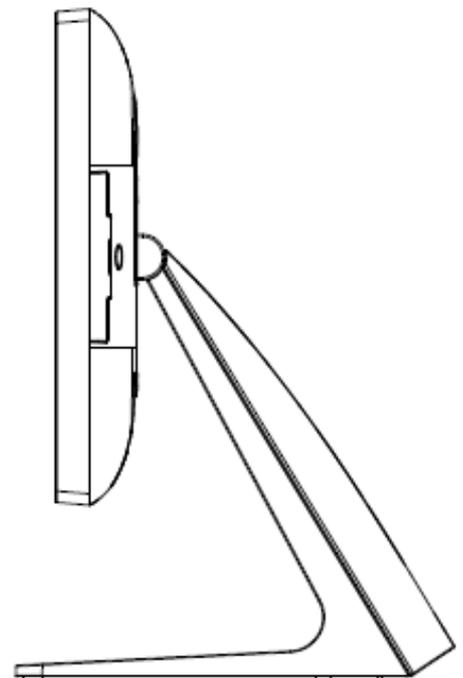
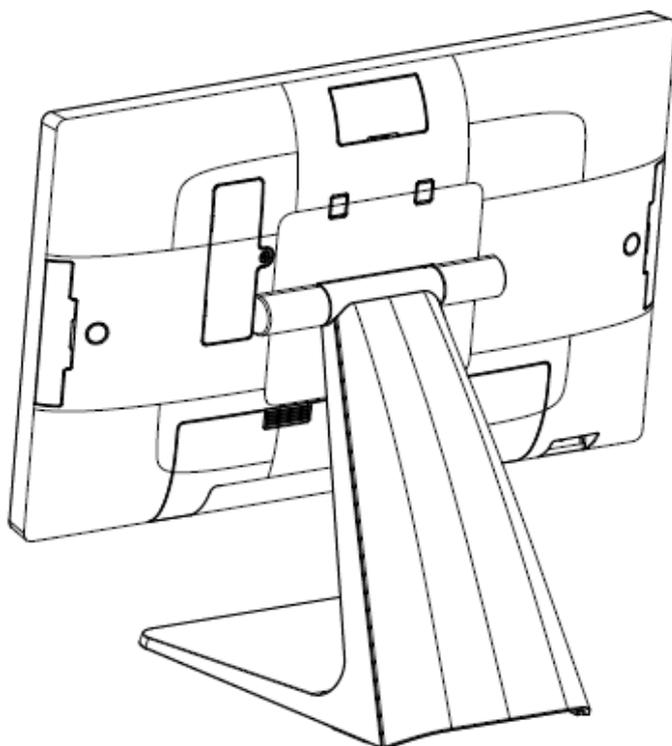
*all peripherals are depends on customer's demand

Front view (PT58)

True flat PCAP
touch panel



Side View



*all peripherals are depends on customer's demand

Rear view

Cover for
- LCM/2nd Display (USB interface) mounting

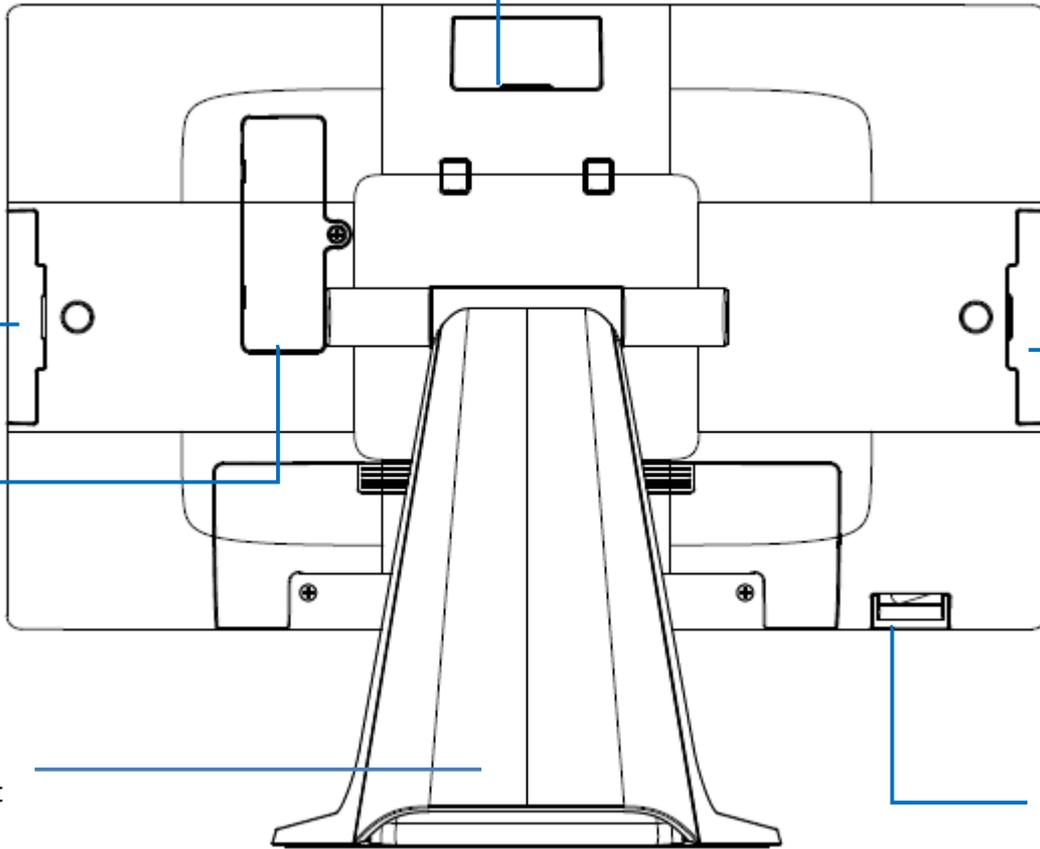
Reader Cover (R)
for USB Peripherals

Reader Cover (L)
for USB Peripherals

Cover for
M.2 SSD

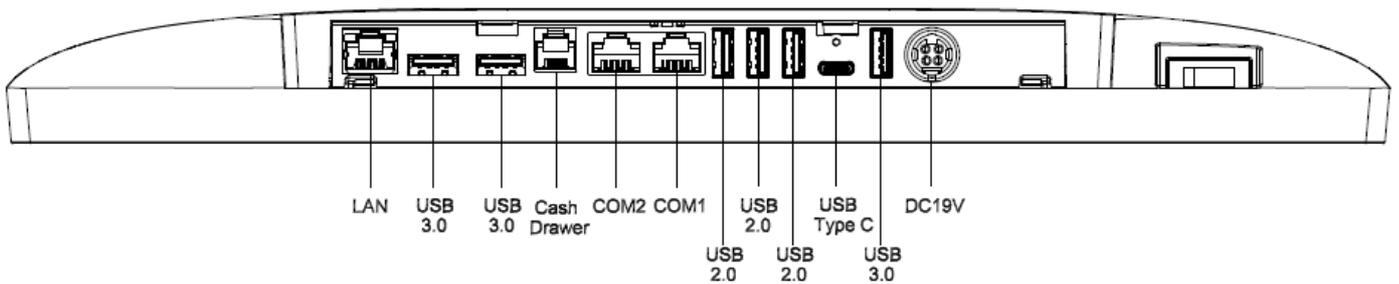
Cable
management slot

Power button



*all peripherals are depends on customer's demand

I/O interface



PT58 Specification

Motherboard	PE24	
Processor	Intel® Celeron® Processor J6412 (1.5M Cache, up to 2.60 GHz)	
Graphic	Chipset integrated	
System memory	1 x 4GB DDR4 SO-DIMM memory (Max. support up to16GB)	
Storage device	1x M.2 Gen 3 x 4 storage	
LCD size	15.6" 16:9	
Brightness	250 nits	
Resolution	1920 x 1080	
Touch screen	True-Flat PCAP multi-touch screen	
External IO ports	USB	3 x USB 3.1 / 3 x USB 2.0
	Serial Port	2 x COM (RJ48 connectors that support DC+0/5/12v by BIOS setting, default setting is 0v)
	LAN	1 x Gigabit Ethernet by RJ-45
	Cash drawer	1 x RJ11 (supports 2 cash drawers), DC 24V/12V by Jumper setting
	DC-Jack	1 x DC-jack with lock
	Power button	1
Internal Speaker	2 x 2W	
LED Indicator	1 for Power LED	
Type C	1 x USB-C support DP+DP	
Bus Expansion	1 x M.2 M Key for SSD 1 x M.2 E Key for WIFI	
Power adaptor	65 Watts, Voltage:+19VDC	
Peripherals (Option)	<ul style="list-style-type: none"> - 3-Track MSR, USB interface - 2x20 character LCM, USB interface - 10.1" Resolution 1280 x 800 (16:10 wide screen), USB interface - I-Button reader, USB interface - RFID USB Type, 13.56MHZ - Fingerprint USB Type - 2D Scanner USB Type 	
Material	Die-Cast aluminum main unit with plastic covers	
Certificates	CE, FCC, LVD	
Dimensions (W x H x D mm)	361 x 191 x 300 (mm)	
Weight	3.6KG	
Environment	Operating temp.	0 ~ 40°C
	Storage Temp.	-20°C ~ 60°C
	Humidity	20% ~ 80% RH non-condensing
OS support	Windows 10/11 (64 bit)	

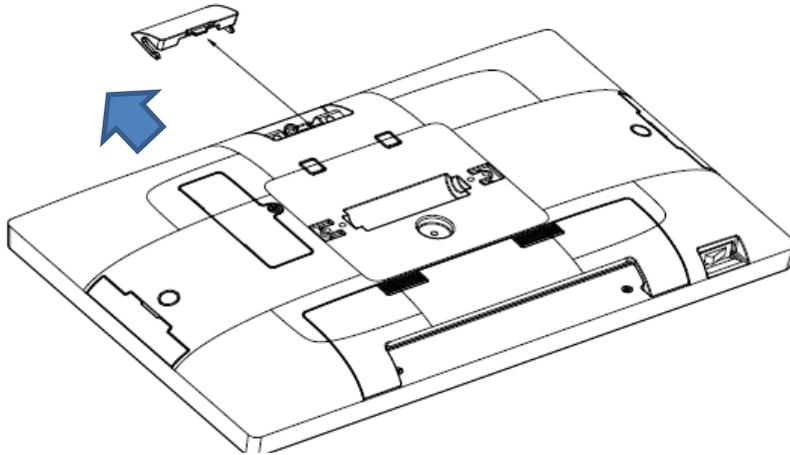
Model Name	PT58
Motherboard	PE26
Processor	Intel® Core™ i5-1235U Processor 12M Cache, up to 4.40 GHz Intel® Core™ i3-1215U Processor 10M Cache, up to 4.40 GHz
Graphic	Chipset integrated
System memory	1 x SO-DIMM DDR5 slot, 8GB RAM as standard. Max. memory support up to 32GB
Storage device	1x M.2 Gen 3 x 4 storage
LCD size	15.6" TFT LCD
Brightness	250 nits
Resolution	1920 x 1080
Touch screen	True-Flat PCAP multi-touch screen
USB	3 x USB 3.0, 3 x USB 2.0
Serial Port	2x COM (COM1/2: RJ48 support DC+0/5/12v by BIOS setting, default setting is 0v)
LAN	1 x Gigabit Ethernet by RJ-45
Cash drawer	1 x RJ11 (Support DC+12v or +24v (default)) port supports 2 cash drawers
Type C	Type C (PD+DP)
DC-Jack	1 x Mini Din 4P (DC+19v only)
Power button	1
Internal Speaker	HD Audio, 2W Speaker x 2
LED Indicator	1 for Power LED
Power adaptor	External adapter, DC Model : 90 Watts, Voltage:+19VDC 4.73 Amax
Certificates	CE/FCC/LVD
Operating temp.	0°C ~ 40°C, 10% ~ 90% RH, non-condensing
OS support	Windows10 IOT, Windows 11 IOT
Peripherals	
10.1" 2nd display, USB I/F	
2x 20 LCM, USB I/F	
3 Track MSR, USB I/F	
iButton Reader, USB I/F	
RFID Reader, USB I/F	
Fingerprint Reader, USB I/F	
2D Scanner, USB I/F	

*Specification may subject to change without prior notice.

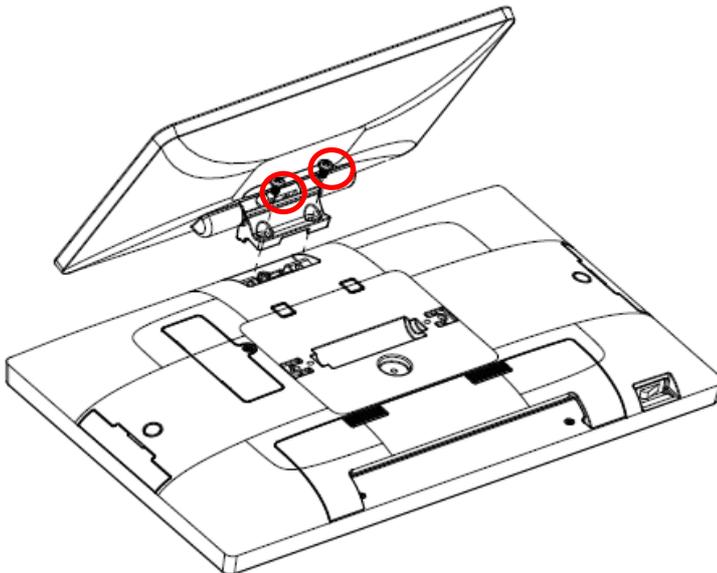
Peripheral Installation

(Technicians are required to perform this work)

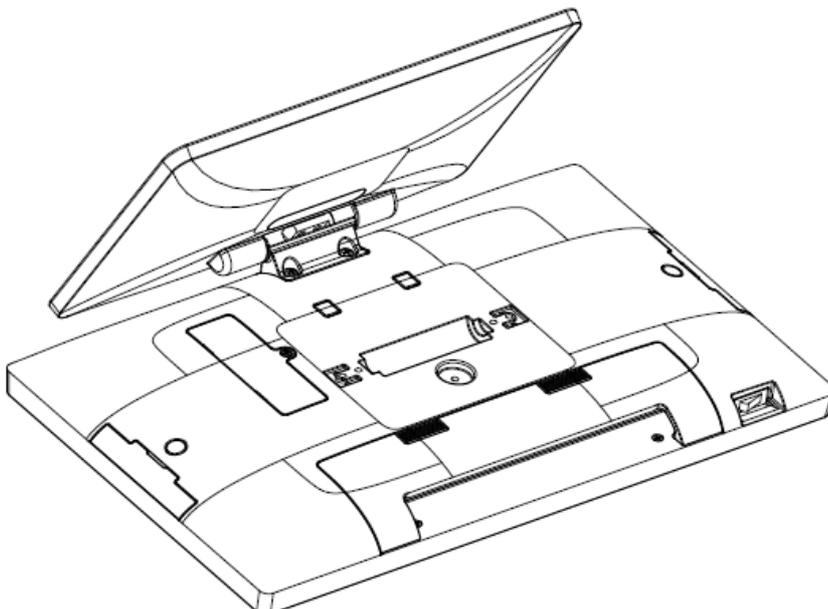
Install the 2nd display**



1. Place the system face down, make sure not to scratch the touch screen
2. Pull the cover upwards to release it from the system

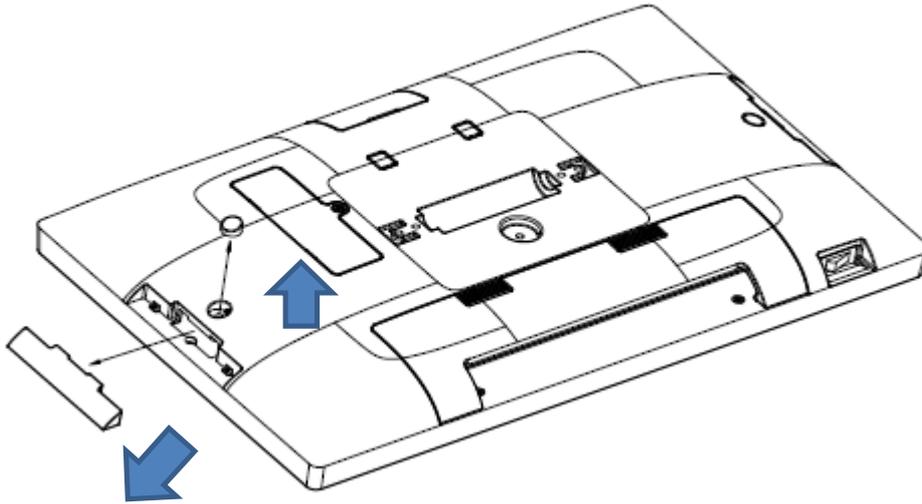


3. Connect the display cable to USB
4. Attach the 2nd display module to system by fastening the screws (x2)

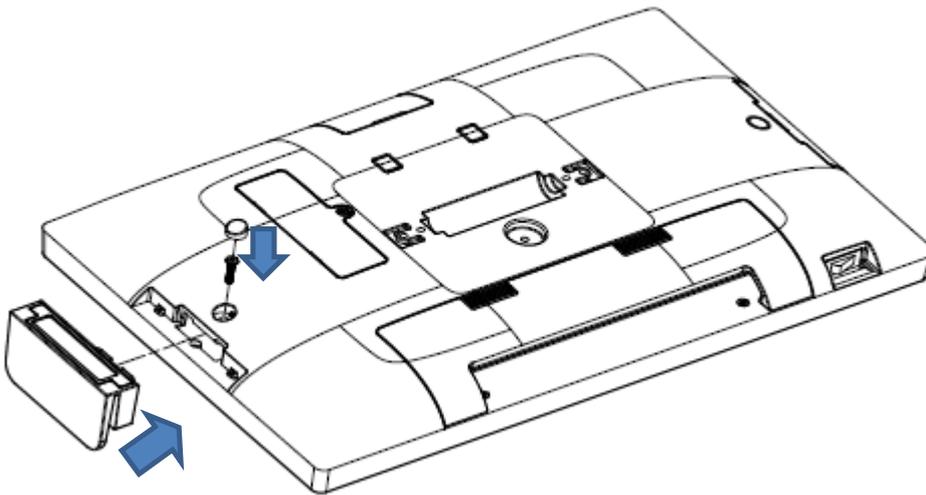


**Repeat the procedure above if you want to install Customer Display (LCM) module

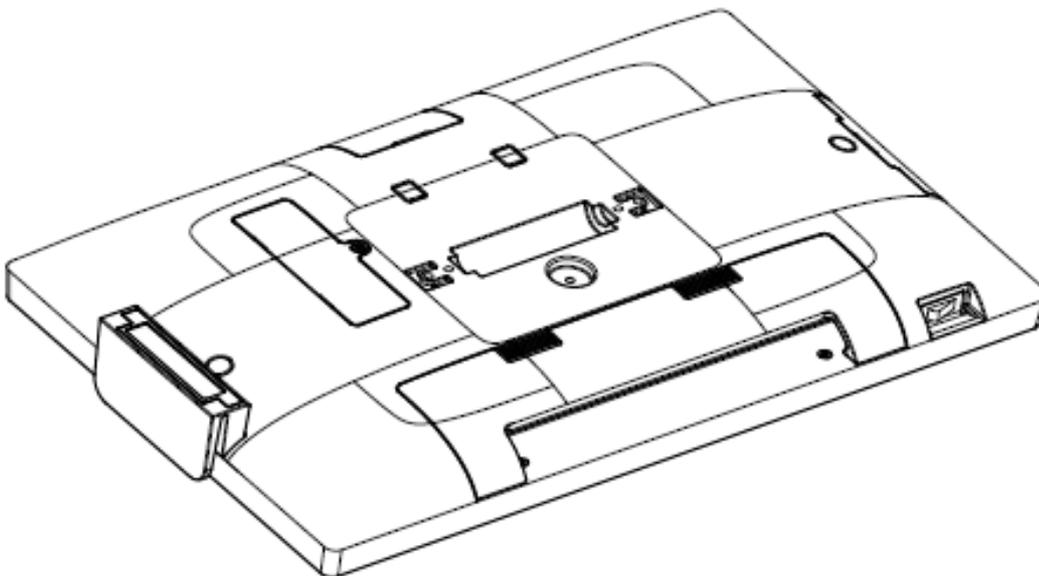
Install the MSR reader module*



1. Place the system face down, make sure not to scratch the touch screen
2. Slide out the side cover and rubber first to release the reader installation position from the system

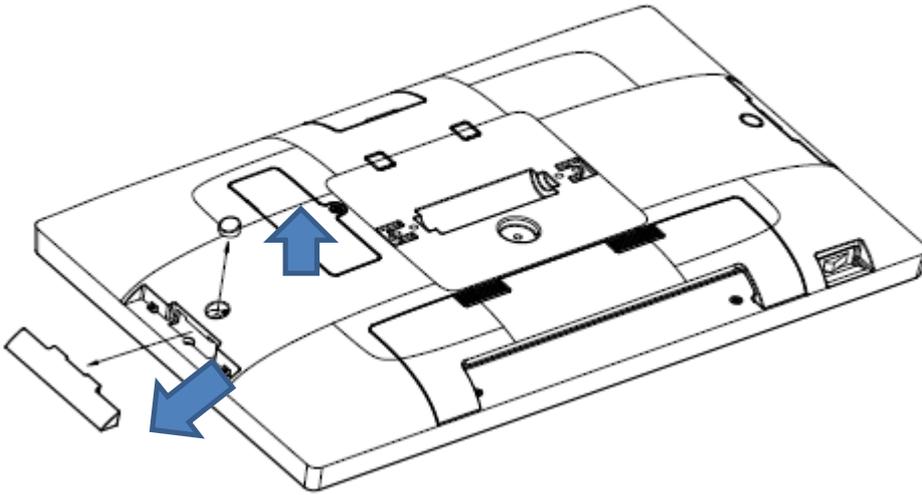


3. Insert the MSR module in place and connect the cable from system
4. Then fasten the screw to secure it to the system
5. Replace the rubber back

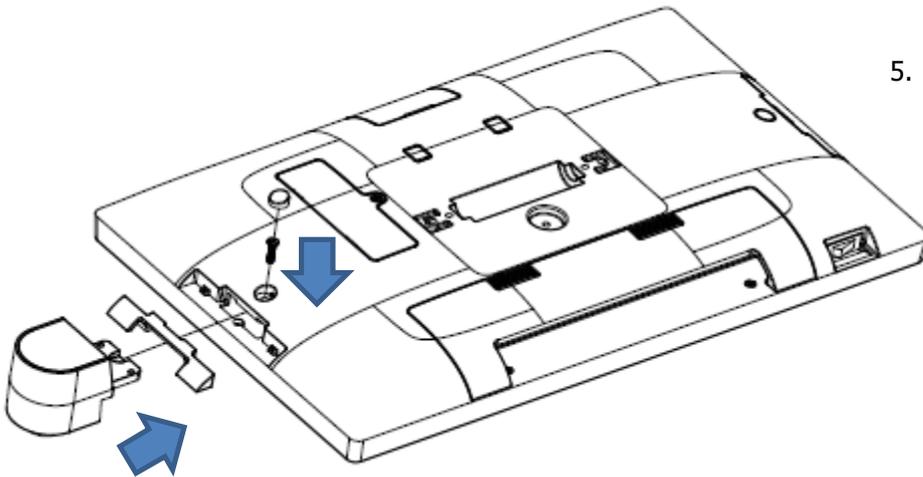


*Repeat the procedure above if you want to install the peripheral on the other side of system

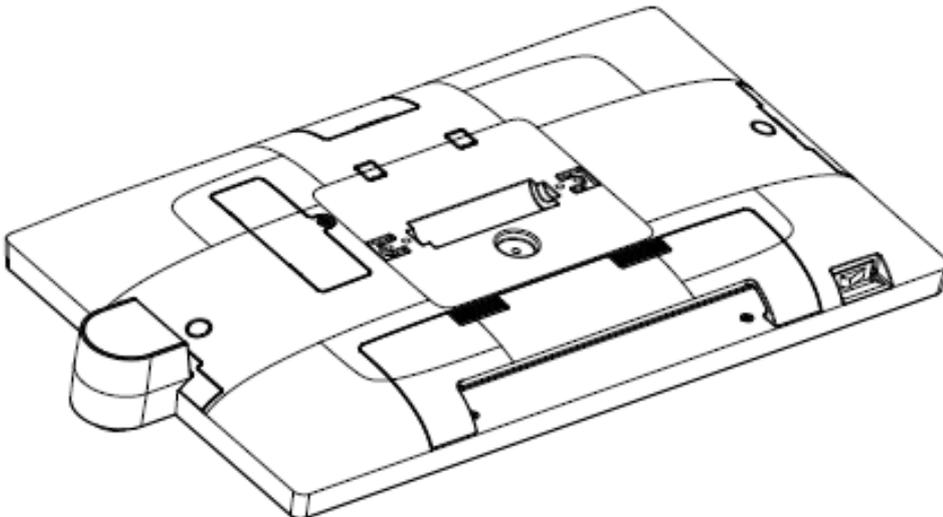
Install the I-Button reader module*



1. Place the system face down, make sure not to scratch the touch screen
2. Slide out the side cover and rubber first to release the reader installation position from the system

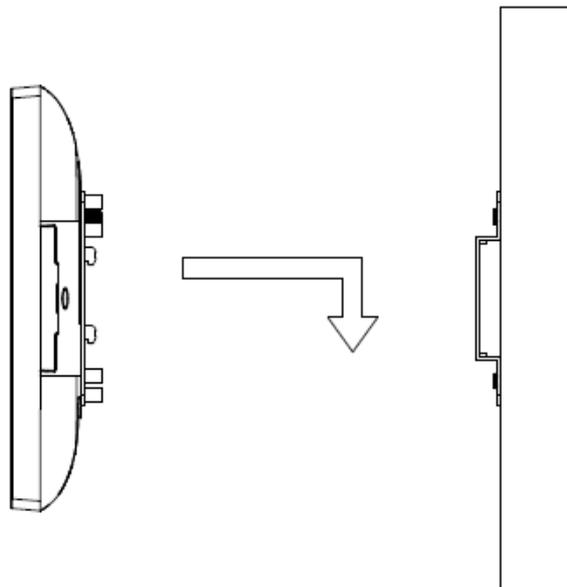
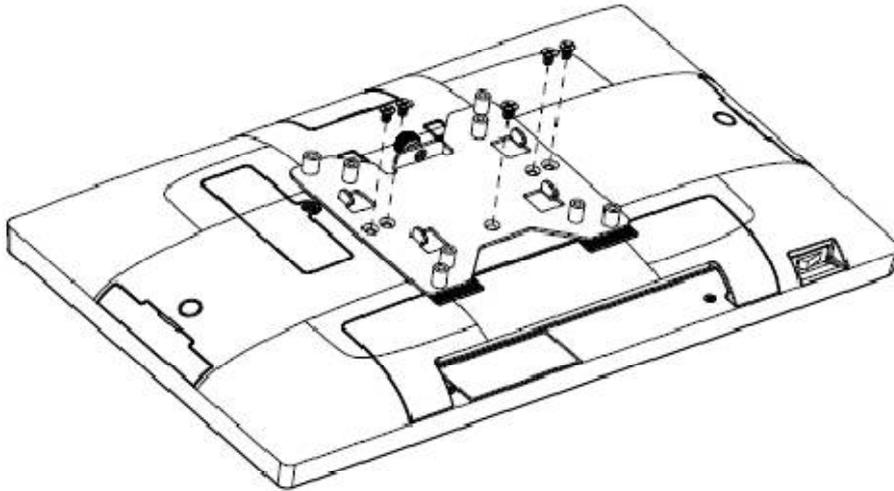
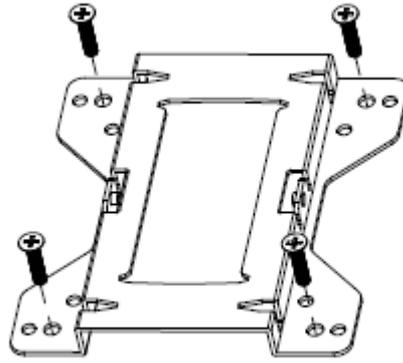


3. Insert the I-Button module in place and connect the cable from system
4. Then fasten the screw to secure it to the system
5. Replace the rubber back

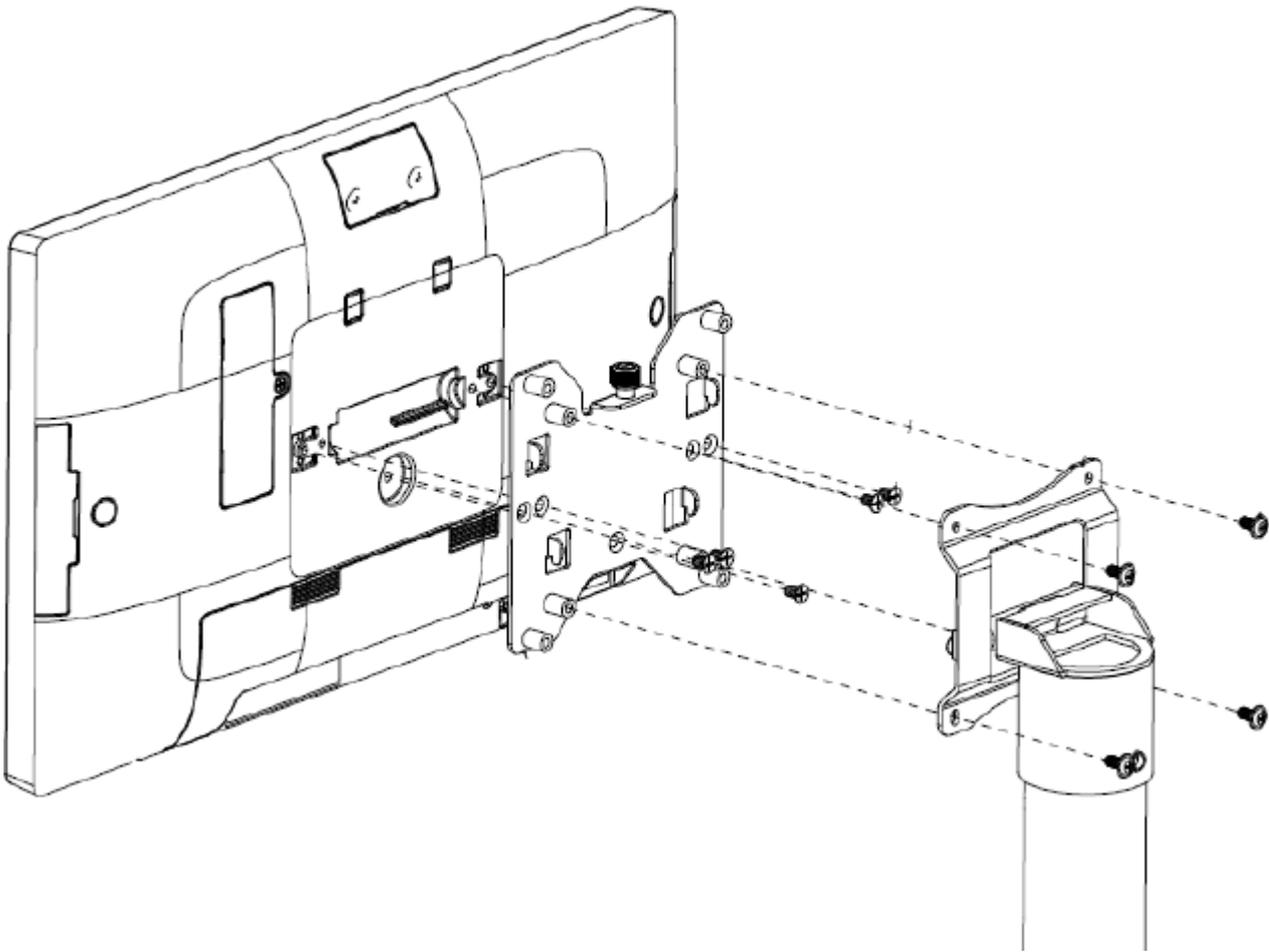


*Repeat the procedure above if you want to install the peripheral on the other side of system

Install the Wall Mount Kit



Install the Pole Mount Kit



Warning:

Never exceed the maximum load capacities of 30Kgs (66lbs).

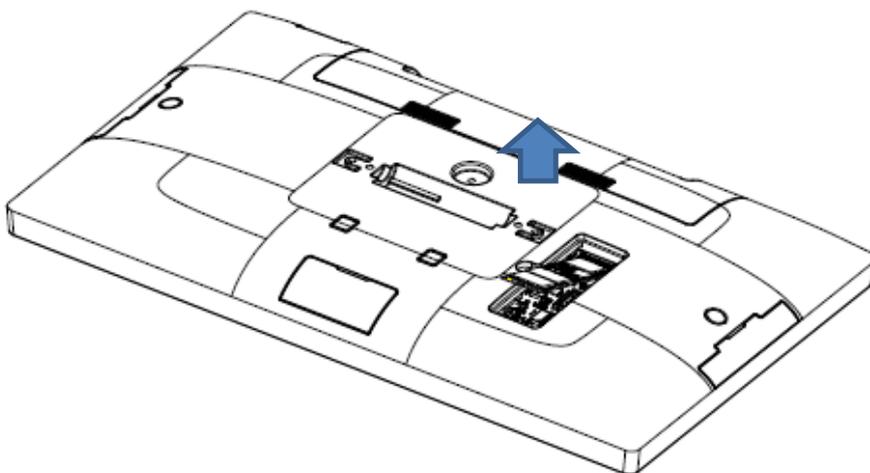
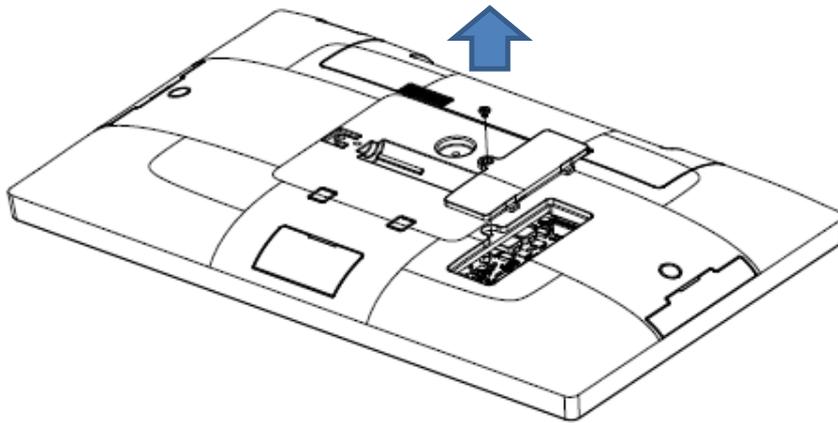
If mounting to wood wall studs, make sure that mounting screws are anchored into the center of the studs.

Failure to secure Wall-Mount Brackets with the thumb screw may cause display to fall off if hit accidentally.

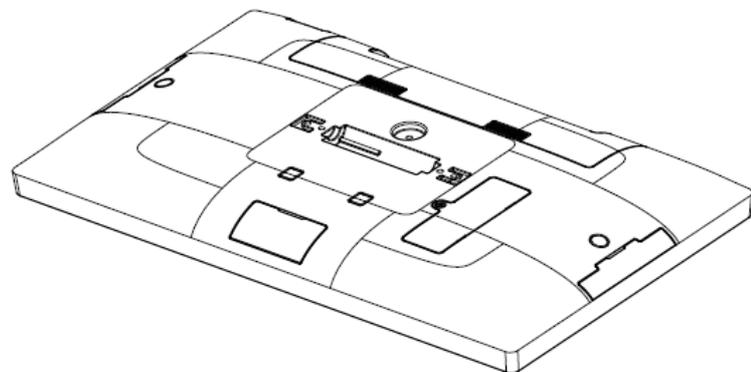
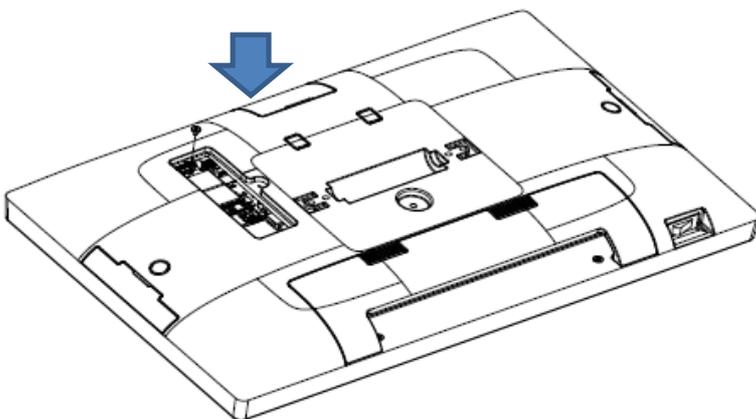
M.2 SSD Module Replacement

(Technicians are required to perform this work)

M.2 SSD Module Replacement



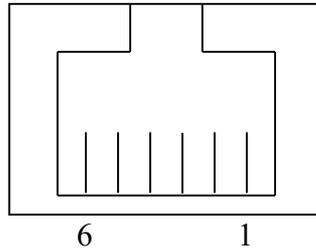
1. Place the system face down, make sure not to scratch the touch screen
2. Pull the cover upwards to release it from the system
3. Release the screw (x1) to replace M.2 SSD
4. Then fasten the screw to secure it from M/B
5. Replace the cover back



Install a Cash Drawer (PE24)

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

Cash Drawer Pin Assignment



Pin	6	5	4	3	2	1
Signal	GND	DOUT bit1	12V/19V	DIN bit0	DOUT bit0	GND

Register Location: A05h

Attribute: Read / Write

Size: 8bit

Bit0 (Read) : Cash Drawer "DIN0" pin output control. = 1: the Cash drawer closed or no Cash Drawer = 0: the Cash Drawer opened

Bit1(Read) : Cash Drawer "DIN1" pin output control. = 1: the Cash drawer closed or no Cash Drawer = 0: the Cash Drawer opened

Bit 2 (Write): Cash Drawer "DOUT0" pin output control. = 1: opening the cash drawer = 0: allow close the cash drawer

Bit 3 (Write): Cash Drawer "DOUT1" pin output control. = 1: opening the cash drawer = 0: allow close the cash drawer

Bit4-7: Reserved

```
//open cashdrawer 1
```

```
LONG u88HData = 0;
```

```
u88HData = IpFnDII_Get_IO(0xA05);
```

```
u88HData = setbit(u88HData, 2);
```

```
IpFnDII_Set_IO(0xA05, u88HData);
```

```
Sleep(200);
```

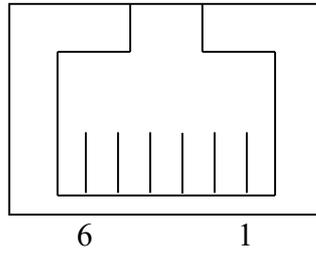
```
u88HData = clrbit(u88HData, 2);
```

```
IpFnDII_Set_IO(0xA05, u88HData);
```

Install a Cash Drawer (PE26)

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

Cash Drawer Pin Assignment



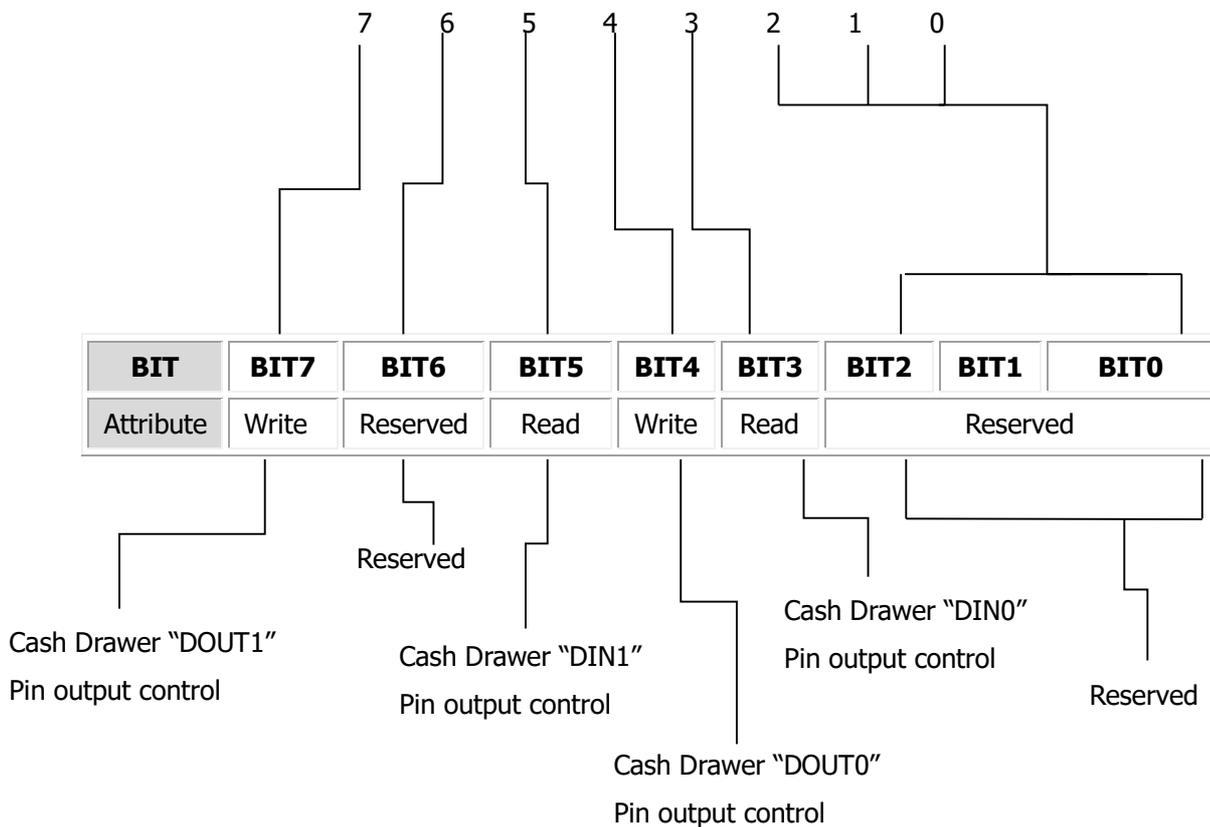
Pin	6	5	4	3	2	1
Signal	GND	DOUT bit1	12V/19V	DIN bit0	DOUT bit0	GND

Cash Drawer Controller I/O Address

Register Location: 482h

Attribute: Read / Write

Size: 8bit



Cash drawer bit define should be follow DIN0/DOUT0 for cash drawer 1 DIN1/DOUT1 for cash drawer 2:

Bit 0: Reserved

Bit 1: Reserved

Bit 2: Reserved

Bit 3: Cash Drawer "DIN0" pin output control.

= 1: the Cash drawer closed or no Cash Drawer

= 0: the Cash Drawer opened

Bit 4: Cash Drawer "DOUT0" pin output control.

= 1: opening the cash drawer

= 0: allow close the cash drawer

Bit 5: Cash Drawer "DIN1" pin output control.

= 1: the Cash drawer closed or no Cash Drawer

= 0: the Cash Drawer opened

Bit 6: Reserved

Bit 7: Cash Drawer "DOUT1" pin output control.

= 1: opening the cash drawer

= 0: allow close the cash drawer

Note: Please follow the cash drawer control signal to control the cash drawer

Cash Drawer Control Command Example

Use Debug.EXE program under DOS

Command	Cash Drawer
O 482 10	Open cash drawer
O 482 00	Allow to close

- Set the I/O address 482h bit4 =1 (opening cash drawer by "DOUT bit0" pin control)
- Set the I/O address 482h bit4 =0 (allow to close cash drawer)

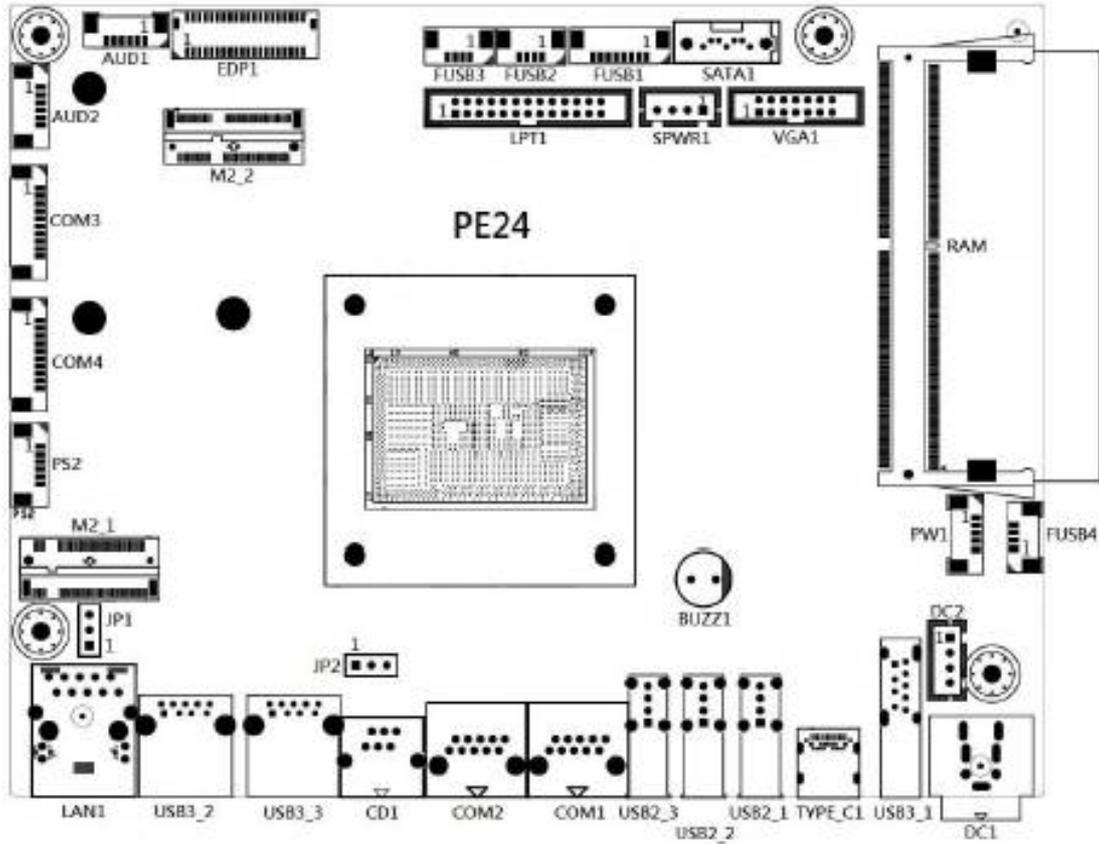
Command	Cash Drawer
I 482	The status of cash drawer

- The I/O address 482h bit3 =1 (Cash Drawer is opened or not exist)
- The I/O address 482h bit3 =0 (Cash Drawer is closed)

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

Motherboard information

Motherboard Layout (PE24)



Connectors & Jumper Setting

COM1 / 2 : RJ48 for COM1/2 Port

PIN1	N/C	PIN2	DCD
PIN3	DSR	PIN4	RX
PIN5	RTS	PIN6	TX
PIN7	CTS	PIN8	DTR
PIN9	GND	PIN10	RI

COM3 / 4 : Pin Header for COM3/4 Port

PIN1	DCD	PIN2	RX
PIN3	TX	PIN4	DTR
PIN5	GND	PIN6	DSR
PIN7	RTS	PIN8	CTS
PIN9	RI	PIN10	+5V

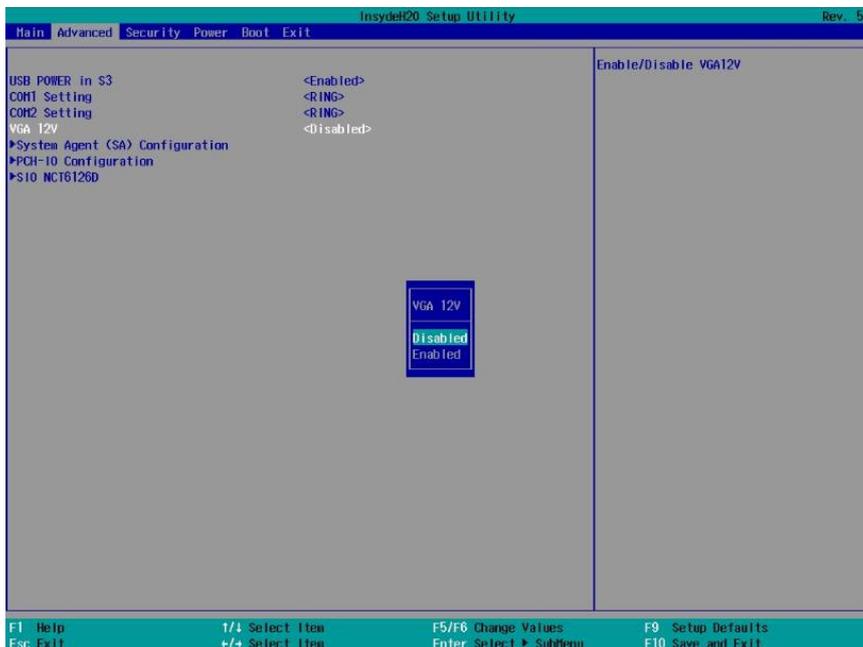
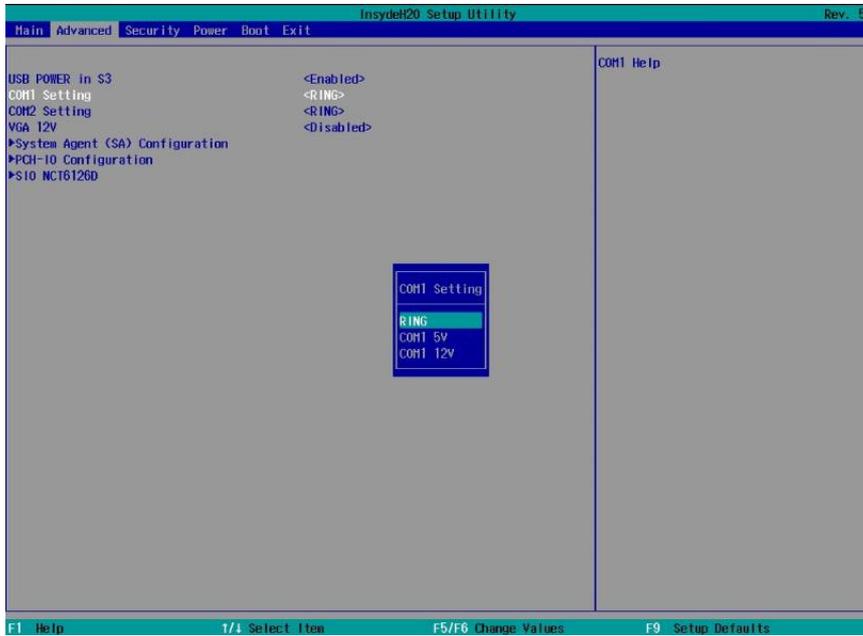
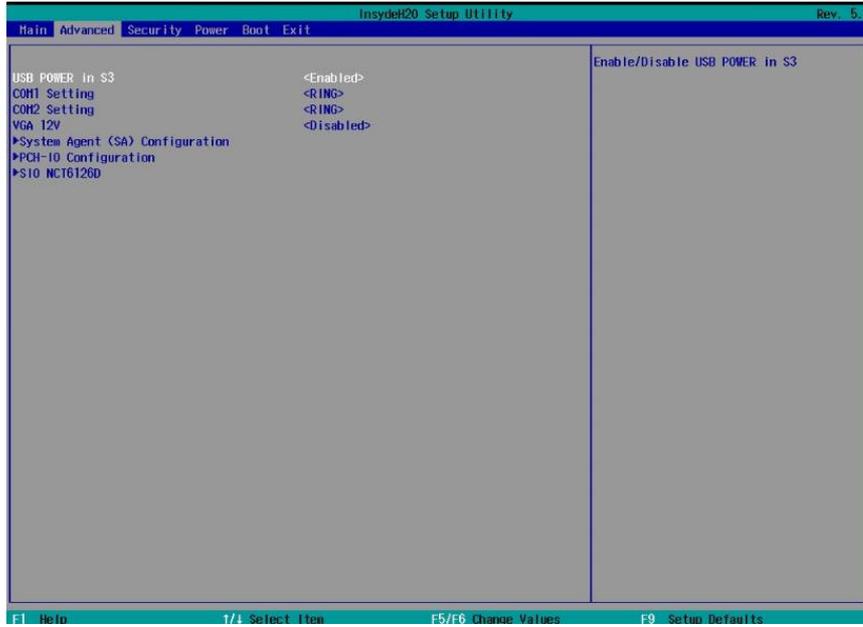
JP1 : Clear CMOS Setup

JP1	Description
1-2	Normal operation
2-3	Clear CMOS

JP2 : Cash Drawer Voltage Setup

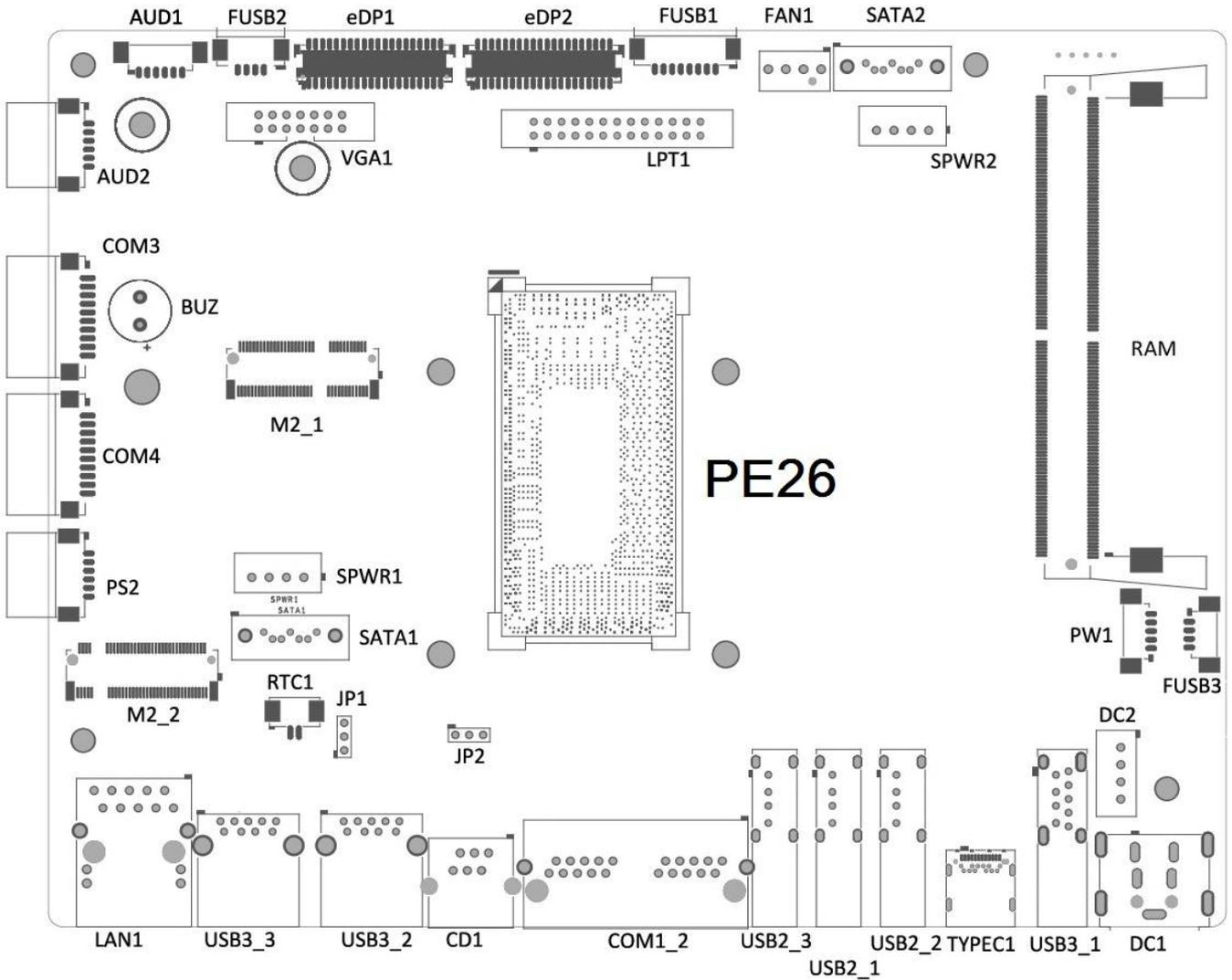
JP2	Description
1-2	+19V
2-3	+12V

Power configuration for COM and VGA ports



Motherboard information

Motherboard Layout (PE26)



Connectors & Jumper Settings

DC1 / 2 : Power connector

PIN1	GND	PIN2	GND
PIN3	+19V	PIN4	+19V

CD1 : RJ11 for Cash Drawer Port

PIN1	DIN1	PIN2	DOUT0
PIN3	DIN0	PIN4	+12V_CD
PIN5	DOUT1	PIN6	GND

COM1 / 2 : RJ48 for COM1/2 Port

PIN1	N/C	PIN2	DCD
PIN3	DSR	PIN4	RX
PIN5	RTS	PIN6	TX
PIN7	CTS	PIN8	DTR
PIN9	GND	PIN10	RI

COM3 / 4 : Pin Header for COM3/4 Port

PIN1	DCD	PIN2	RX
PIN3	TX	PIN4	DTR
PIN5	GND	PIN6	DSR
PIN7	RTS	PIN8	CTS
PIN9	RI	PIN10	+5V

JP1 : Clear CMOS Setup

JP1	Description
1-2	Normal operation
2-3	Clear CMOS

JP2 : Cash Drawer Voltage Setup

JP2	Description
1-2	+19V
2-3	+12V