Rev.01

USER GUIDE

PP SERIES

mod. PP-9735W

FEC
ITALIA

PP SERIES | PP-9735W

User Guide
Version 01
Date May 2025

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CE Conformity Declaration

This appliance complies with the following directives and regulations:

2014/35/UE	LVD “Low Voltage” Directive
2014/30/UE	EMC Directive “Electromagnetic Compatibility”
2011/65/UE	Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS II) and subsequent amendments according to Directive 2015/863/EU (RoHS III) and Directive 2017/2102
2009/125/CE	Directive on the establishment of a framework for the development of ecodesign specifications for energy-related products
(UE) N. 617/2013	Regulation laying down implementing measures for Directive 2009/125/EC of the European Parliament and of the Council on ecodesign requirements for computers and computer servers
(CE) N. 1907/2006	Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Summary

Chapter 1
General

Package material list

Here's below packaging material list:

	Supplied Material
1	15.6” PP-9735W
2	Base to assemble
3	AC Cable
4	x1 RJ-45 to D-sub9 Cable
5	20V 90W Power Supply

Before installation

Once the content's packaging is checked, it's advisable to keep it to allow any computer's transport viable and safer.
After the unpackage, arrange all the materials on a work surface. Then, carefully follow the instructions in the following chapters.

Warranty Notes

We recommend that you read the warranty certificate and make sure that it has been filled in with the date of purchase, the dealer's stamp, and the data relating to the model and serial number.
The latter can be found on the label glued to the back of the basic module.

Safety

Carefully read these safety directions:

1) Unplug from the power outlet before cleaning, disassembling, or transporting. Do not use liquid cleaners or sprays for cleaning. Use only a damp cloth and avoid any prolonged contact with moisture.
2) Lay the machine on a stable surface before maintenance or use, to avoid accidental falls.
3) The panel's back grilles are ventings. DO NOT COVER.

4) Make sure the voltage and load are correct before connecting the machine to the power outlet.
5) Safely place the power cord to avoid accidental trips. Do not twist, pinch, or knot it.
6) Follow all precautions and warnings printed on the machine.
7) If the machine isn't long-time used, unplug it from the power source.
8) Do not pour any liquid into the openings. It could cause fire or electric shock.
9) Only qualified service personnel should open and repair the equipment.
10) If one of the following situations occurs, have the machine checked by our technical service:
    a. The power cord, plug, or adapter is visibly damaged.
    b. Liquid has entered the machine.
    c. The machine has been exposed to moisture.
    d. The machine fell and was damaged.
    e. The machine has obvious signs of breakage.
11) DO NOT LEAVE THE MACHINE IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20°C (-4°F) OR HIGHER THAN 60°C (140°F)

Chapter 2
System Presentation

Based on 10th generation Intel® Celeron processors, it offers high performance with low power consumption. The system can be equipped with high-speed fanless SSD disks, which eliminate moving mechanical parts and increase the overall reliability of the solution.

The 15.6" adjustable true-flat LCD is equipped with 10-touch capacitive touch screen technology, enhanced even with work gloves or capacitive touch pens. The front panel, IP65 certified, is resistant to dust and liquids.

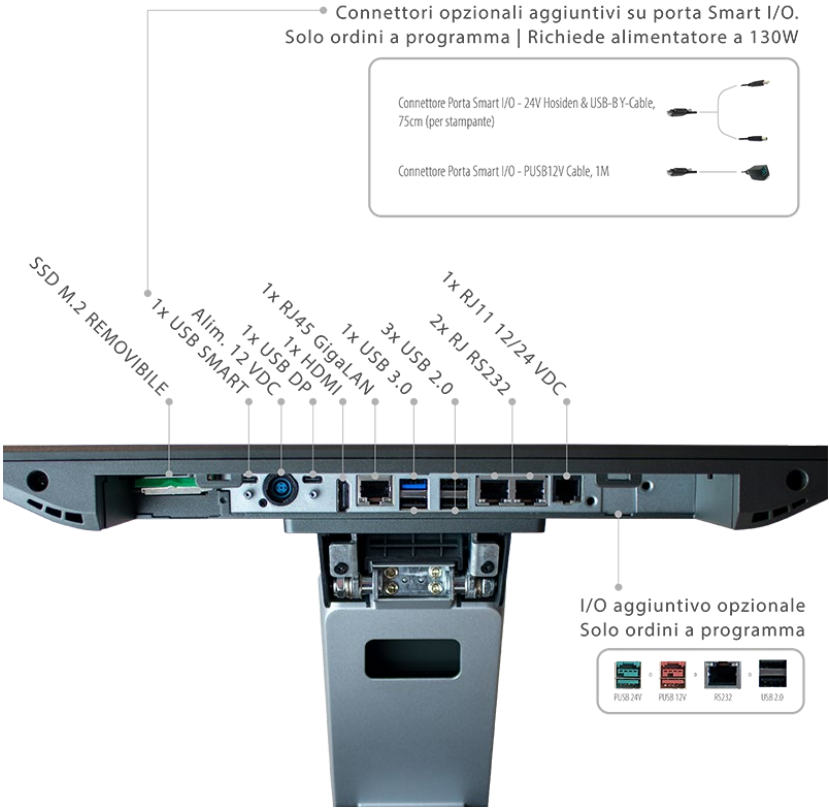
The rear-panel electronics allow the use of the Panel PC both by exploiting the robust and sturdy base and for wall/arm placement thanks to the VESA standard attachment located on the back of the PC.

The high brightness tilting monitor - 300nits - allows the most suitable use depending on the height and lighting of the installation point, even in places exposed to direct sunlight without losing visibility of the contents; the ambient light sensor also automatically adjusts the screen brightness based on the surrounding environment.

Designed to reduce overall dimensions with a decidedly compact chassis, through a careful design study, it offers a rich I/O section with optional integrated Wi-Fi connectivity and numerous accessories on request.

I/O Ports

I/O ports are placed in a protected position. A practical cable cover is supplied with the machine, which prevents unwanted access.
The system is also equipped with a removable M.2 SSD.



I/O Port	Connector Type	Usage
Video Ports	1x USB DP 1x HDMI	For 2nd monitor
12V in	12V DC in (90W)	
Cash Drawer	1x RJ11 (12V/24V) Cash Drawer port BIOS-managed	
USB	1x USB SMART 1x USB 3.0 3x USB 2.0	
LAN	1x RJ45 GigaLAN	
	2x RJ RS232	
	PUSB 24V / PUSB 12V / RS232 / USB 2.0	Optional Additional I/O on Request

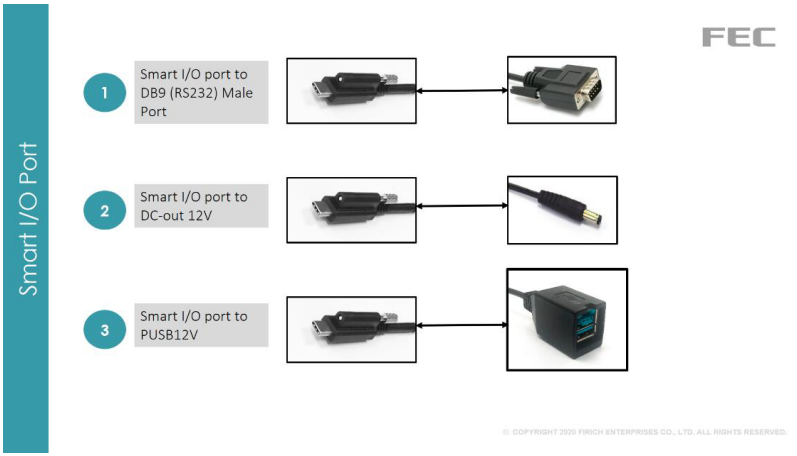

PP-9735W
LED Indicator
Blue = System On
Red = System Off
Power Button
Speaker
Speaker
FEC

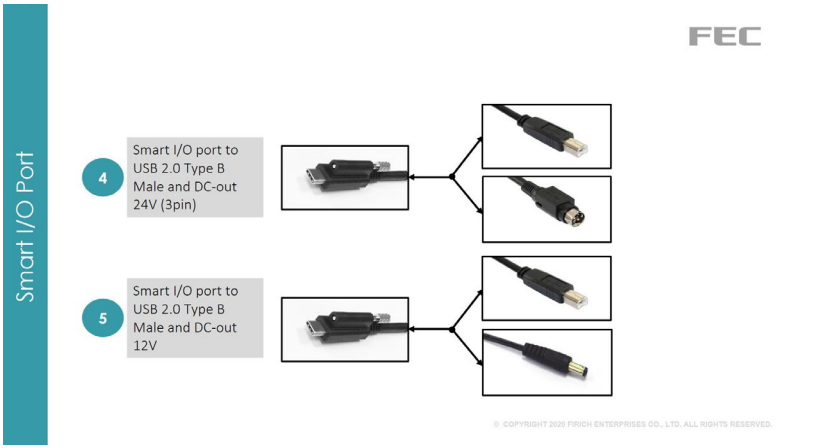
Chapter 3
Installation and Settings

Terminology and Tools

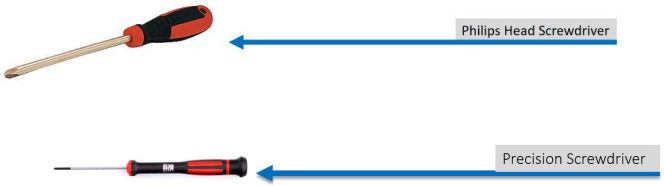
Smart DD: It's a proprietary port that can support two side-by-side Smart DD monitors. It uses a USB-C connector but is NOT backward-compatible with previous-generation USB-C (USB DP) ports. Contact your agent for more information.
Smart DP: is a proprietary port for exclusive use by Display Smart DP. Previous generation displays, called FEC DP, can be used on this port; However, there will be an error in the control panel that cannot be fixed. It won't affect its use.
Smart I/O: It's a proprietary port that supports multiple I/O cable expansions. The relative power supply can be set in the BIOS at Advanced > Product Settings. By default, it is set to minimum. For example, the default power of RJ45 at DB9 is set to RI.
Universal I/O (UIO): it's an optional port. The customer can request it. The available ports are (1 per system):

- ①PUSB24V,
- ②PUSB12V,
- ③RJ45 (RS232) RI/5V/12V,
- ④USB 2.0 Tipo A (Doppia)
- ⑤ Da Smart I/O a USB 2.0 tipo B maschio e DC-OUT 12V





For assembly, you may need these tools:

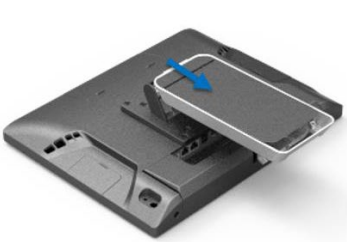


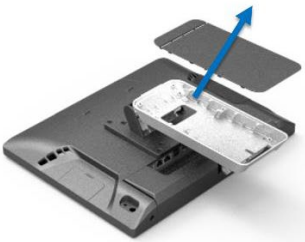
Stand – double hinge

Note: This is a general reference assembly guide, the actual display back cover may not match your product. It will not matter to the assembly.
Tools Needed: You will need to prepare a screwdriver in order to assemble the stand.
Items Included:
Panel PC with Part A of the stand attached.
Part B of the stand
Screw x 4pcs in the accessory box.

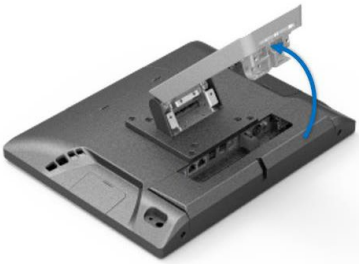
STEP 1: Lay items on a flat surface.

STEP 2: Remove the stand cable cover by sliding it down (left image) then lift it away (right image).

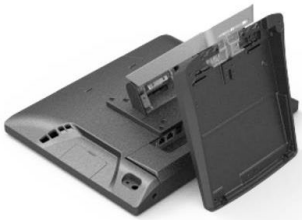


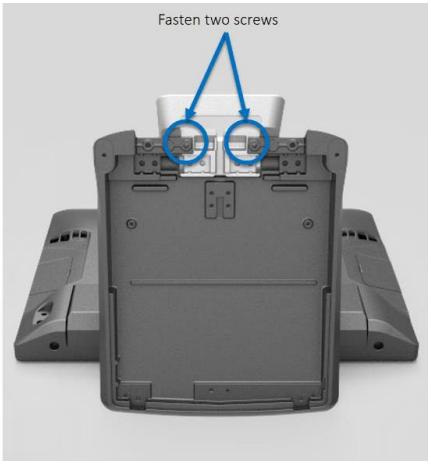


STEP 3: Lift up the angle of Part A of the stand .

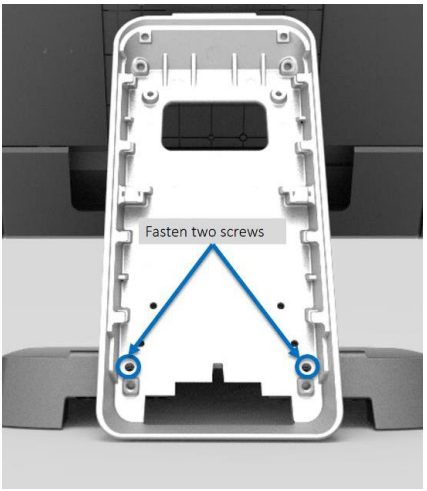


STEP 4: Align Part B of the base with Part A of the base as shown. While holding the base together with one hand. Use your hand to slightly fasten the screws . Then use the screwdriver to tightly fasten it.



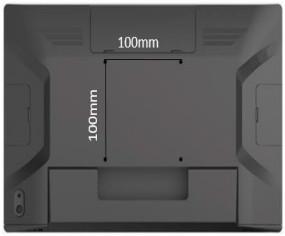


STEP 5: Place the stand in the upright position (left image) then use the screwdriver to fasten the two screws (right image).

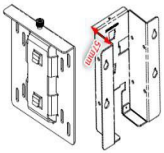


STEP 6: Place the stand cable cover back on the stand. Then assembly is complete .

Wall Mount Bracket - optional



Wall Mount
Bracket



Thickness of wall mount bracket (no space for power adapter)= 21mm

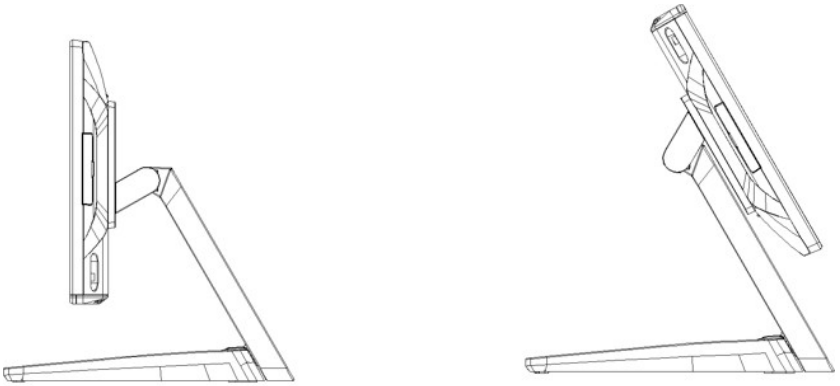
Thickness of Wall Mount bracket (space for power adapter)= 57mm

Color

Galaxy Gray + Sliver

Cable Management

Adjustable Angle



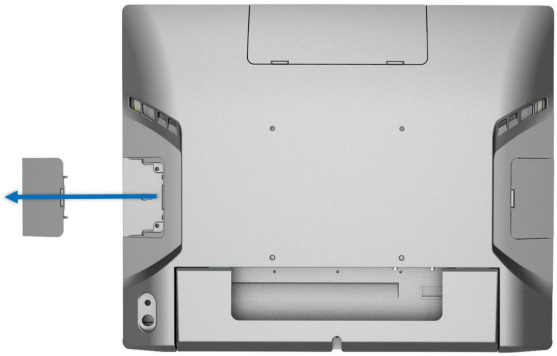
Dimensions

Add-On Devices

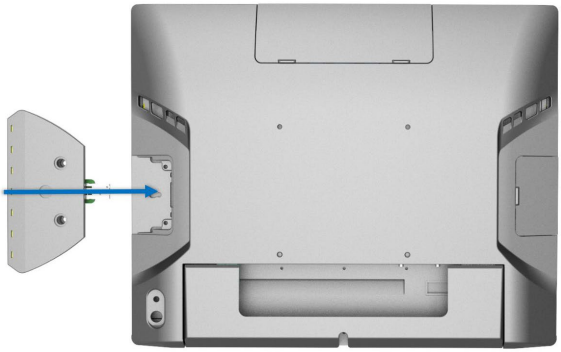
Note: This is a general reference assembly guide, the actual display back cover may not match your product. It will not matter to the assembly.
Tools Needed: You will need to prepare a screwdriver in order to assemble the add-on device.
Items Included:
Panel PC with Part A of the stand attached.

Part B of the stand
Screw x 4pcs in the accessory box.

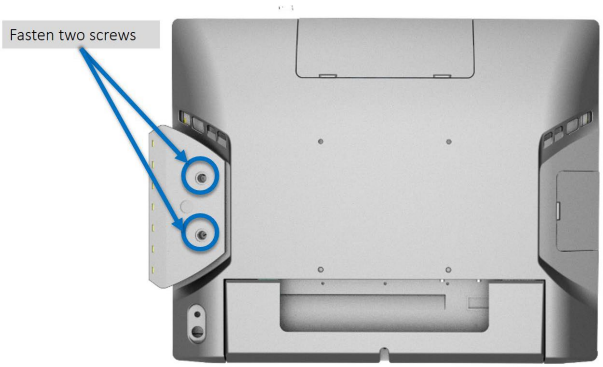
STEP 1: Remove the side cover.



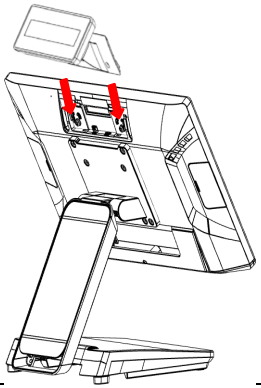
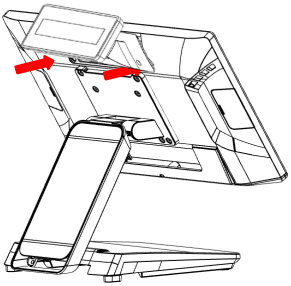
STEP 2: Connect the add-on device to the system.



STEP 3: Fasten the two screws. Complete.



Customer display installation (XP-2025)

1. Remove the connector	2. Fasten 2 screws for customer display
	

Integrated Secondary Display

- Loosen the screw indicated in the figure and remove the cover

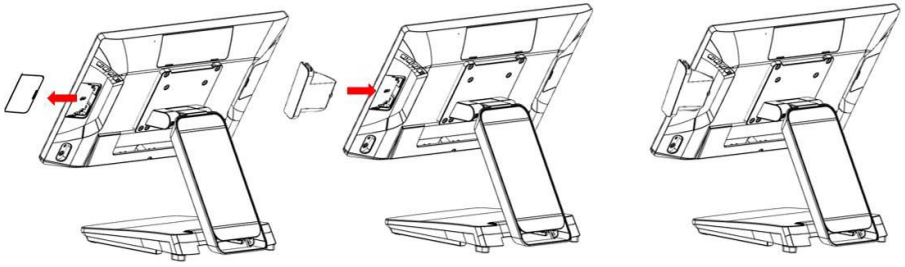
Connect the customer display and secure it to the display. (Make sure the COM6 port power supply is correct before connecting the VFD.)

- Don't exceed the maximum tilt angle, otherwise, the internal cable may disconnect.

Peripheral installation

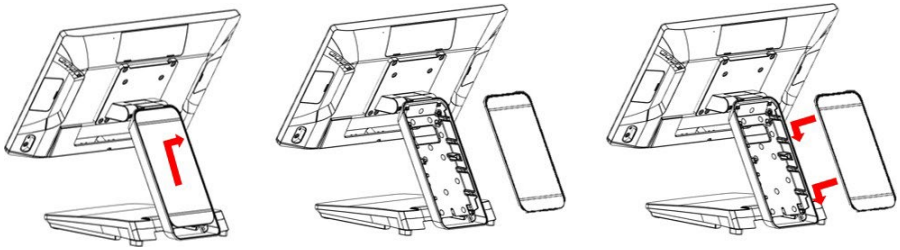
1. Remove plastic lid

2. Attach ID (USB) device and fix it with 1 x M3 screw



Remove/Install cable cover

1. Cable cover removal
2. Cable cover installation



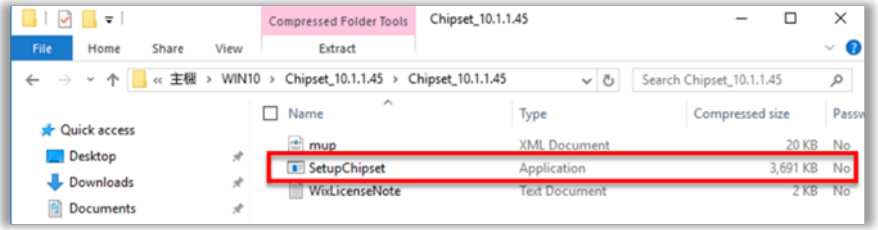
Chapter 4
Driver & Utility installation and configuration

For the most recent drivers go to:
https://www.fecpos.com/download/download.html
For the installation, follow this order:

- ①Chipset
- ②Audio
- ③Graphics
- ④Intel® ME
- ⑤Serial IO
- ⑥LAN
- ⑦Sensors

1. Chipset

1. Locate the chipset folder and double-click on **[SetupChipset]**

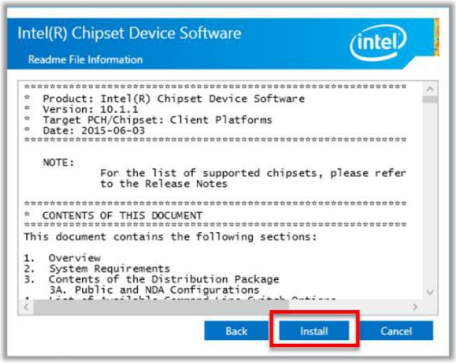


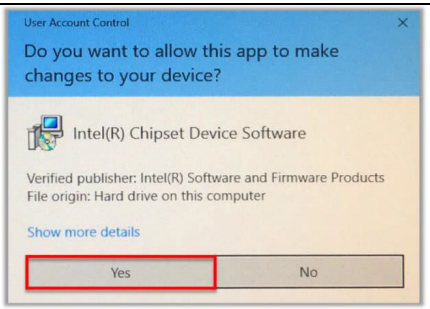
2. •Click on **[Next]**

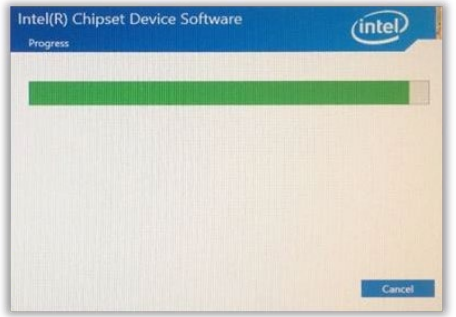
3. • Click on **[Accept]**

4. •Click on **[Install]**

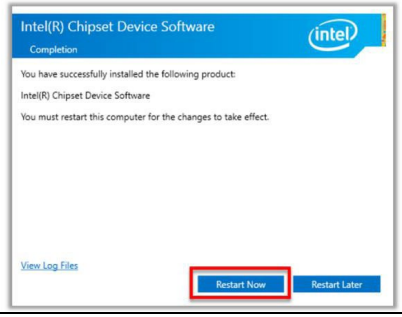
5. •Click on **[Yes]**





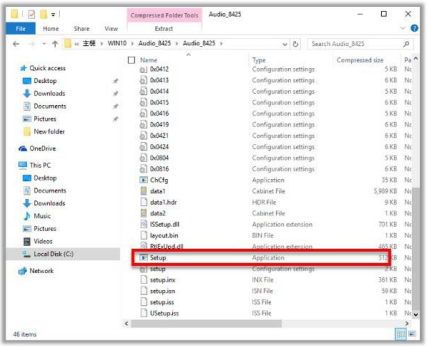


6. •Click on **[Restart Now]**

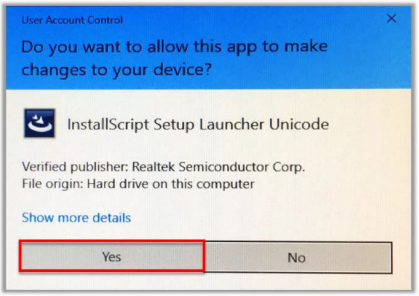


2. Audio

1. •Double-click on **[Setup]**

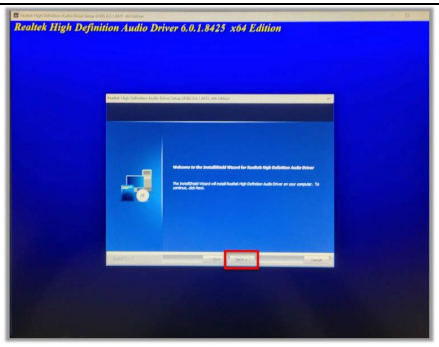


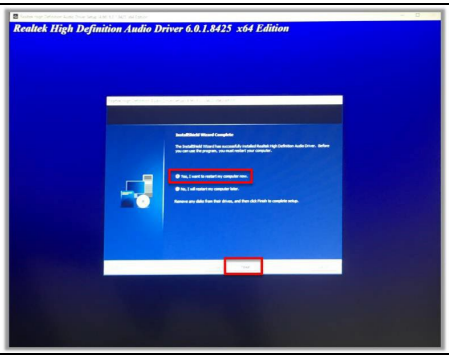
2. Click on **[Yes]**



3. Click **[Next]**

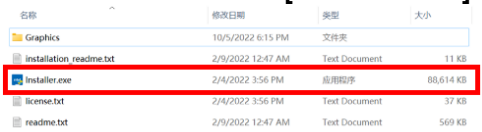
4. Click **[Yes, I want to restart now, [Finish]**



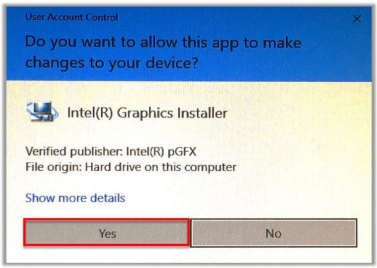


3. Graphics.

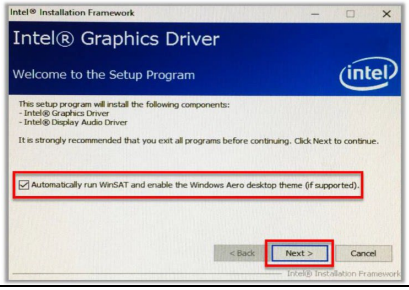
1. Double-click on **[installer.exe]**



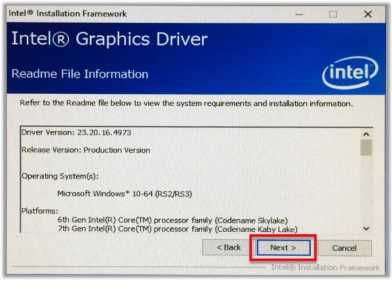
2. Click on **[Yes]**



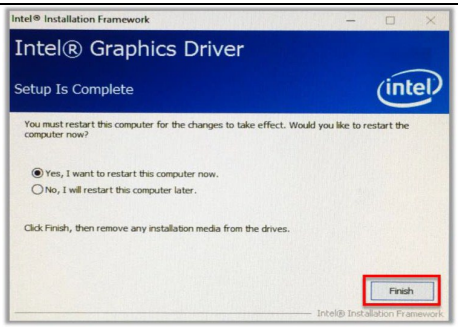
3. Click on **[Next]**



4. Click on **[Next]**

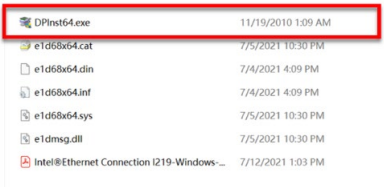


5. Click on **[Finish]**

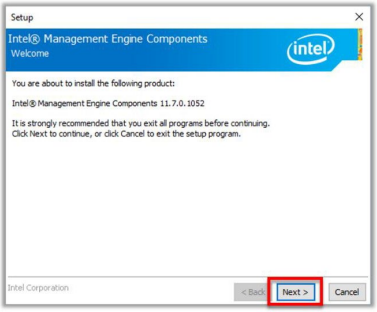


4. INTEL® ME

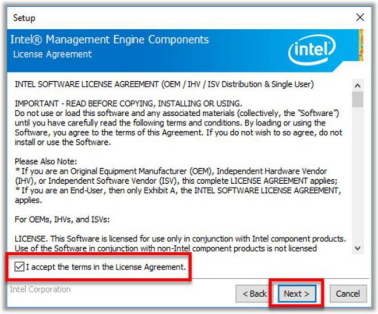
1. Double-click on **[Dpinst64]**



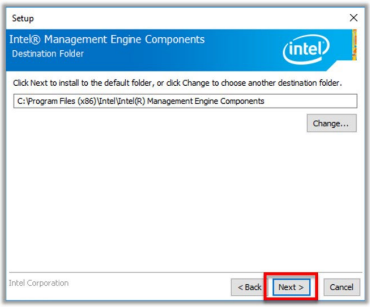
2. Click on **[Next]**



3. Accept terms and conditions, then click on **[Next]**

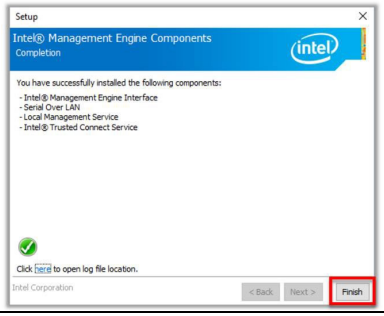


4. Click on **[Next]**



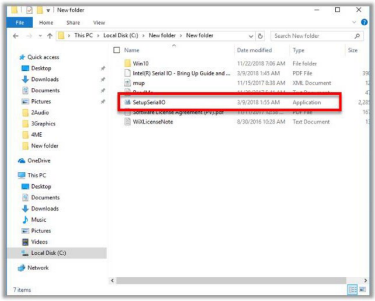
5. Click on **[Yes]**

6. Click on **[Finish]**

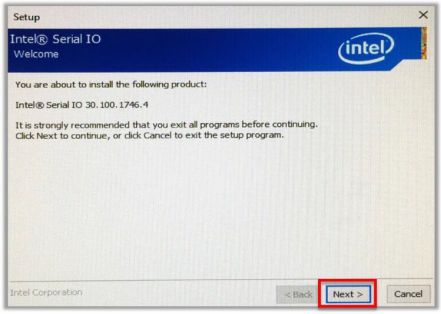


5. Serial IO

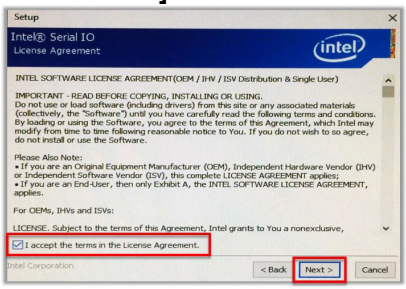
1. Double-click on **[SetupSerialIO]**



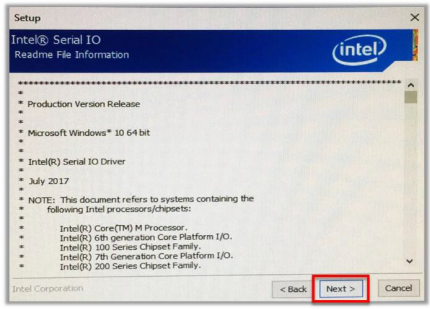
2. Click on **[Next]**



3. Accept terms and conditions, then click on **[Next]**

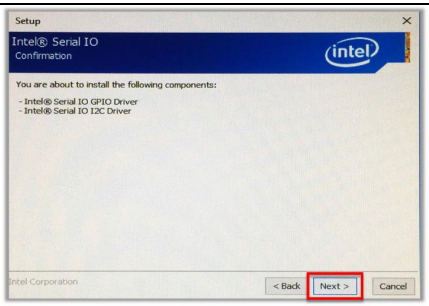


4. Click on **[Next]**



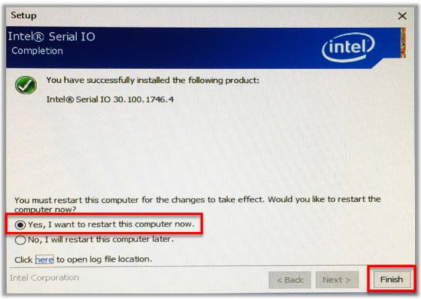
5. Click on **[Next]**

6. Select Yes, I want to



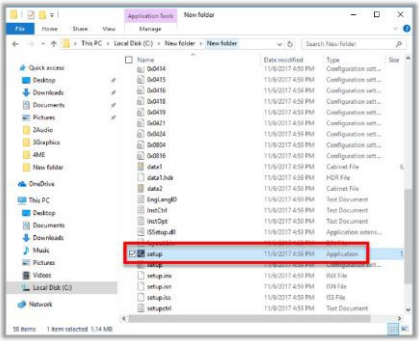
restart now, then click on

[Finish]

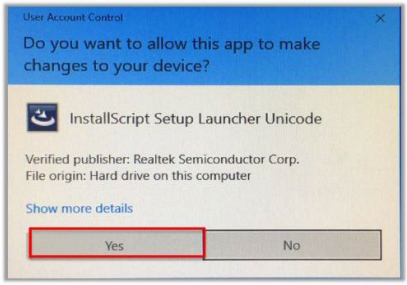


6. LAN

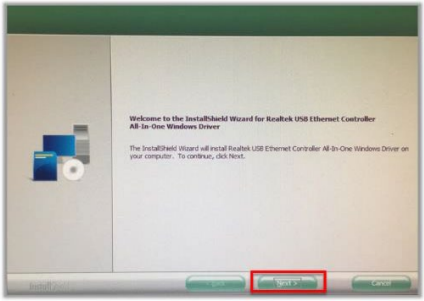
1. Fai doppio click su **[Setup]**



2. Clicca [Sì]

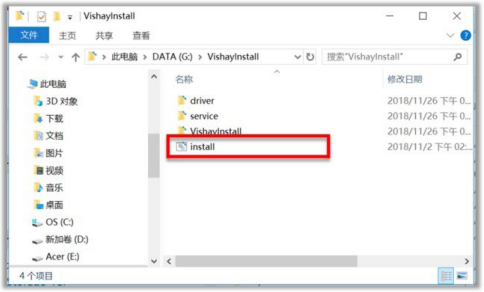


3.

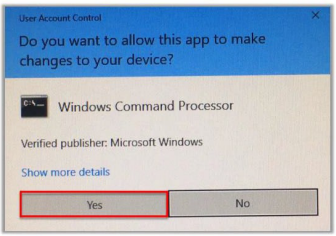


7. Sensors

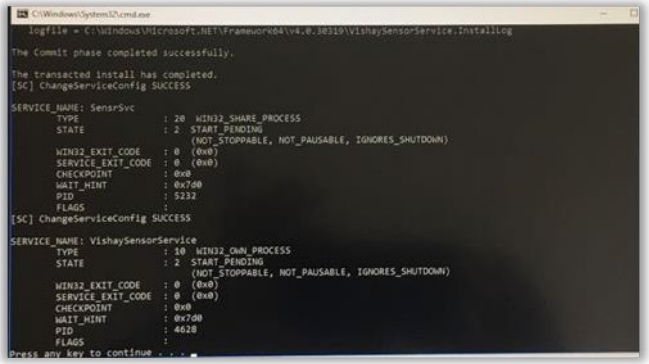
1. Double-click on **[install]**



2. Click on **[Yes]**



3.



8. Cash Drawer

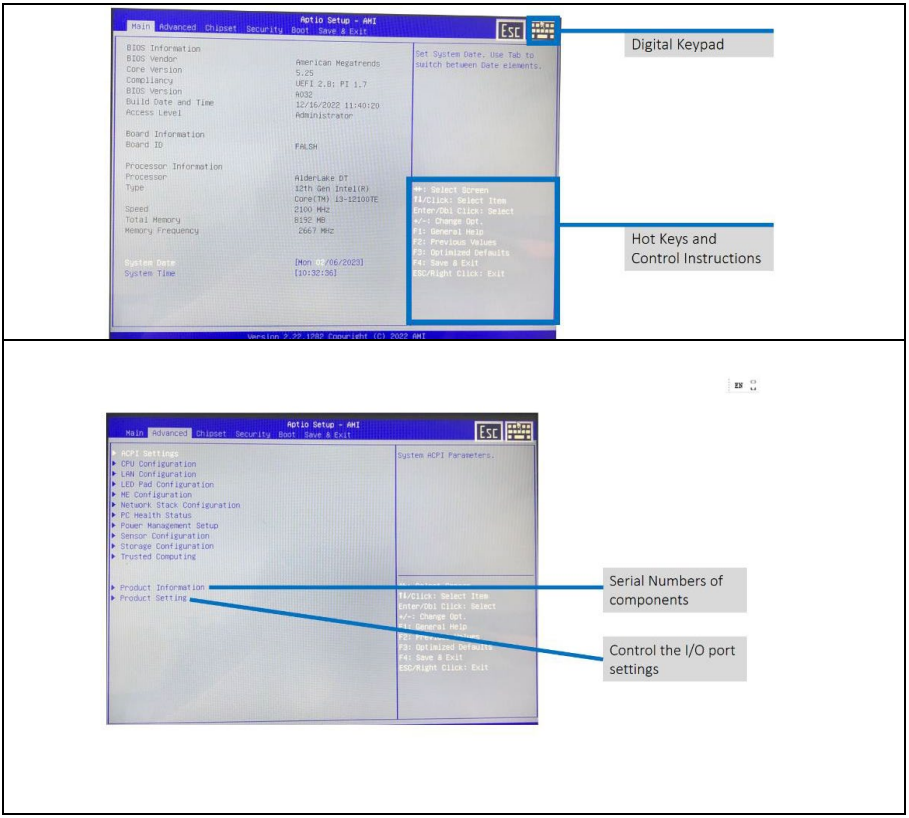
Contact the support staff and request the "**FEC Guide for SDK Integration with the Cash Drawer**".

9. BIOS Introduction

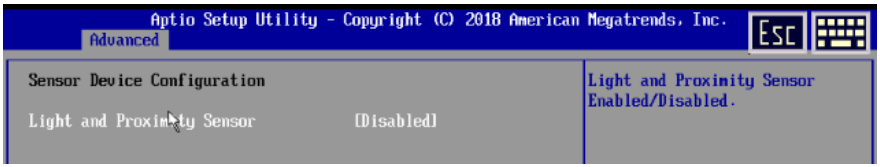
To access the BIOS, press the <DEL> key when the device is rebooting.

Enable/Disable ambient light and proximity sensor on the BIOS

To use the BIOS, you can use the touch panel.



Step 1: Boot the system
Step 2: Press the <DEL> key during boot to enter the BIOS
Step 3: On Advanced > Sensor Configuration click Disabled to turn it off, Sensor 1 to activate the proximity and ambient light sensor.



Note: Factory setting is set on “Enabled”.

Chapter 5
Software Installation

Device code example

Cash Drawer

```
public void CashDrawer_1_Open_click(View view) {
try {
Intent intent = new Intent("
X.intent.action.SET_BOX_OUTPUT1_HIGH");
mContext.sendBroadcast(intent);
Thread.sleep(200);
Intent intent1 = new Intent("
X.intent.action.SET_BOX_OUTPUT1_LOW");
mContext.sendBroadcast(intent1);
} catch (Exception e) {
Log.d(TAG, "Failed to send broadcast.");
}
}
```

```
public void CashDrawer_2_Open_click(View view) {
try {
Intent intent = new Intent("
X.intent.action.SET_BOX_OUTPUT2_HIGH");
mContext.sendBroadcast(intent);
Thread.sleep(200);
Intent intent1 = new Intent("
X.intent.action.SET_BOX_OUTPUT2_LOW");
mContext.sendBroadcast(intent1);
} catch (Exception e) {
Log.d(TAG, "Failed to send broadcast.");
}
}
```

COM Ports

COM1 = /dev/ttyUSB0
COM2 = /dev/ttyUSB1
COM3 = /dev/ttyUSB2
COM4 = /dev/ttyUSB3
COM5 (LCM/VFD) = /dev/ttyS1

```
int intSerialPortHandle = -1; int intReturnCode = -
1;
private int intBaudRate=9600;
private String
strTestString="testStringtestString";
String strttyUSBPath;

SerialPort sp;


private void SleepMiniSecond(SerialPort spThread,
int minSecond)
{
try {
spThread.sleep(minSecond);
dump_trace("SLEEP_MSEC="+ minSecond);
} catch (InterruptedException e) {
e.printStackTrace();
}
}


private boolean RS232_Test
{
int intDataReceivedLength=0; sp = new SerialPort();

strttyUSBPath = "/dev/ttyUSB0"
intSerialPortHandle =
sp.open(strttyUSBPath,intBaudRate);


byte[] btyVersion_msg_received = new byte[256];
Arrays.fill( btyVersion_msg_received, (byte) 0 );
intReturnCode =
sp.write(intSerialPortHandle,strTestString.getBytes
());
```

```
sp.setListener(splistener);
intDataReceivedLength = sp.getDataReceivedLength();
int nRetry=0;
while (intDataReceivedLength == 0)
{
SleepMiniSecond(sp, 1000);
intDataReceivedLength = sp.getDataReceivedLength();
nRetry++;
if (nRetry == 2) break;
}

if ( intDataReceivedLength>= 0) {
btyVersion_msg_received =
Arrays.copyOf(sp.getBytDataReceived(),intDataReceiv
edLength);
}


sp.close(intSerialPortHandle);
sp = null;
boolean testResult = false;
testResult = (intDataReceivedLength > 0 )? true:
false; return testResult;
}
```

Chapter 6
Hardware

RAM Access

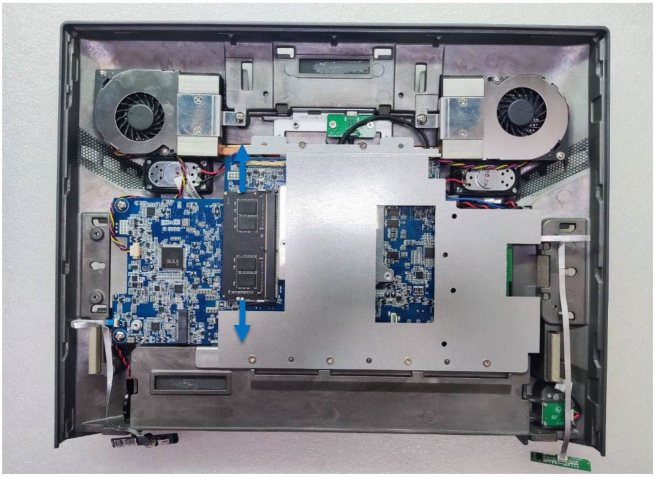
Note: This is a reference assembly guide, actual display dimensions may vary; however, they won't affect assembly. Make sure the product is turned off.
Tools Needed: Prepare a screwdriver.

STEP 1: Place the Panel PC face down on a flat surface. Using a precision screwdriver, unscrew the screw.

STEP 2: Remove back cover

STEP 3: Lift the panel, which will automatically release the FFC sensor cable.

STEP 4: Release the RAM by pressing on the metal hooks. It will rise, then you can disconnect it by pulling it out at a 45-degree angle.

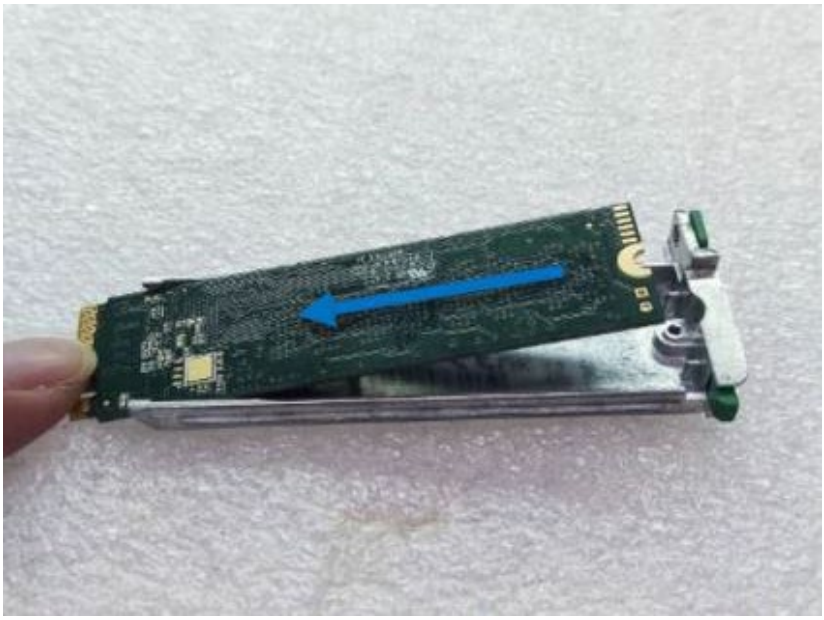


Add M.2 from the tray

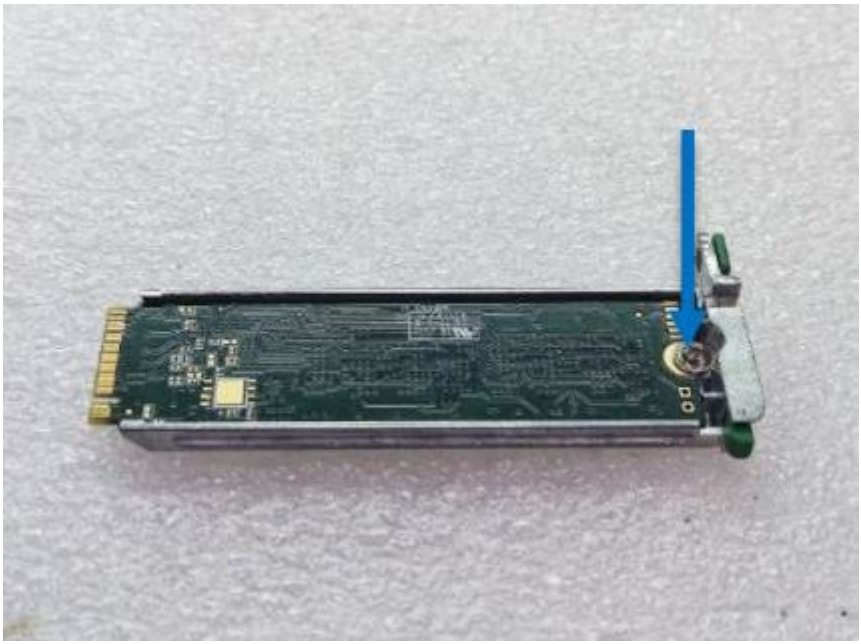
Note: This is a general reference assembly guide, the actual display back cover may not match your product. It will not matter to the assembly. Make sure the system is off before removing or installing the M.2 tray from the system. This system does not support hot plug of the storage device.
Tools Needed: You will need to prepare a precision screwdriver in order to assemble the M.2.
Items Included:
Thermal pad in the accessory box.
M.2 Tray with Screw x 1
M.2 (PCIe Gen III) x 1 (This can be purchased from FEC or otherwise)

STEP 1: Get thermal pad from the accessory box. Remove the plastic and place the thermal pad on to the controller.

STEP 2: Slide the M.2 into the tray.

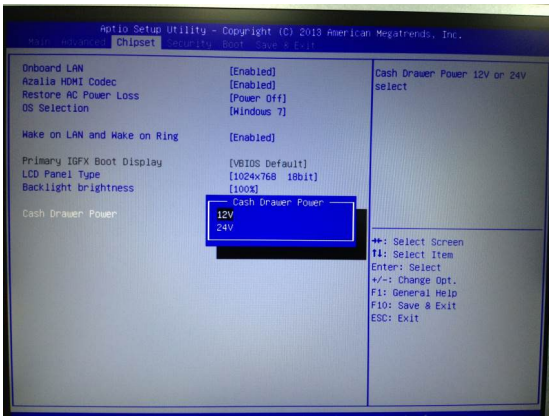


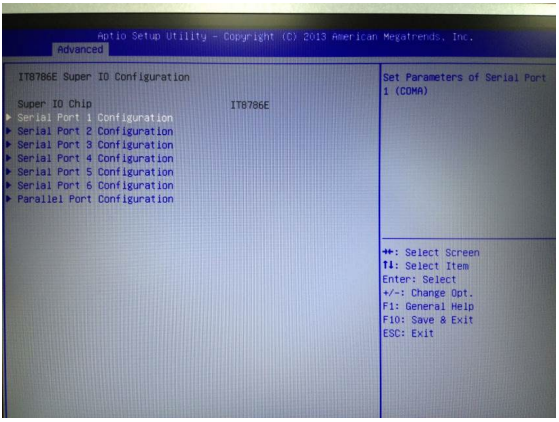
STEP 3: Fasten the screw. Complete. Note: Make sure the system is off when inserting the M.2 tray into the socket.



POWER SETTING (COM)

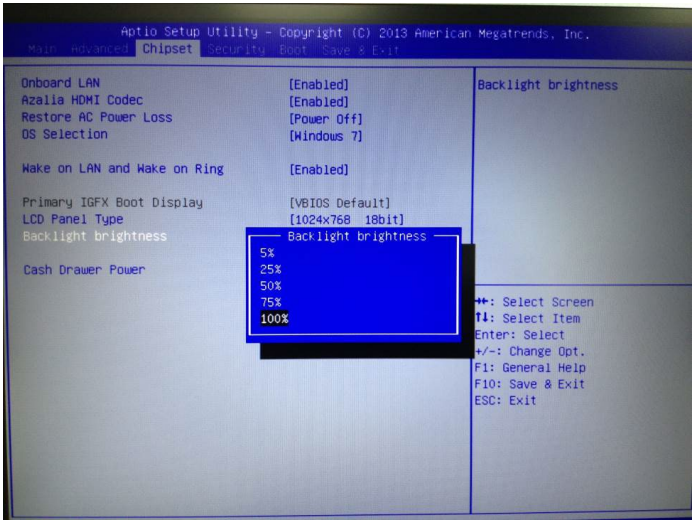
You may select the power (5v / 12v) of COM in BIOS





Make sure the device voltage matches the power setting before connection

LED Backlight Brightness



- 5 backlight brightness levels (5, 25, 50, 75, 100%) can be selected through the BIOS.

Cash Drawer

Only on PP Series

- Please make sure the voltage and cable pin assignment of your cash drawer matches the cash drawer port on PP-9735W.
- You may find the jumper setting and pin definition in M/B J1900 user manual.
- Please refer to trouble shooting if the cash drawer cannot be detected by PP-9735W

Open drawer 1 (default):
port[openaddr] <= open1
wait(sleep(ms))
port[openaddr] <= close

Open drawer 2
port[openaddr] <= open2
wait(sleep(ms))
port[openaddr] <= close

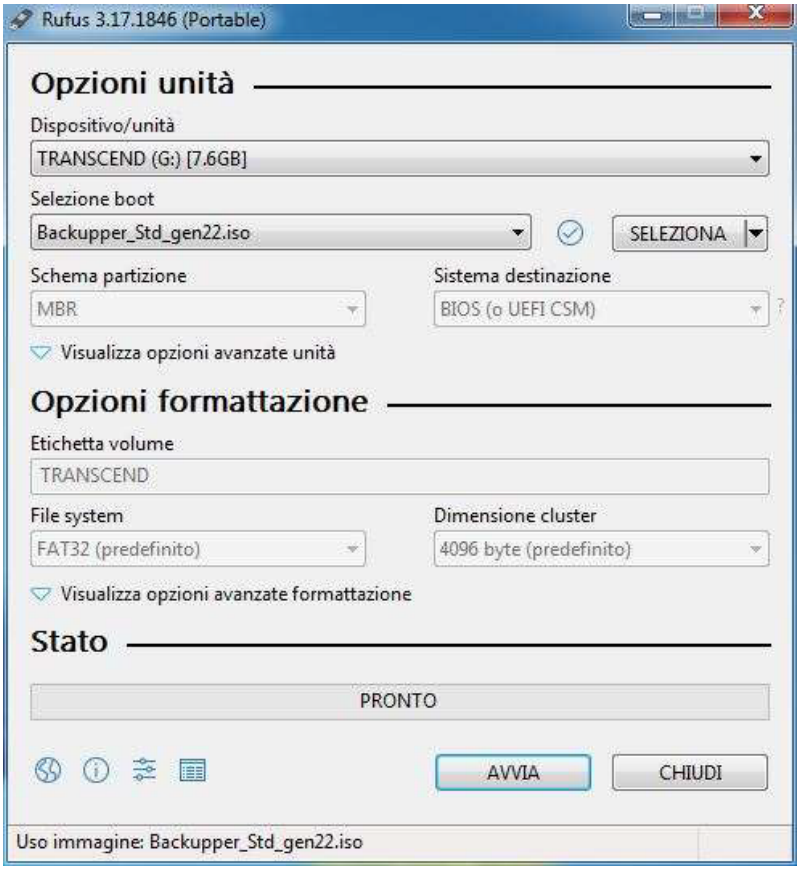
Stato:
StatusValue <= port[status] and statusmask

Parameters inside cashdrawer.ini file
openaddr=a04
status=a05
sleep=200
open1=40
open2=80
close=00
statusmask=01

Chapter 7
Operating System Recovery

Bootable key creation with Aomei Backupper 6.7.0

Create a boot key using the Rufus utility, available at https://rufus.ie/it/, and download the portable version.
Launch Rufus with the USB stick to be formatted already inserted, select the Backupper_Std_670_gen22.iso file



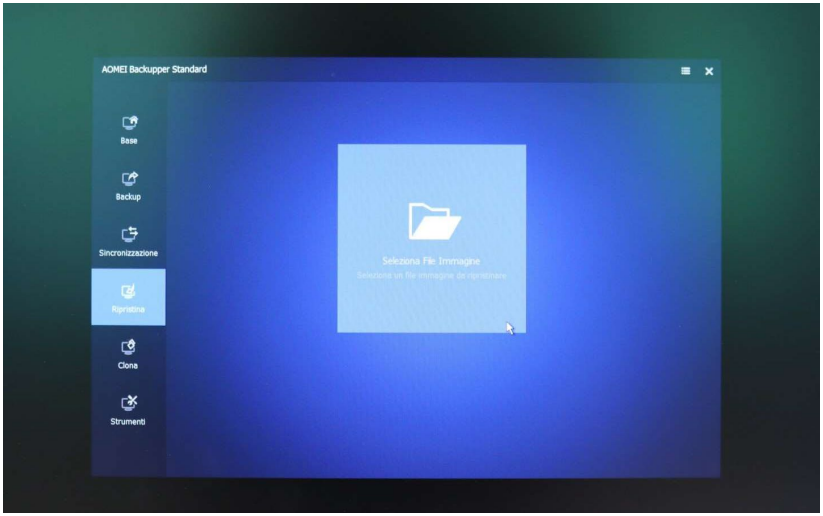
Confirm operation with **Start/Launch**.

Starting Operating System Recovery

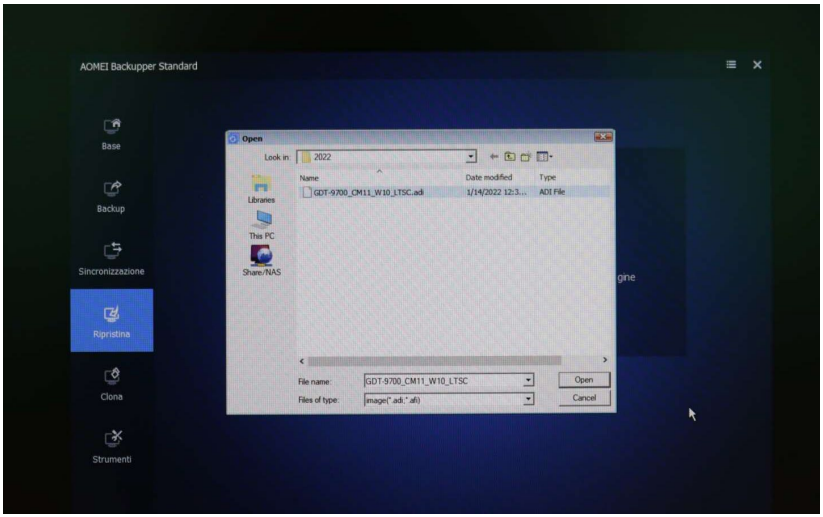
Insert the USB stick into the system to be restored, when turning it on press **F7** for the Boot device and select:

- **UEFI: USB name**

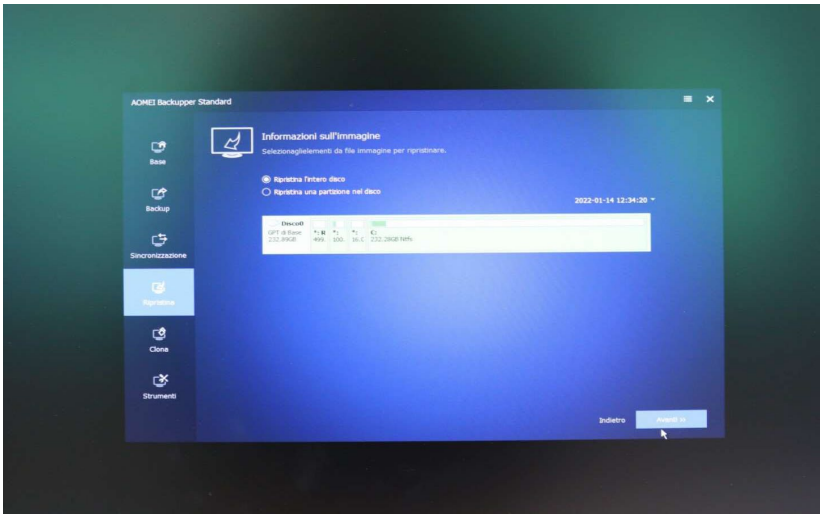
Once the AOMEI_Backupper graphical interface has started, close the screen with the offer, select the **Restore and Image File Selection** task**.**



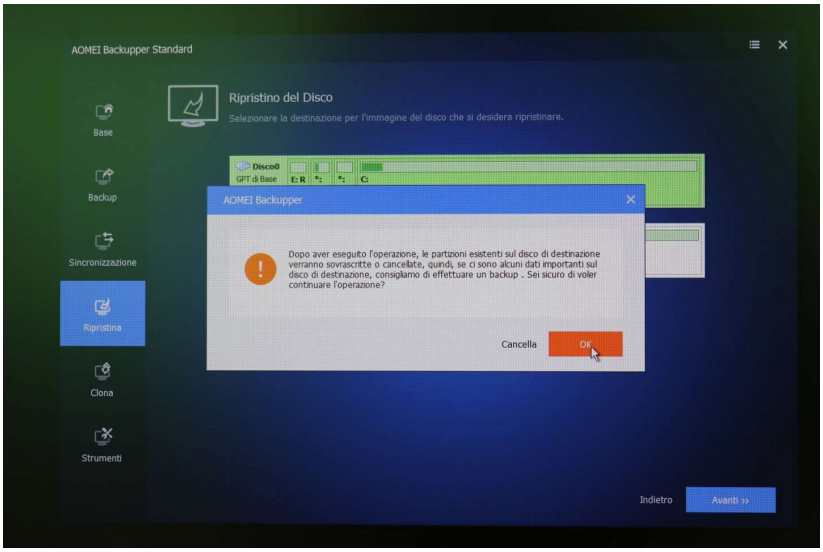
Browse external disk and select the "WTC6E_W10_Pro_21H1_*Ita/Eng*" file, confirm with **Open**.



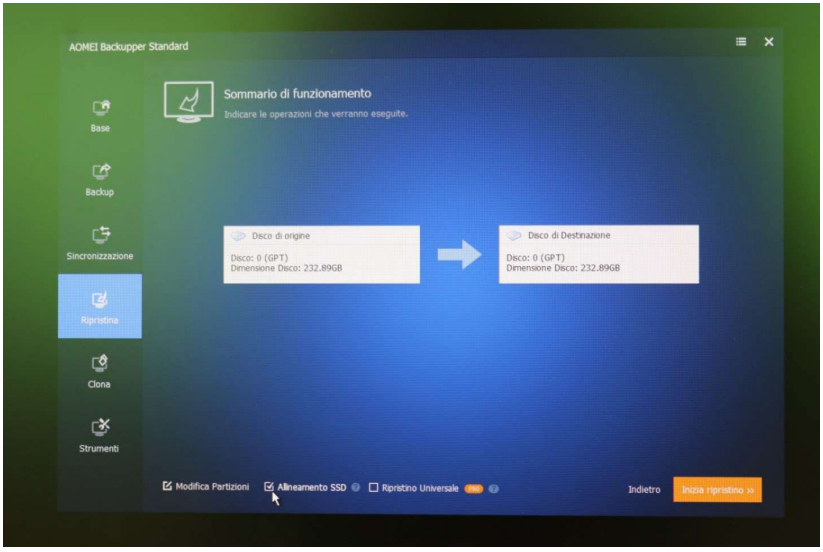
Check that "Restore entire disk" is checked, click on the Disk 0 box, it turns green, and confirm with **Next**.



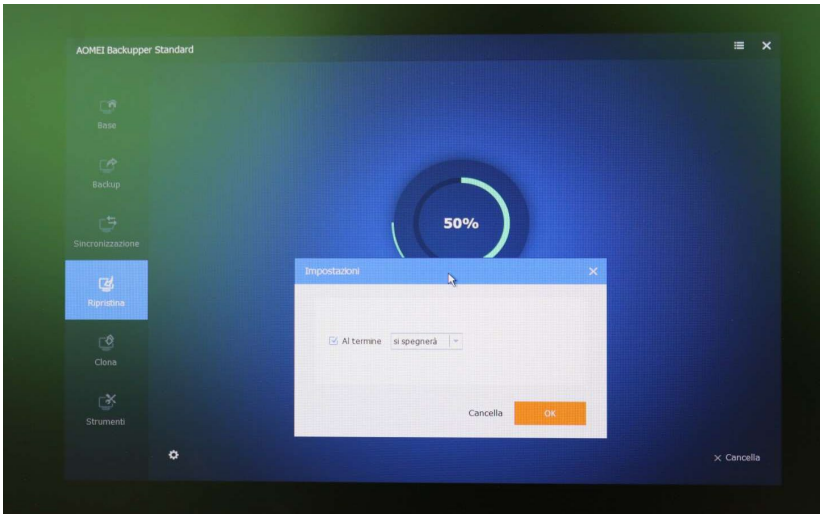
Check that Disk0 is highlighted (green), continue with **Next**, and confirm the overwriting with **OK**.



On the final screen, check **SSD Alignment** and start the operation with **Start recovery >>**



With the restore operation in progress, click on the cogwheel and check **When finished** (it will go out), confirm with **OK**.



Once the activity is finished, the PC will turn off. (disconnect external USB drives)

End of Procedure

When you turn it back on, the system will start with the initial Windows configuration, with the request to select country - language, etc...

Chapter 8
Technical features

General	
Processor	Intel® Celeron Quad Core J6412
RAM	8GB / 32GB (Factory) / 1 RAM Slot
Power Supply	External 20V / 90W
Integrated Storage	SSD NVMe from 128 Gb to 1 Tb
Speaker	2 x 2 W Integrated
Mounting	VESA 100 ready Optionally available wall brackets also with power supply support
Chassis	Die-cast aluminum chassis
Audio	Realtek ALC233
Network	GigaLAN
WiFi	Wi-Fi 5 (802.11 AC) with Optional BT
TPM	TPM 2.0
Fanless	Passive heat dissipation
Video	
Graphical Chipset	Intel® UHD graphics
Display	15,6” (16:9), 1920x1080 TFT FHD
Secondary Display	Optional 10”/15”/15,6”
Optional Accessories	Double-hinge table base, add-ons that can be integrated on the display side
Brightness	300 Nits
Contrast Ratio	-
Backlighning-MBTF	-
Touch	Capacitive 10 contemporary touches
I/O Ports	
Video	1x USB DP 1x HDMI
Ethernet	1x RJ45 GigaLAN
USB	1x USB 3.0 3x USB 2.0
COM	2x RJ RS232 1x RJ11 12/24 VDC
Audio	-
Power Supply	12 VDC Power Supply
Other	1x USB SMART
Optional Additional I/O (scheduled orders only) (1 of 4 options)	
USB	1x PUSB 24V 1x PUSB 12V

	2x USB 2.0 (2x Slots)
RS232	1x RJ45 (COM) RS232
Dimensions and Weight	
Dimensions (L x P x A)	368 x 315 x 272,5 mm (Panel PC with Base)
Weight	Approx. 4 Kg with Base
Quality	
Temperature	Operation: 0˚C ~ 40˚C (32˚F ~ 104˚F) Storage: -20˚C ~ 60˚C (-4˚F ~ 140˚F)
Relative Humidity	-
Vibration Range	-
IP	IP65 on front panel
Certifications	ISO 9001:2015 DESIGN AND PRODUCTION OF PERSONAL COMPUTERS, TOUCH DEVICES, AND ACCESSORIES FOR INDUSTRY AND COMMERCE (IAF 19) EMC: EN 55022 EN 55032:2015+A11:2020 EN 61000-3-2:2019 EN 61000-3-3:2013+A2:2021 EN 55035:2018/A11 IEC 61000-4-2:2008 IEC 61000-4-3:2020 IEC 61000-4-4:2012 IEC 61000-4-5:2014+A1:2017
Warranty	12 months FEC SWAP24 included in the price
Compatible Operating Systems	Windows IoT, Windows 11, Linux Ubuntu
Optional Warranty	Optional SWAP 24 or on-site warranty up to 36 months

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