PROX
PROTECH Group

PA-J510

Quick Reference Guide

Ver. Q2

Packing Checklist

If you discover any of the items below are damaged or lost, please contact your vendor immediately.

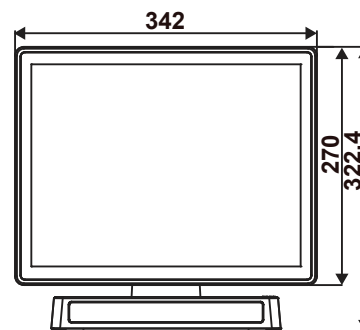|		
☑	PA-J510	X 1
☑	This Quick Reference Guide	X 1
☑	Power Adaptor	X 1
☑	AC Power Cord	X 1
☑	Driver DVD	X 1

Specifications

System	CPU Support	Intel® Core® i5-1145G7E / i3-1115G4E / Celeron® 6305E / Pentium® 7505
	Memory	1 x DDR4 SO-DIMM slot (up to 16GB)
	Power Supply	1 x 60/90 watt power adapter
	Network	1 x RJ45, Gigabit 10/100/1000 Mbps / 1 x M.2 (E Key, 2230)
	O.S. Support	Windows® 11 IoT Enterprise / Windows®10 IoT Enterprise
	Primary Display	15", 1024 x 768
	2nd Display	10.1" Monitor with Touch
	Wall Mount Type	VESA 75 x 75mm standard
	Audio	1 x 2W Speaker
	System Weight	**POS+2nd Display:** 5.3 kg w/o power adapter / **POS:** 4.3 kg
	Dimensions (WxHxD)	**POS:** 342 x 270 x 195 mm (with 45 degree) **POS + 2nd Display:** 342 x 291 x 237 mm (with 45 degree)
Storage	SATA	1 x M.2 2280, SATA interface
I/O Ports	Display	2 x Mini DP for Primary/ 2nd display 1 x HDMI 1.4
	USB	**Rear I/O:** 2 x USB 2.0/ 2 x USB 3.1 / 1 x USB Type-C **Side I/O:** 1 x USB 2.0
	Serial Port	1 x RJ45 (support +5V/12V selectable)
	LAN	1 x Giga LAN
	Cash Drawer	1 x RJ11 (+12V or +24V selectable) (Default at +24V)
	DC In	1 x 4-pin DC power jack
	Option	1 x USB 2.0 or 1 x 24V Power USB (1A) or 1 x DC Out (1A)
Add-ons	Customer Display	20 columns x2 lines STN LCD display
	MSR & i-Button	ISO I,II,III;JIS II and support information key (USB interface)
	Fingerprint	Silicon Fingerprint Module
	Barcode Scanner	**1D:** EAN-13, EAN-8, UPC-A, UPC-E, ISSN, ISBN, Codabar, Code 128, Code 93, ITF-6, ITF-14, Interleaved 2 of 5, Industrial 2 of 5, Standard 2 of 5, Matrix 2 of 5, GS1 Databar, Code 39, Code 11 **2D:** PDF417, QR Code, Micro QR, Data Matrix, Chinese sensible code
Display	Primary Display	15" IPS LCD (Max. Resolution: 1024 x 768) Brightness: 400 cd/m²
	Touchscreen	Bezel-free projected capacitive
	Tilt Angle	0~50 degree
Environment	EMC & Safety	CE / FCC
	Operating Temp.	0°C ~ 35°C (32°F ~ 95°F)
	Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)
	Humidity	20% ~ 90%

System View

Unit: mm

Front View

342
270
322.4

Side View

24.4

REAR I/O

1st Display Port
DC In
LAN
HDMI
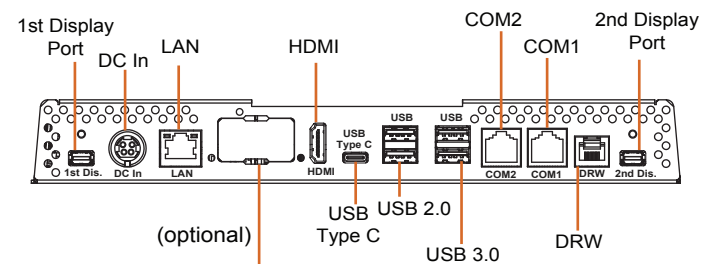COM2
COM1
2nd Display Port
USB Type C
USB 2.0
USB 3.0
DRW
(optional)

DC OUT   USB   Power USB
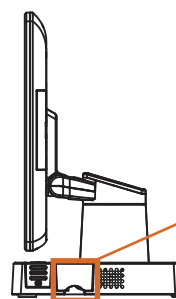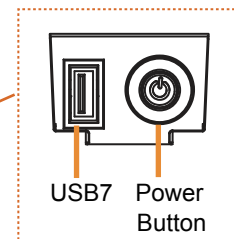
SIDE I/O

Open up the cover from the right side of PA-J510 Box as shown and find the Side I/O **USB7** and Power Button.

USB7   Power Button
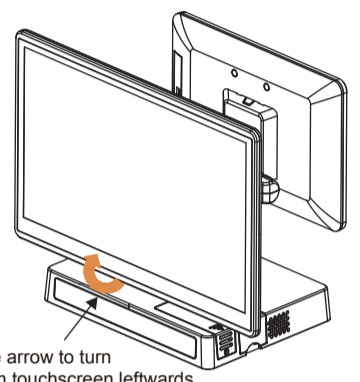
Easy Maintenance

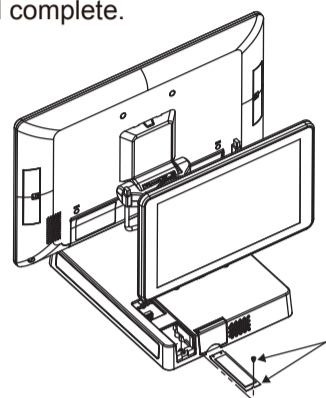## M.2 2280 Maintenance

Step 1: Follow the arrow to turn the system touchscreen leftwards.

Step 2: Unscrew M.2 2280 and follow the direction of red arrow (as shown) to release the cover.

Step 3: Slide a new M.2 2280 into the M2. slot and fasten up the screw to secure the cover and complete.

Follow the arrow to turn the system touchscreen leftwards.
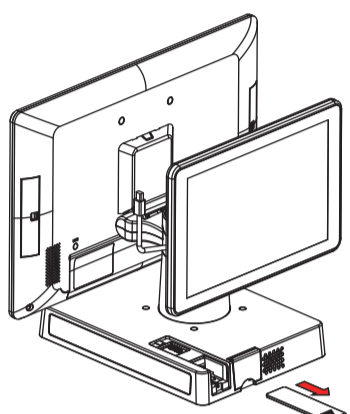
Unscrew M.2 2280 and follow the red arrow to open the cover.

Slide a new M.2 2280 into the M2. slot and fasten up the screw to secure the cover.

Please refer to the "How To Turn System Touchscreen" section below on how to turn the primary touchscreen properly.

Memory Maintenance

Step 1: Unplug the 2 Display Port cables from I/O Ports (1st Dis. and 2nd Dis. ports).

2nd Dis. Port
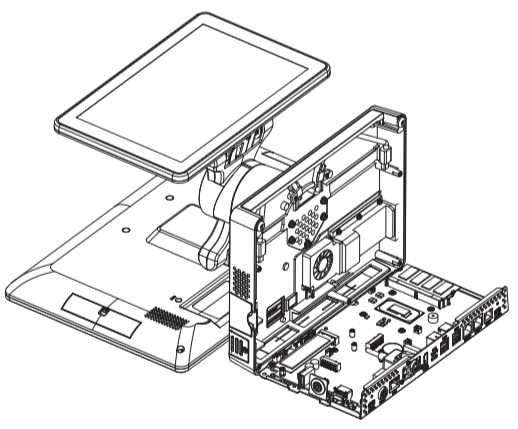
1st Dis. Port

Step 2: Unfasten the 5 screws as shown.
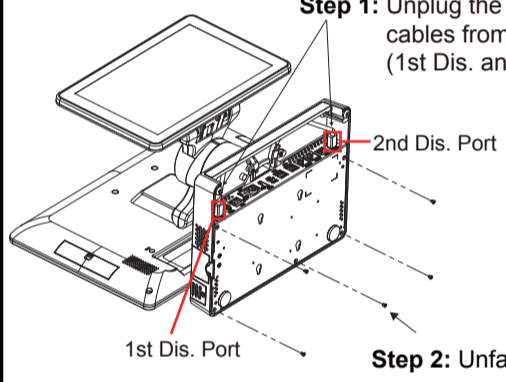
Step 3: Move the PCB box outwards slightly as shown (red arrow) and lay the PCB box down on a flat surface.
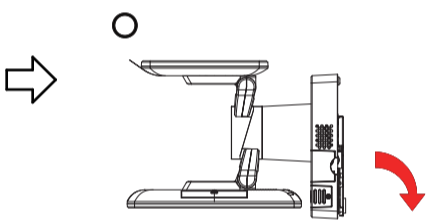
Warning: If you force to move the PCB Box too far away from the POS system, the connected cables inside the system could be damaged.

Step 4: Open the cover and unplug all the connected cables. (Remove the LED cable and Wi-Fi antenna if Wi-Fi function is available.)

Step 5: Change the memory and heating pad.

Step 6: Re-connect all the unplugged cables and replace all removed screws in the order you dismantled and complete.
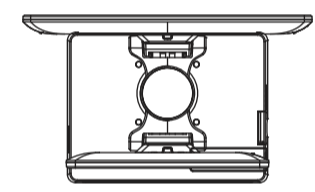
How To Turn System Touchscreen

You can turn the POS touchscreen either way. Heed that after you turn the primary touchscreen to the rear side, you must turn the primary touchscreen only in the direction you previously turned.
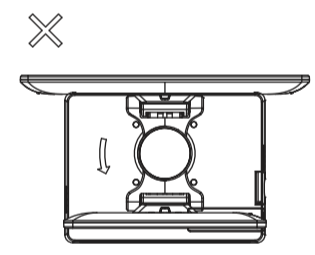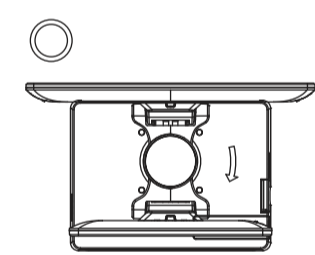
PA-J510 System Top View
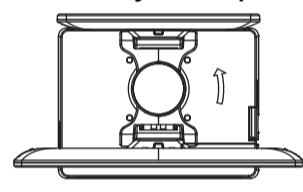
In this example, the primary touchscreen is to be turned leftwards.
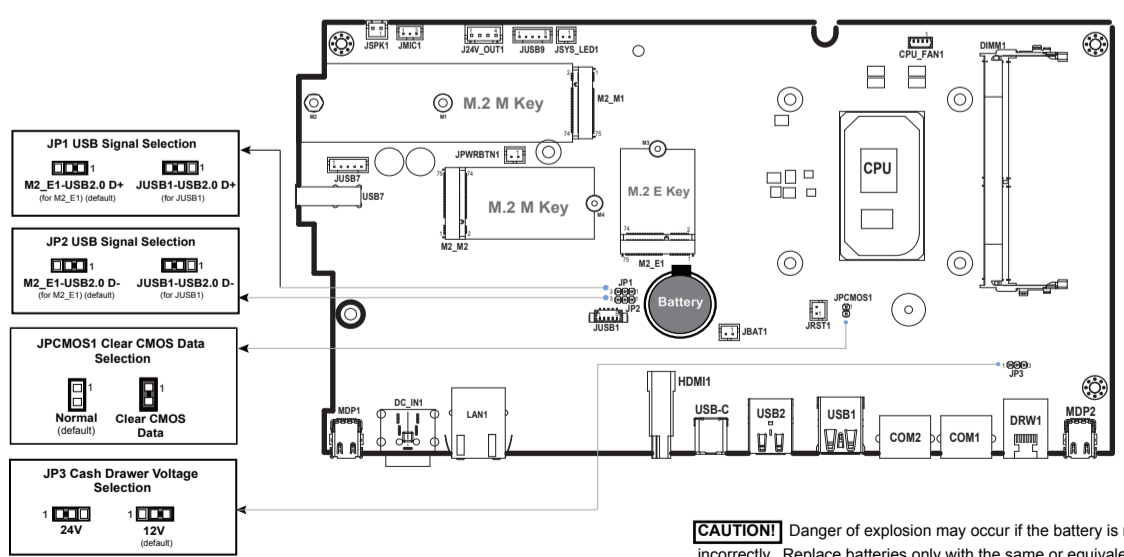
The primary touchscreen has been turned as illustrated.

Important: Please turn the primary touchscreen only in the direction you previously turned.

Warning: If you force to turn not in the direction you previously turned, the internal structure of the POS system could be damaged.

Jumper Setting

JSPK1 JMIC1 J24V_OUT1 JUSB9 JSYS_LED1

CPU_FAN1 DIMM1

M.2 M Key

M2_M1

JP1 USB Signal Selection

M2_E1-USB2.0 D+ (for M2_E1) (default)   JUSB1-USB2.0 D+ (for JUSB1)

JPWRBTN1

JUSB7

USB7

M.2 M Key

M2_M2

M.2 E Key

CPU

JP2 USB Signal Selection

M2_E1-USB2.0 D- (for M2_E1) (default)   JUSB1-USB2.0 D- (for JUSB1)

JP1
JP2
JUSB1

M2_E1

Battery

JPCMOS1
JRST1

JBAT1

JPCMOS1 Clear CMOS Data Selection

Normal (default)   Clear CMOS Data

JP3

JP3 Cash Drawer Voltage Selection

1 ◼◼◼ 1
24V

1 ◼◼◼ 1
12V (default)

MDP1   DC_IN1   LAN1   HDMI1   USB-C   USB2   USB1   COM2   COM1   DRW1   MDP2

CAUTION! Danger of explosion may occur if the battery is replaced incorrectly. Replace batteries only with the same or equivalent type recommended by the manufacturer. Dispose the used batteries according to the manufacturer's instructions.
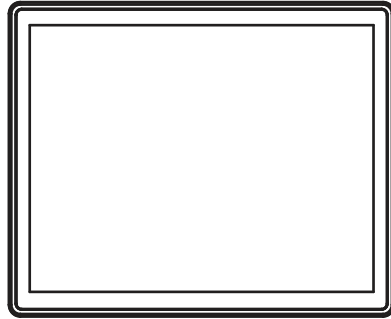
Safety Precautuion

The following messages are reminders for safety on how to protect your system from damages and extend a long life for the system.

1. Check the Cable Voltage
- Make sure the range of operating voltage between AC 100V ~ 240V. Otherwise, the system could be damaged.

2. Environmental Conditions
- Place your PA-J510 on a sturdy, level surface. Be sure to allow enough space to have easy access around the system.
- Avoid extremely hot or cold place to install the system.
- Avoid exposure to sunlight for a long period of time or in an airtight space.
- Avoid the system from any heating device or using it outdoors in a cold winter day.
- Bear in mind that the operating ambient temperature is from 0 ~ 35°C (32°F ~ 95°F).
- Avoid moving the system rapidly from a hot place to a cold place and vice versa as condensation may come from inside of system.
- Place PA-J510 in strong vibration(s) may cause hard disk failure.
- Don't place the system close to any radio active device in case of signal interference.

3. Handling
- If the system isn't fully in DOS mode, adjust BIOS setting as the instruction: Advanced Chipset Feature => Boot display => choose "LFP".
- Avoid putting heavy objects on top of the system.
- Don't turn the system upside down. This may cause the hard drive to malfunction.
- Don't allow foreign objects to fall into this product.
- If water or other liquid spills into this product, unplug the power cord immediately.

4. Good Care
- When the outside of the case is stained, remove the stain with a neutral washing agent with a cloth.
- Never use strong agents such as benzene and thinner to clean the system.
- If heavy stains are present, moisten a cloth with diluted neutral washing agent or with alcohol and then wipe thoroughly with a dry cloth.
- If dust has been accumulated on the outside, remove it by using a made vacuum cleaner for computers.
- Don't contact the surface of capacitive touch before entering operation system, or capacitive touch may have problems for electrostatics interface.

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent ype recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

WARNING! Some internal parts of the system may have high electrical voltage. And therefore we strongly recommend that qualified engineers can open and disassemble the system. The LCD and Touchscreen are easily breakable, please handle them with extra care.

PA-J510

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☑	Power Adaptor	X 1
☑	AC Power Cord	X 1
☑	Driver DVD	X 1

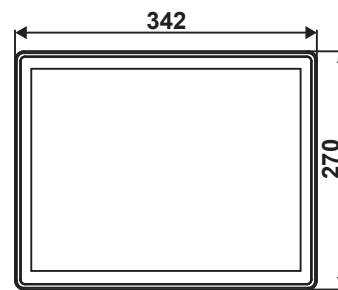## Specifications

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	Memory	1 x DDR4 SO-DIMM slot (up to 16GB)
	Power Supply	1 x 60/90 watt power adapter
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	O.S. Support	Windows® 11 IoT Enterprise / Windows®10 IoT Enterprise
	Primary Display	15", 1024 x 768
	Wall Mount Type	VESA 75 x 75mm standard
	Audio	1 x 2W Speaker
	System Weight	3.9 kg
	Dimensions (WxHxD)	342 x 270 x 60 mm
Storage	SATA	1 x M.2 2280, SATA interface
I/O Ports	USB	**Rear I/O:** 2 x USB 2.0/ 2 x USB 3.1 / 1 x USB Type-C **Side I/O:** 1 x USB 2.0
	Serial Port	1 x RJ45 (support +5V/12V selectable)
	LAN	1 x Giga LAN
	HDMI	1 x HDMI
	Cash Drawer	1 x RJ11 (+12V or +24V selectable) (Default at +24V)
	DC In	1 x 4-pin DC power jack
	Option	1 x USB 2.0 or 1 x 24V Power USB (1A) or 1 x DC Out (1A)
Add-ons	Customer Display	20 columns x2 lines STN LCD display
	MSR & i-Button	ISO I,II,III;JIS II and support information key (USB interface)
	Fingerprint	Silicon Fingerprint Module
	Barcode Scanner	**1D:** EAN-13, EAN-8, UPC-A, UPC-E, ISSN, ISBN, Codabar, Code 128, Code 93, ITF-6, ITF-14, Interleaved 2 of 5, Industrial 2 of 5, Standard 2 of 5, Matrix 2 of 5, GS1 Databar, Code 39, Code 11 **2D:** PDF417, QR Code, Micro QR, Data Matrix, Chinese sensible code
Display	Primary Display	15" IPS LCD (Max. Resolution: 1024 x 768) Brightness: 400 cd/m²
	Touchscreen	Bezel-free projected capacitive
	Tilt Angle	0~50 degree
Environment	EMC & Safety	CE / FCC
	Operating Temp.	0°C ~ 35°C (32°F ~ 95°F)
	Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)
	Humidity	20% ~ 90%

System View

Unit: mm

Front View

342
270

Rear View

136
75
75

REAR I/O

1st Display Port
DC In
LAN
HDMI
COM2
COM1
2nd Display Port

1st Dis.
DC In
LAN
HDMI
USB Type C
USB
USB
COM2
COM1
DRW
2nd Dis.

(optional)

USB Type C
USB 2.0
USB 3.0
DRW

DC OUT
USB
Power USB

SIDE I/O

Open up the cover from the right side of PA-J510 Panel PC as shown and find the Side I/O **USB7** and Power Button.

USB7
Power Button

prox
PROTECH Group
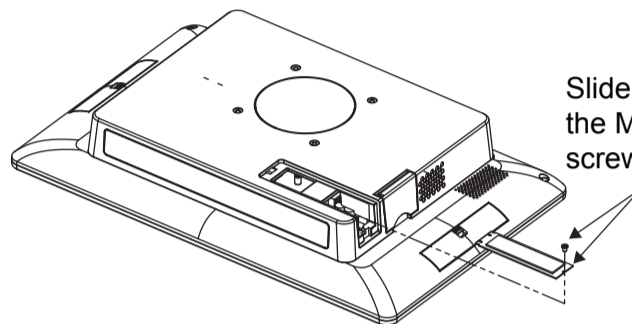
Easy Maintenance

M.2 2280 Maintenance

**Step 1:** Unscrew M.2 2280 and follow the direction (red arrow) to release the cover.

Step 2: Slide a new M.2 2280 into the M2. slot and fasten up the screw to secure the cover and complete.
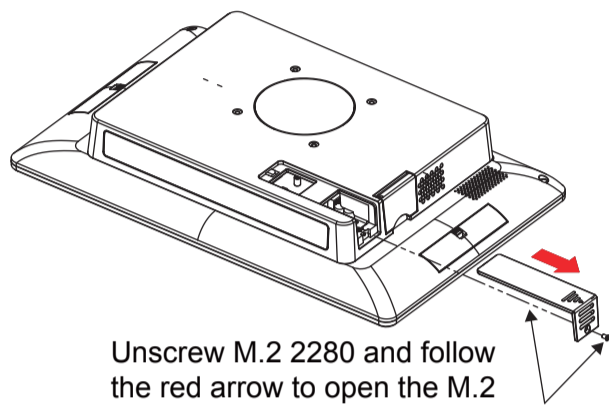
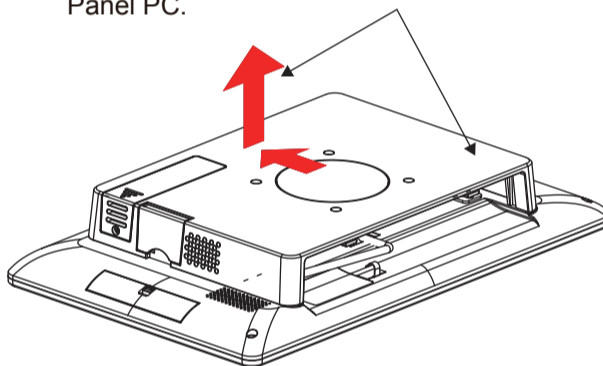Unscrew M.2 2280 and follow the red arrow to open the M.2 slot cover.

Slide a new M.2 2280 into the M2. slot and fasten up the screw to secure the cover.
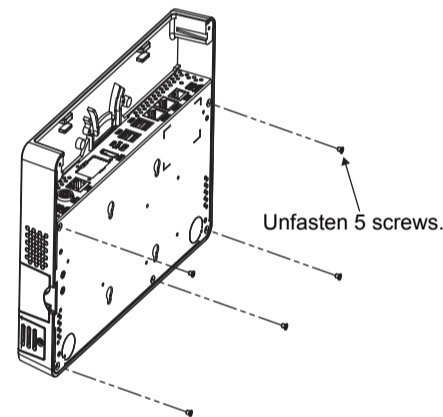
Memory Maintenance

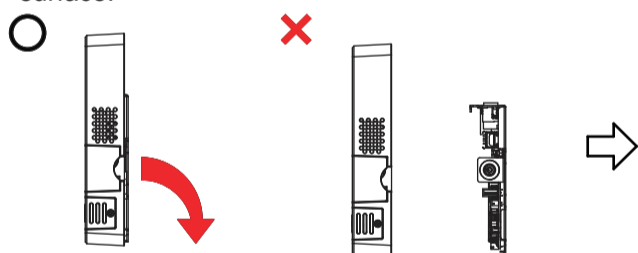**Step 1:** Release the 2 screws and unplug the DP cable from the I/O Ports.
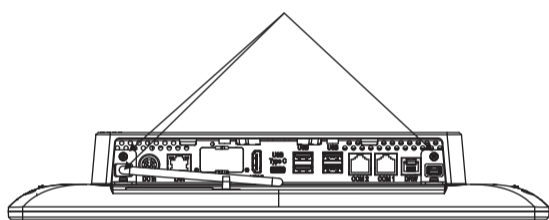
Step 2: Follow the directions (red arrows) below to separate PCB Box from the touchscreen of Panel PC.
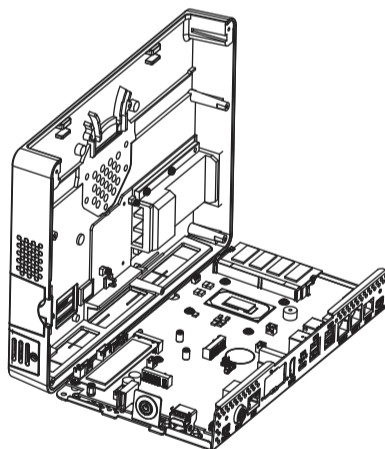
Step 3: Unfasten 5 screws as shown:

Unfasten 5 screws.

Step 4: Move the PCB box outwards slightly as shown (red arrow) and lay the PCB box down on a flat surface.

Warning: If you force to move the PCB Box too far away from PPC, the connected cables inside could be damaged.
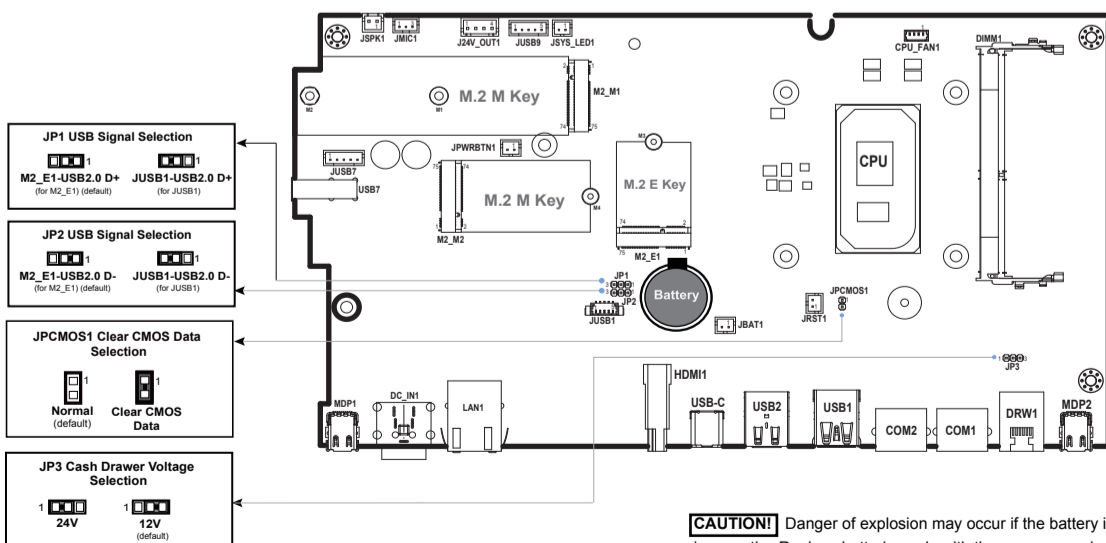
Step 5: Open the cover and unplug all the connected cables.

Step 6: Change the memory and heating pad.

Step 7: Re-connect all the unplugged cables and replace all removed screws in the order you dismantled and complete.

Jumper Setting

JP1 USB Signal Selection

M2_E1-USB2.0 D+	JUSB1-USB2.0 D+
(for M2_E1) (default)	(for JUSB1)

JP2 USB Signal Selection

M2_E1-USB2.0 D-	JUSB1-USB2.0 D-
(for M2_E1) (default)	(for JUSB1)

JPCMOS1 Clear CMOS Data Selection

Normal	Clear CMOS Data
(default)	

JP3 Cash Drawer Voltage Selection

24V	12V
	(default)

Board components: JSPK1, JMIC1, J24V_OUT1, JUSB9, JSYS_LED1, CPU_FAN1, DIMM1, M.2 M Key, M2_M1, JPWRBTN1, JUSB7, USB7, M.2 M Key, M2_M2, M.2 E Key, M2_E1, JUSB1, Battery, JPCMOS1, JRST1, JBAT1, JP3, MDP1, DC_IN1, LAN1, HDMI1, USB-C, USB2, USB1, COM2, COM1, DRW1, MDP2, CPU

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