Manuel d'entretien mécanique

TPV Fanless PULSE NP-150-i
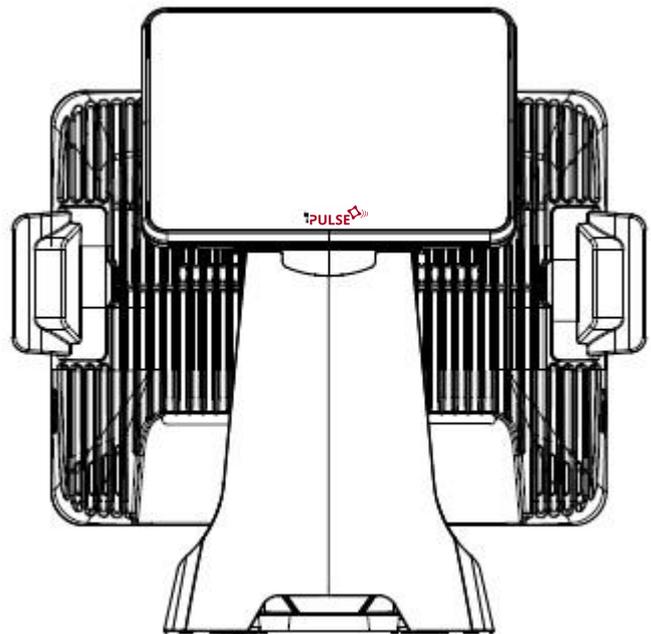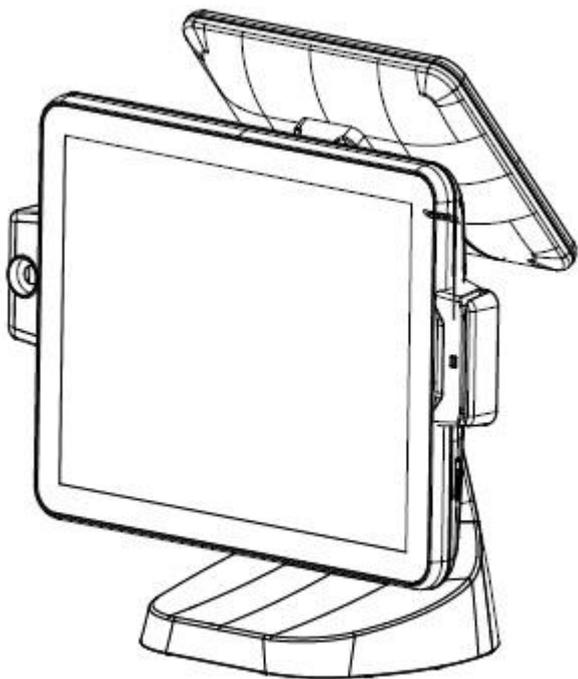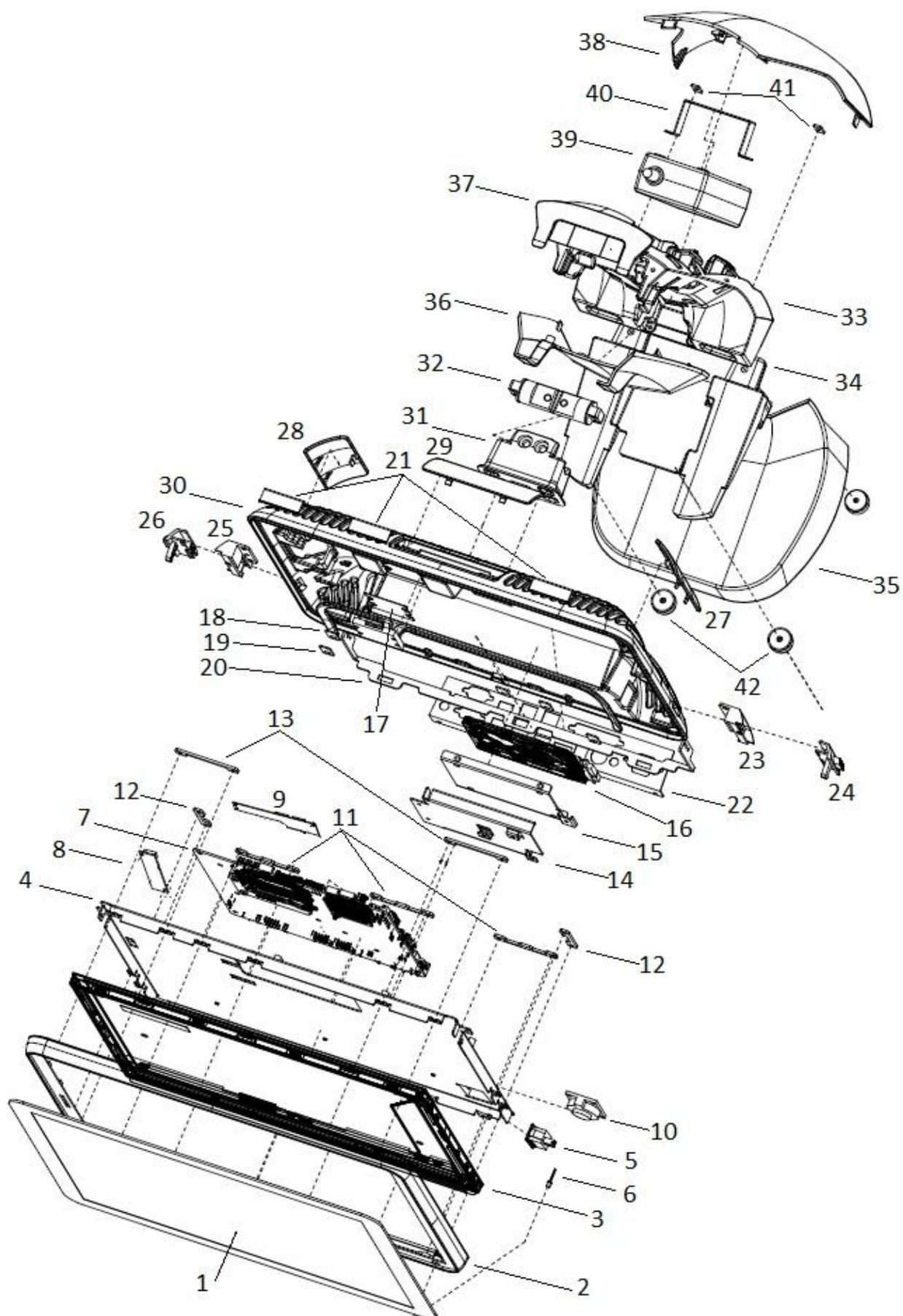
Table of Contents

I. NP-150-i parts description

1. Exploded view & parts list

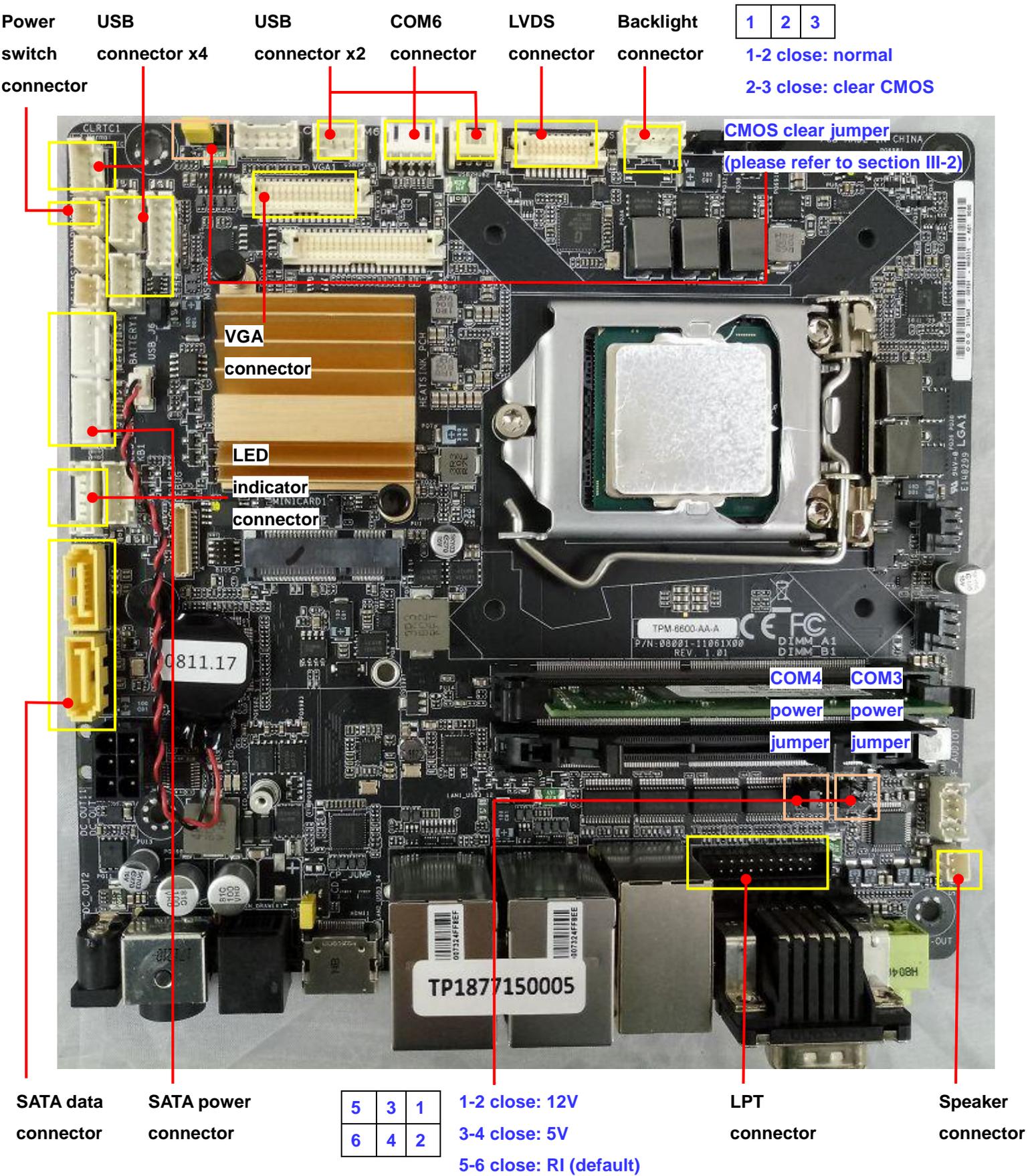| No.	Item	Description
1	Touch screen	5-wire resistive / Projected capacitive touch screen
2	Front bezel	Plastic front bezel
3	LCD panel	15" TFT-LCD module
4	Panel chassis	Metal LCD panel chassis
5	Power switch	Main power switch
6	LED indicator	Blue LED indicator
7	Main board	Main board Skylake H110, mini-ITX
8	RTP controller board	5-wire resistive controller board
9	PCT controller board	Projected capacitive touch controller board
10	Speaker	Single speaker
11	Down snap bracket	Metal front panel down snap bracket
12	Side snap bracket	Metal front panel side snap bracket
13	Up snap bracket	Metal front panel up snap bracket
14	HDD tray	Metal 2.5" HDD/SSD tray
15	HDD bracket	Metal 2.5" HDD/SSD bracket
16	Hard disk drive	2.5" HDD/SSD
17	Mylar gasket	Heat pipe copper block mylar gasket
18	Heat pipe module	Heat pipe module, copper block & pipe x2
19	Heat pipe bracket	Heat pipe bracket
20	Down snap	Metal rear cover down snap
21	Up snap	Metal rear cover up snap
22	I/O bracket	Metal bottom I/O bracket
23	Right snap button holder	Plastic rear cover right snap button holder
24	Right snap button	Plastic rear cover right snap button
25	Left snap button holder	Plastic rear cover left snap button holder
26	Left snap button	Plastic rear cover left snap button
27	Right cover	Plastic rear right cover
28	Left cover	Plastic rear Left cover
29	Up cover	Plastic rear up cover
30	Rear cover	Aluminum rear cover
31	Arm	Aluminum support arm
32	Hinge	Hinge torque 75kg
33	Base	Aluminum base
34	Stand	Aluminum stand
35	Stand cover	Plastic stand cover
36	Base front cover	Plastic base front cover
37	Base top cover	Plastic base top cover
38	Base rear cover	Plastic base rear cover
39	Adapter	60W 12V/5A adapter
40	Adapter bracket	Metal adapter bracket

41	Magnet	Base rear cover magnet
42	Foot pad	NBR rubber foot pad

2. Main board & internal assembly parts

Projected Capacitive Touch Controller Board

COM6 connector (for VFD)

VGA connector (for 2nd monitor)

CPU socket

5-Wire Resistive Touch Controller Board (optional)

HDD/SSD tray

Right USB x2 (for peripherals)

Speaker

Left USB x1 (for peripherals)

mini PCIe socket

RAM socket

LED indicator

Power switch
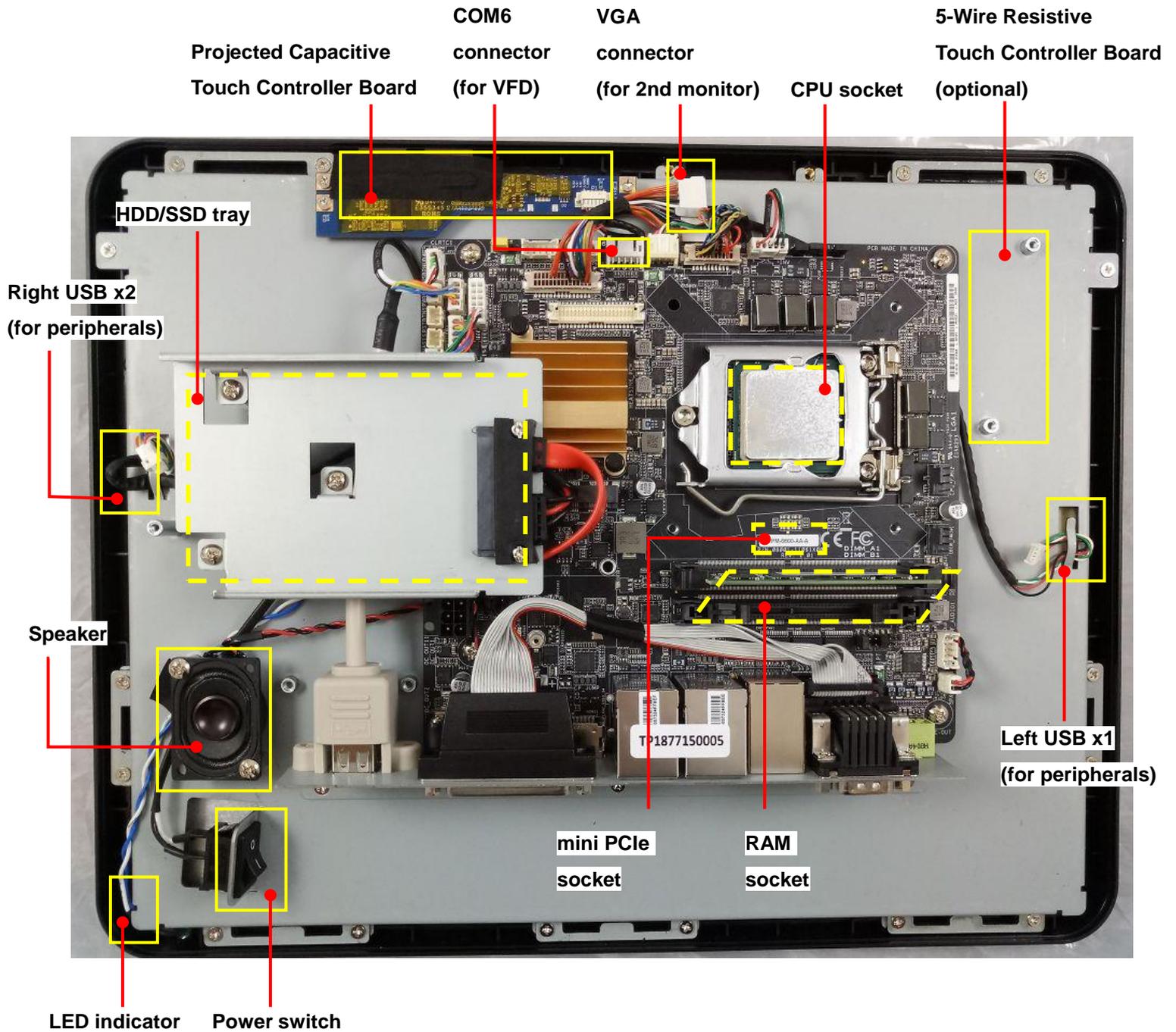
3. Main board connector & jumper

Power switch connector

USB connector x4

USB connector x2

COM6 connector

LVDS connector

Backlight connector

| 1 | 2 | 3 |

1-2 close: normal

2-3 close: clear CMOS

CMOS clear jumper
(please refer to section III-2)

VGA connector

LED indicator connector

COM4 power jumper

COM3 power jumper

SATA data connector

SATA power connector

| 5 | 3 | 1 |
| 6 | 4 | 2 |

1-2 close: 12V

3-4 close: 5V

5-6 close: RI (default)

LPT connector

Speaker connector

4

II. NP-150i system disassembly

1. Detach the optional peripherals

a. Remove the MSR/i-button module

1. Open the back cover of the MSR/i-button module.

2. Loosen the securing screw of MSR/i-button bracket.

3. Disconnect the cable from POS unit.

4. Put the cover to POS unit back. (POS and cover have printed words "L, R, T")

b. Remove the VFD module

1. Turn the VFD screen angle to the lowest.

2. Remove the hinge cover.

3. Turn the VFD screen angle to the highest.

4. Loosen the securing screw of hinge holder.

5. Disconnect the cable from POS unit.

6. Put the cover to POS unit back.
(POS and cover have printed words "L, R, T")

2. Remove the HDD/SSD drive from POS unit

1. Open the back right cover from POS unit.

2. Loosen the securing screw of HDD bracket.

3. Pull out the HDD/SSD drive.

3. Remove the adapter from base unit

1. Unplug the power cord.
(Pull the spring lock to unlock)

2. Remove the base rear cover.

3. Remove the base top cover.

4. Loosen the securing screw of adapter bracket.

4. Disassemble the POS unit

a. Remove the base from POS unit

1. Loosen the securing nut screw of hinge from support arm.

b. Remove the back cover of the POS unit

(POS back cover can be removed without removing the base)

1. Snap button of right/left side.

2. Push to the end.
(The button will stop in the middle)
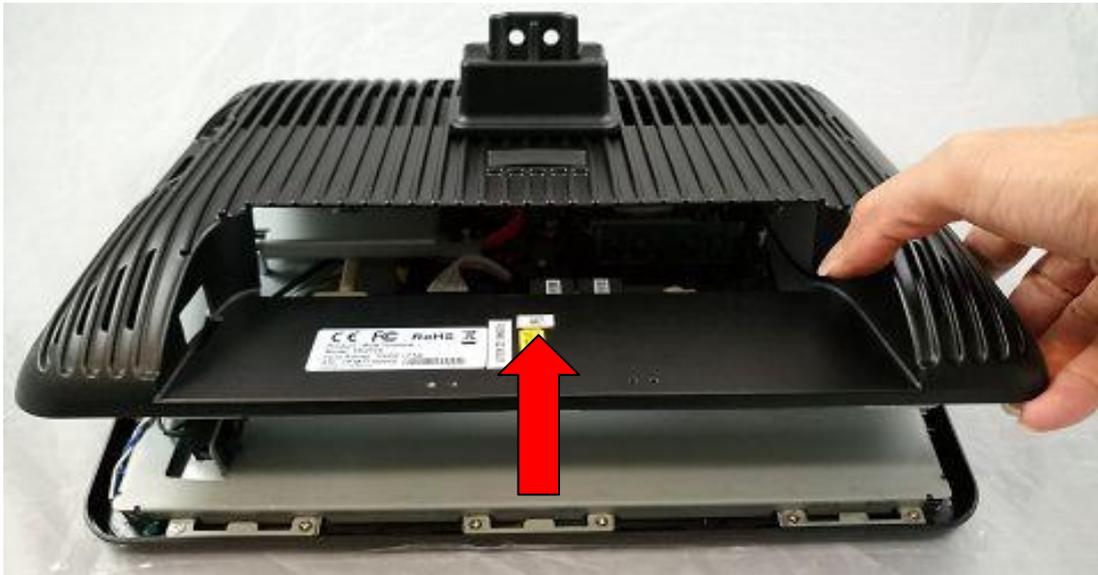
3. Open the back cover.

c-1. Remove the projected capacitive controller & cable
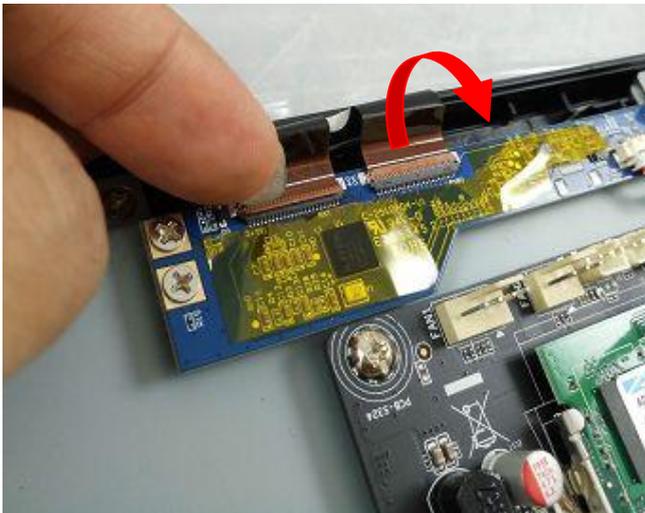
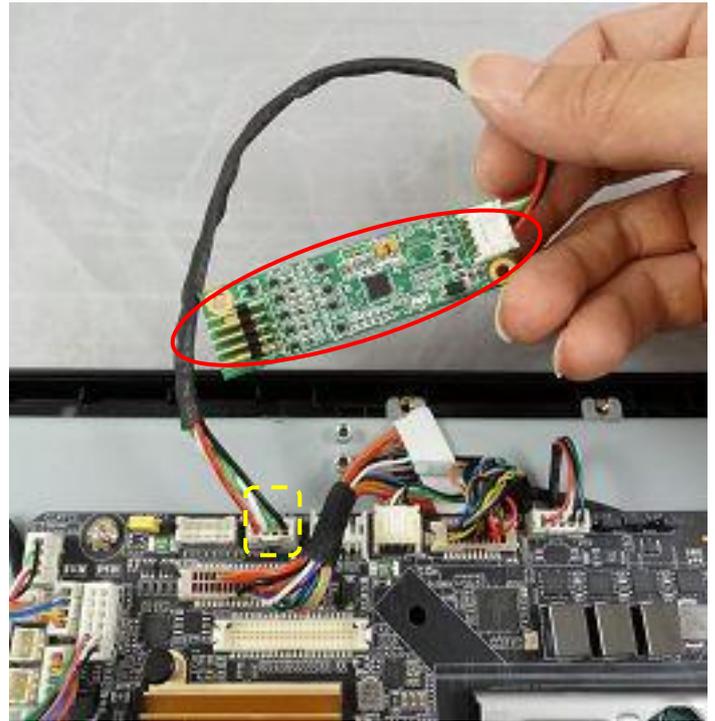1. Open the flip-lock connector and remove the touch FFC.
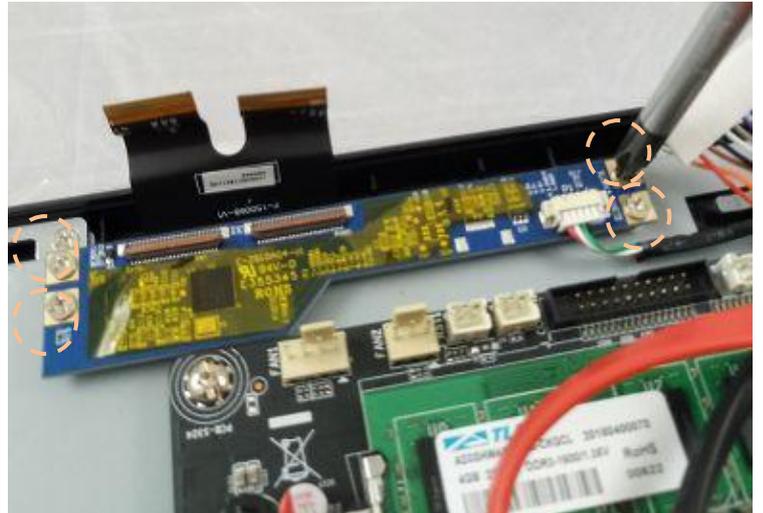
2. Loosen the securing screw of controller.
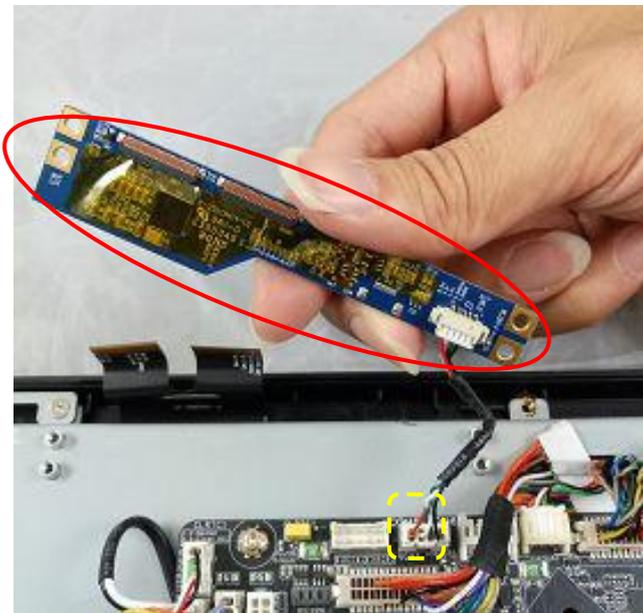
3. Disconnect the touch controller cable from MB.

c-2. Remove the resistive controller & cable

1. Loosen the securing screw of controller.

2. Disconnect the touch controller cable from MB.

d. Remove the touch panel kit (touch screen + front bezel)

(This step isn't required for remove the main board)
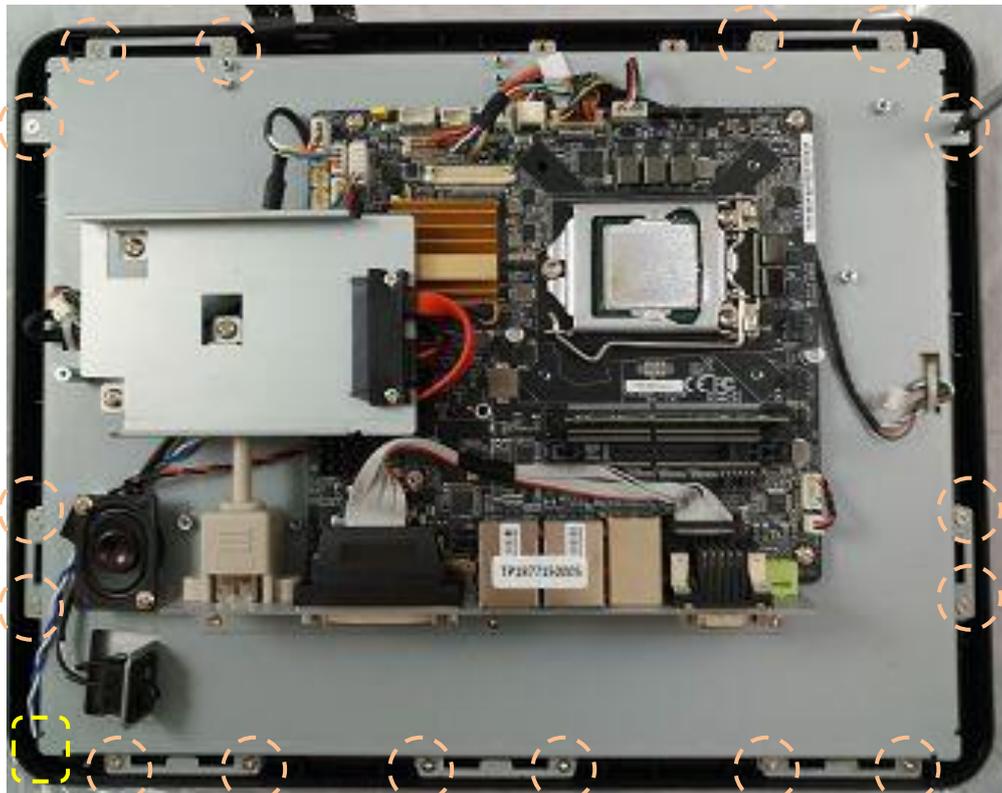
1. Loosen the securing screw of Panel chassis, take out the LED indicator.

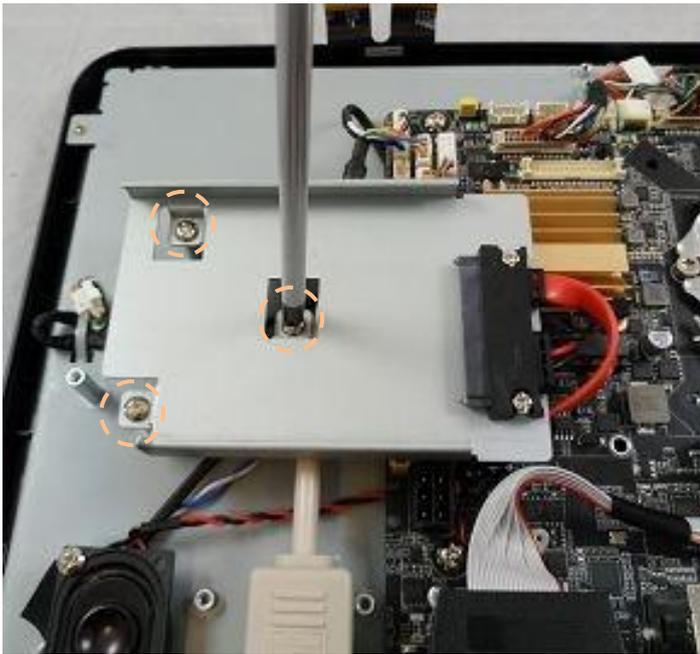2. Take out the snap bracket (up x2, side x2, down x3).
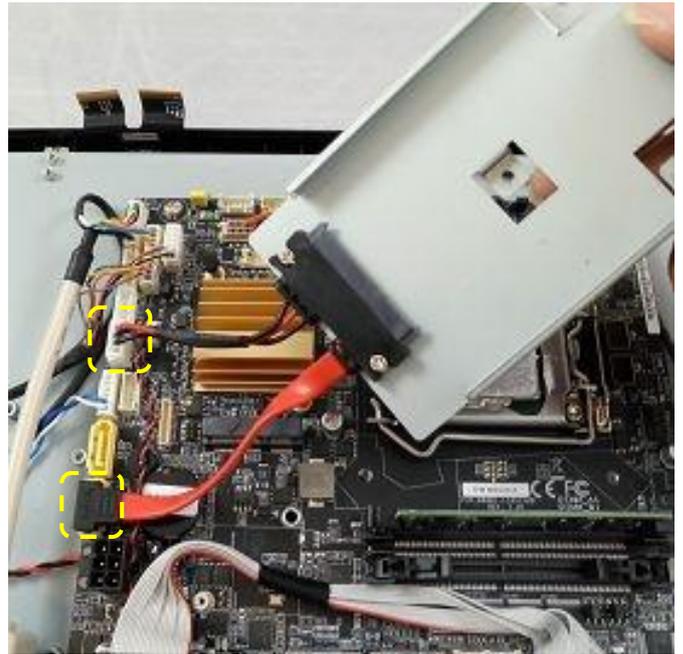

3-1. Projected capacitive touch panel kit.
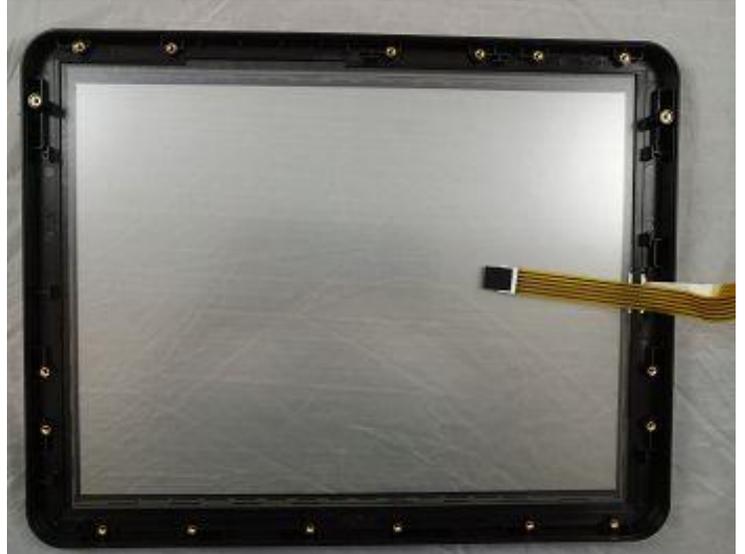
3-2. Resistive touch panel kit.

e. Disconnect the HDD fixed bracket & cable

1. Loosen the securing screw of HDD tray.

2. Disconnect the SATA cable from MB.

f. Disconnect the stack USBx2 cable
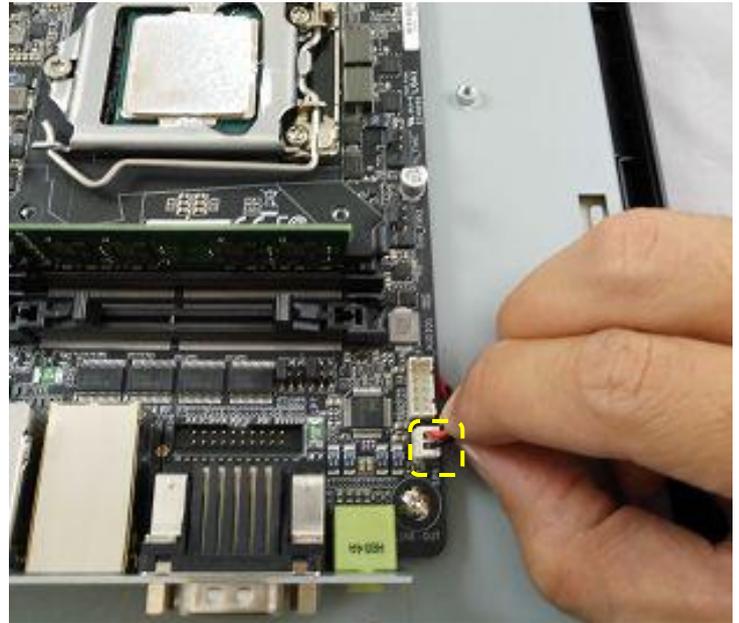

1. Loosen the securing screw of IO bracket.

2. Disconnect the USB cable from MB.

g. Disconnect the speaker

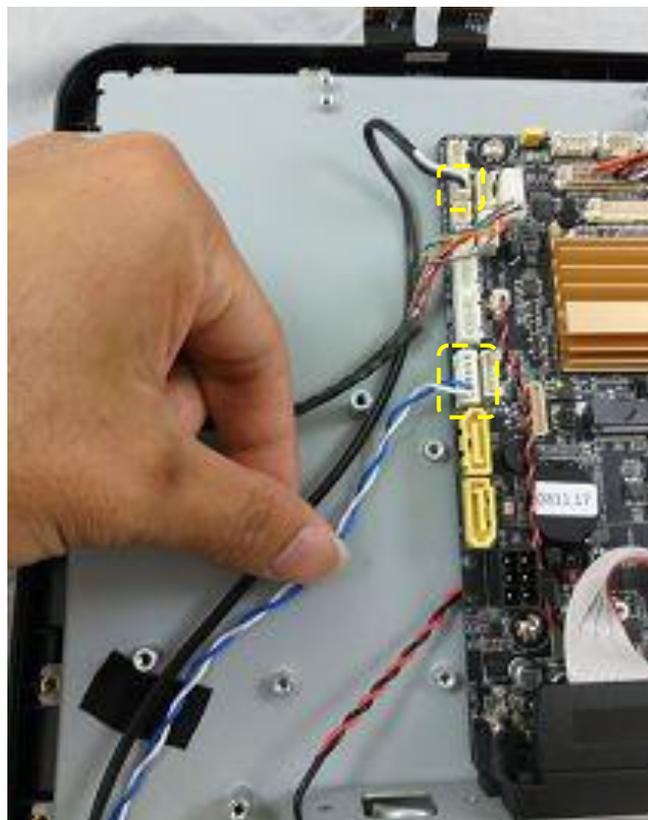(Need to remove the main board before can take out the speaker)

2. Disconnect the speaker cable from MB.

1. Loosen the securing screw of speaker.

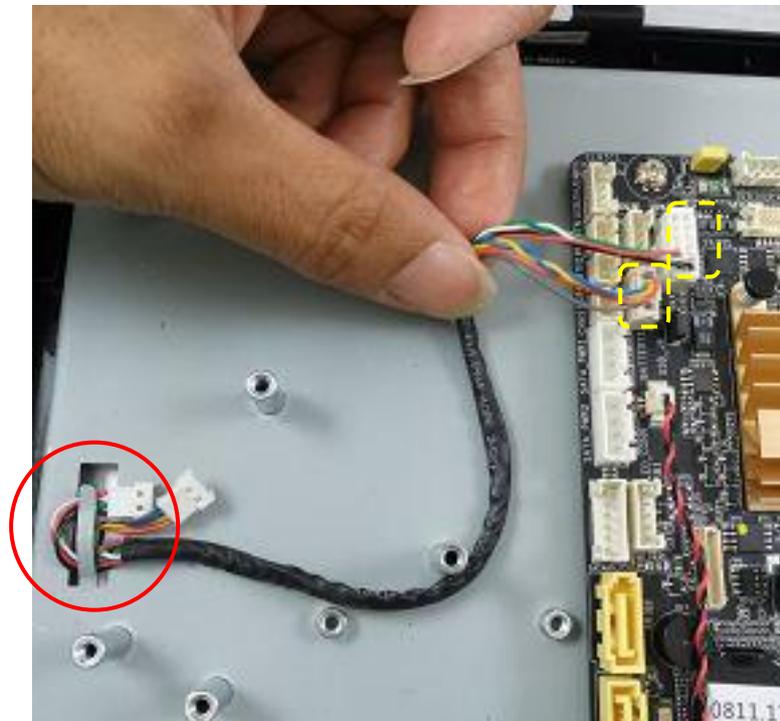## h. Disconnect the power button / LED indicator cable

1. Disconnect the power button / LED indicator cable from MB.
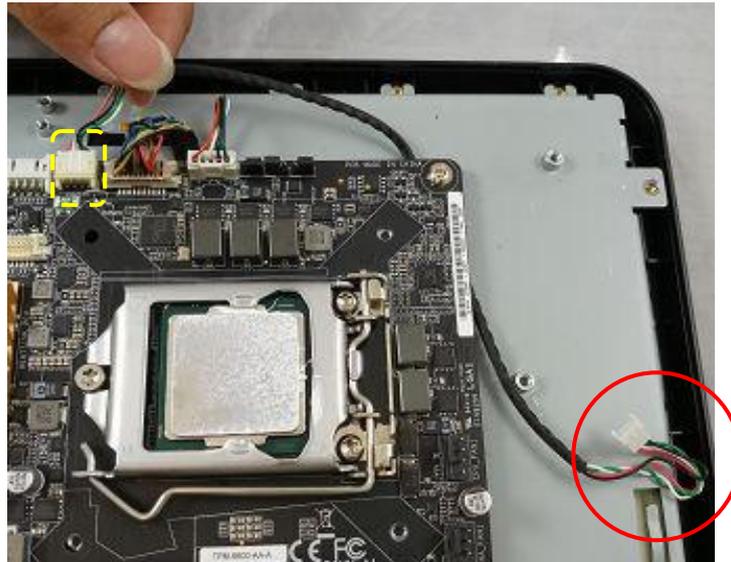
i. Disconnect the VGA cable

1. Disconnect the VGA cable from MB.

j. Disconnect the right USB x2 cable

1. Disconnect the right USB x2 cable from MB.

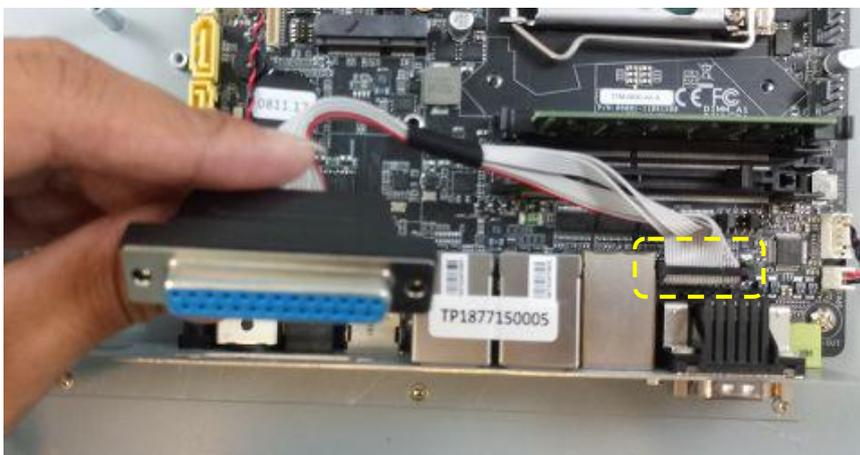# k. Disconnect the left USB x1 cable

1. Disconnect the left USB x1 cable from MB.

l. Disconnect the LPT cable

1. Disconnect the hexagonal copper column from I/O bracket.

2. Disconnect the LPT cable from MB.

m. Disconnect the LVDS / backlight cable

(Need to remove the main board before can take out the cable)

1. Disconnect the LVDS / backlight cable from MB.
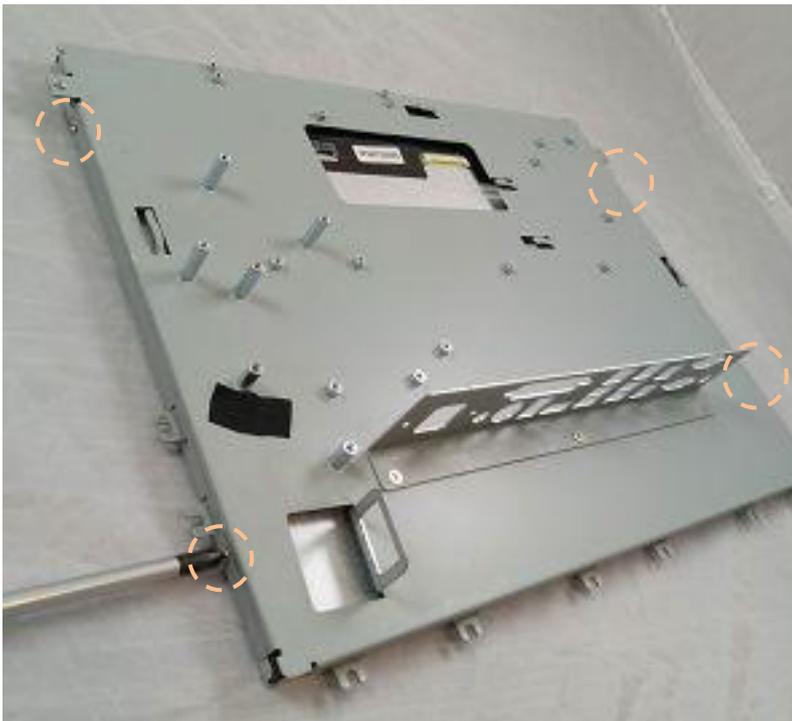
n. Remove the main board

1. Disconnect the hexagonal copper column from I/O bracket.

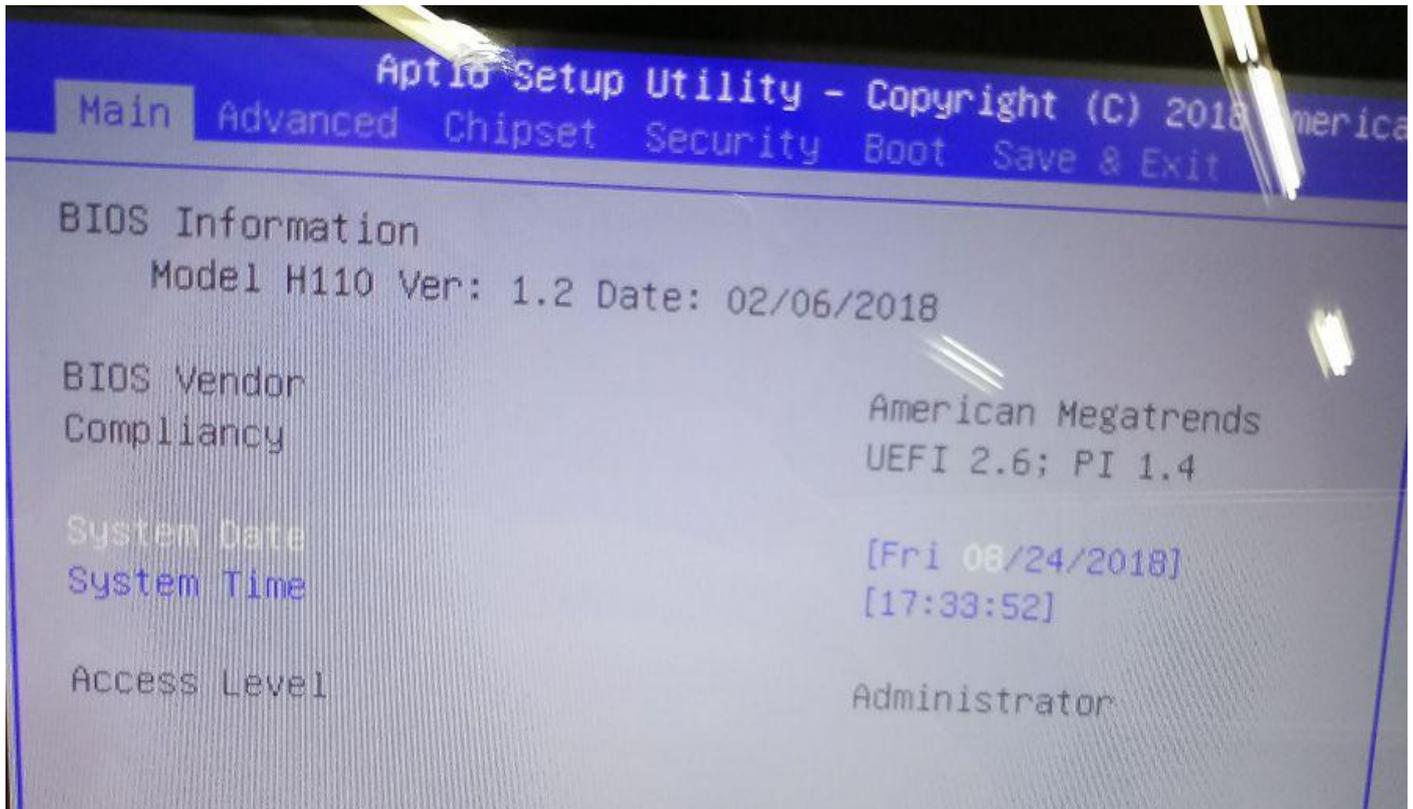2. Loosen the securing screw of MB.

o. Remove the LCD panel

1. Loosen the securing screw of panel chassis.

2. Take out the LCD panel.

III. NP-150-i BIOS setting & CMOS clear

1. BIOS common functions

BIOS version: TP66BM12 (date: 02/06/2018)

a. POS status when the power is reinserted

[Tab bar] Advanced →Power Management →Restore AC Power Loss
- Last State
- Always On
- Always Off (default)

b. COM1~2 power supply setting

[Tab bar] Advanced →Super IO Configuration →[*Active*] Serial Port 1~2 →Mode
- RI# (default)
- 5V
- 12V

COM3~4 power supply setting from main board jumper (RI default).
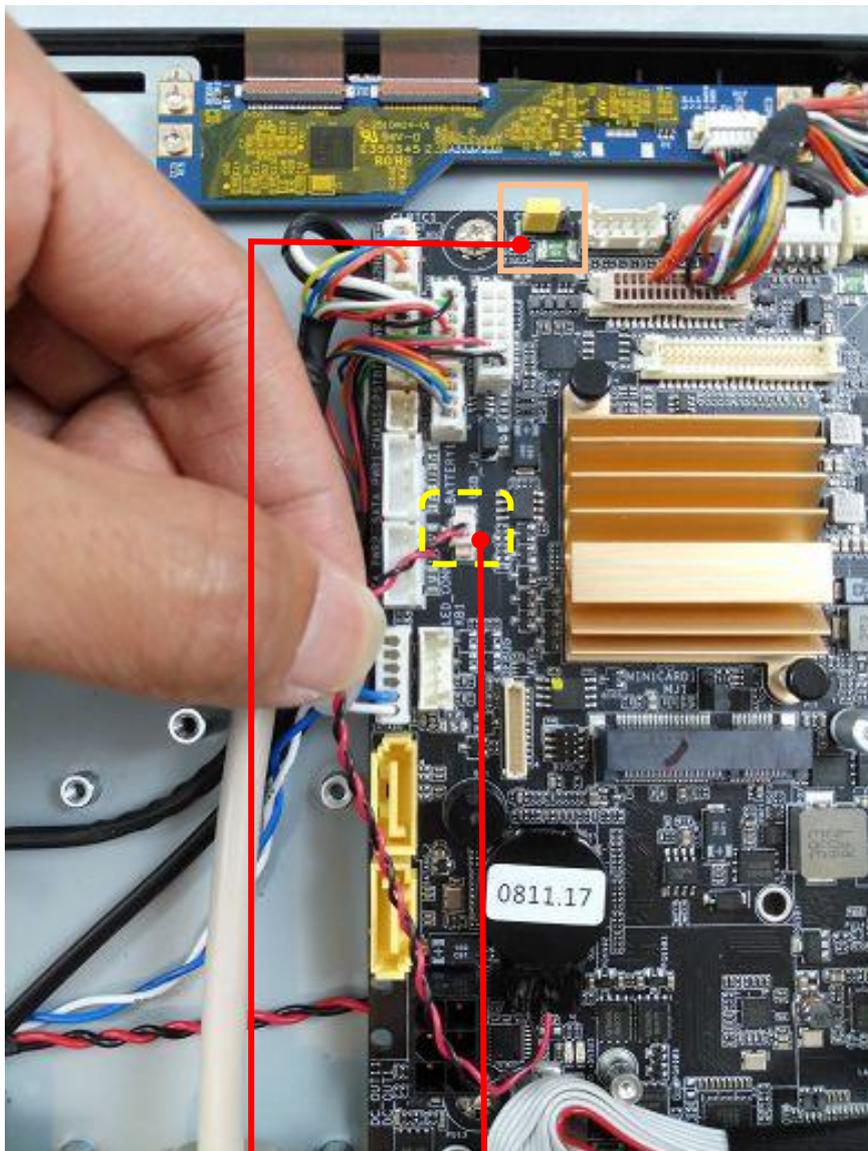COM5 default at +5V, COM6 fix at +12V.

c. Boot sequence

[Tab bar] Boot →Boot Option Priorities
 • Boot Option #1
 • Boot Option #2

d. Restore BIOS item to factory default setting

[Tab bar] Save & Exit →Restore Defaults

2. CMOS clear (reply the BIOS initial preset)

1	2	3

1-2 close: normal

2-3 close: clear CMOS

lithium battery plug

Step1. Remove the AC power line.

Step2. Set the jumper to pin 2-3 close.

Step3. Wait for five seconds.

Step4. Set the jumper to pin 1-2 close.

Step5. Power in the AC.

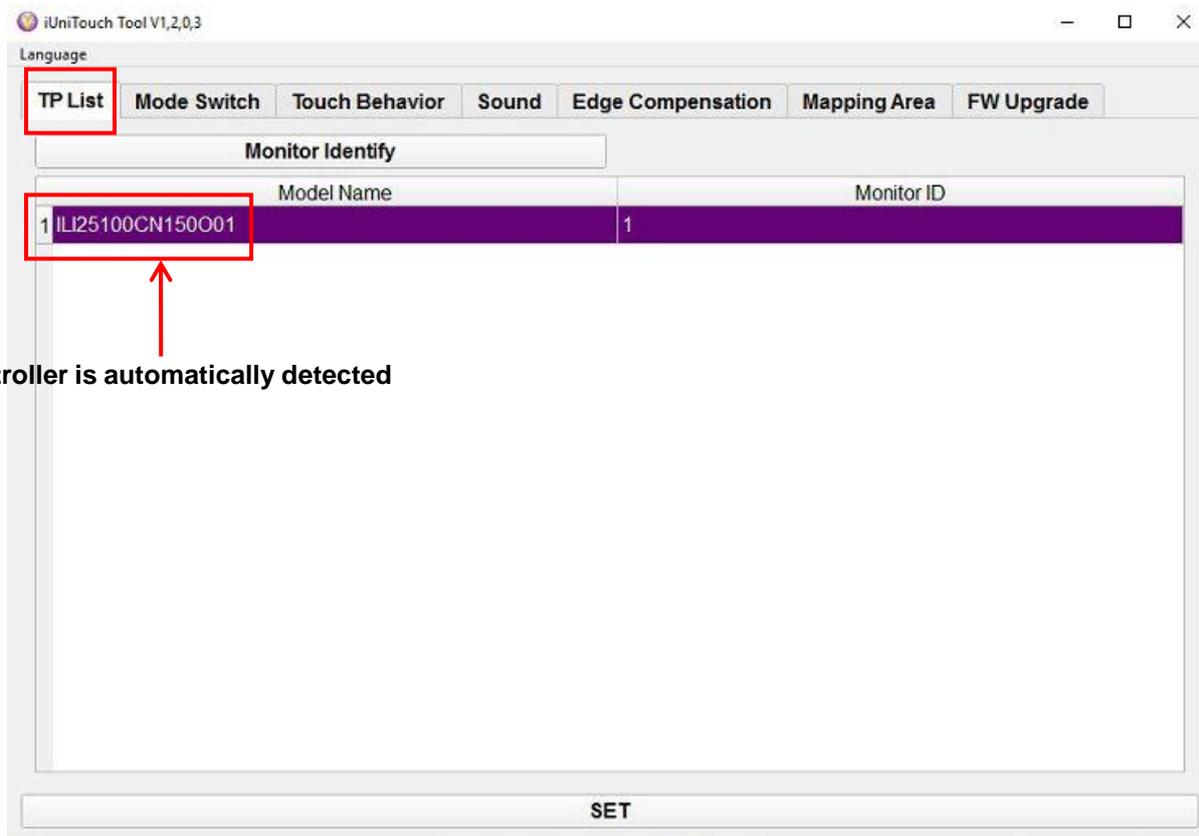# IV. NP-150-i touch utility setting

1. Projected capacitive touch

Please refer the following file to install the utility.
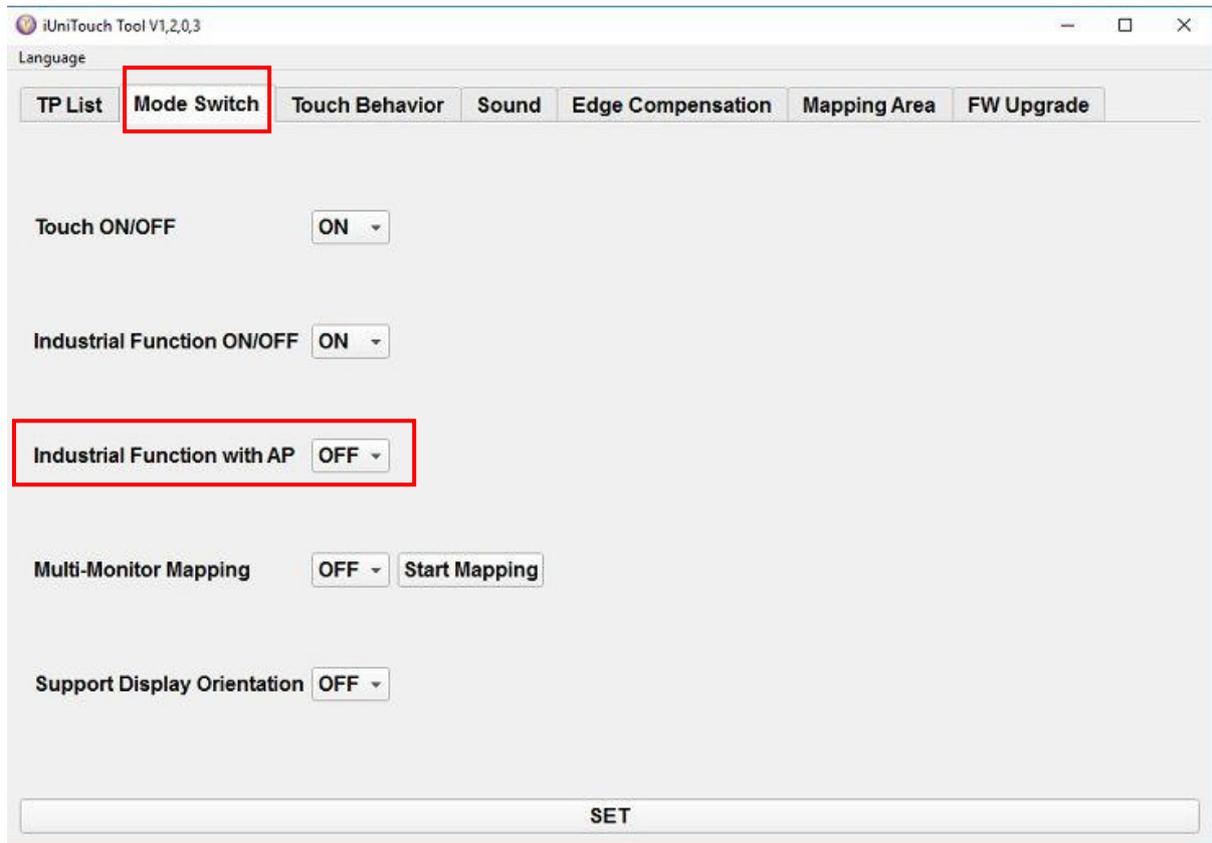"TP-2515_TP-8515_TP-7715_Touch Driver Installation_TYSSO_20180820.pdf"

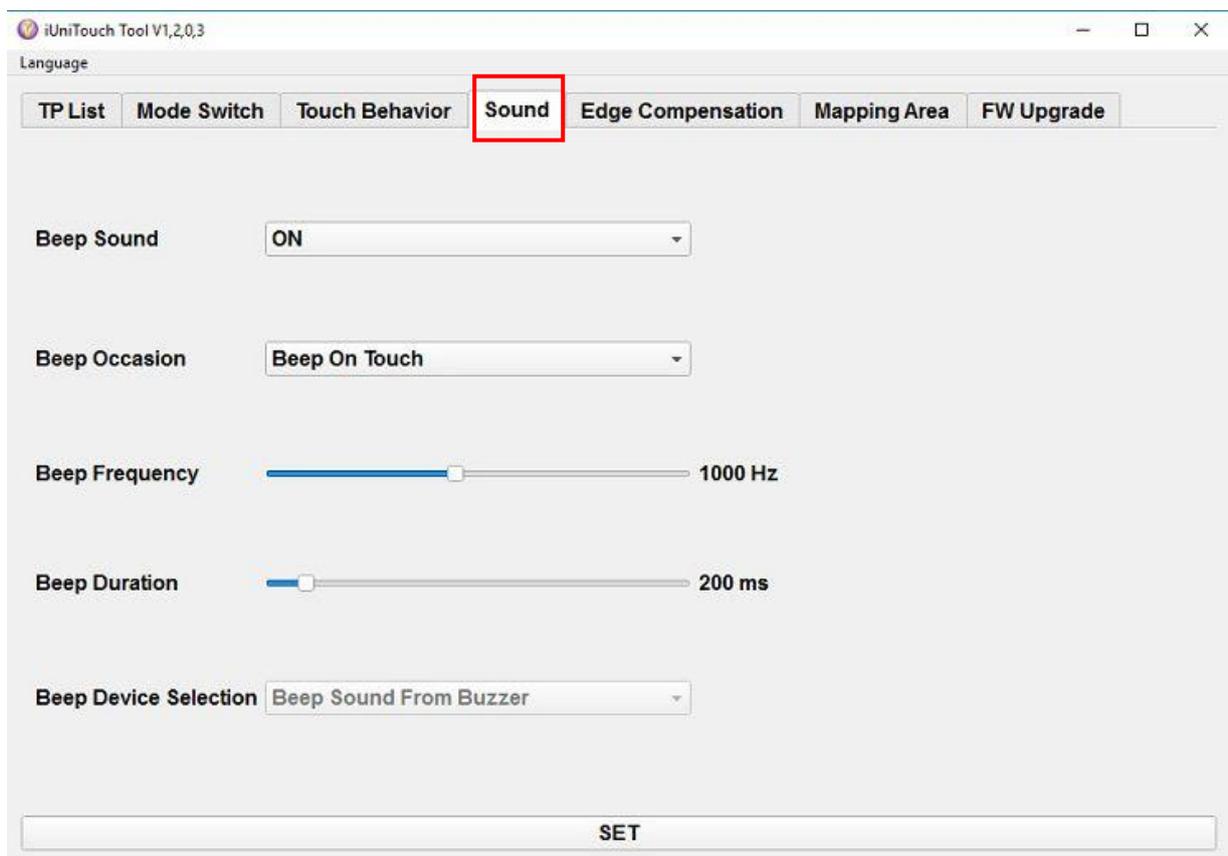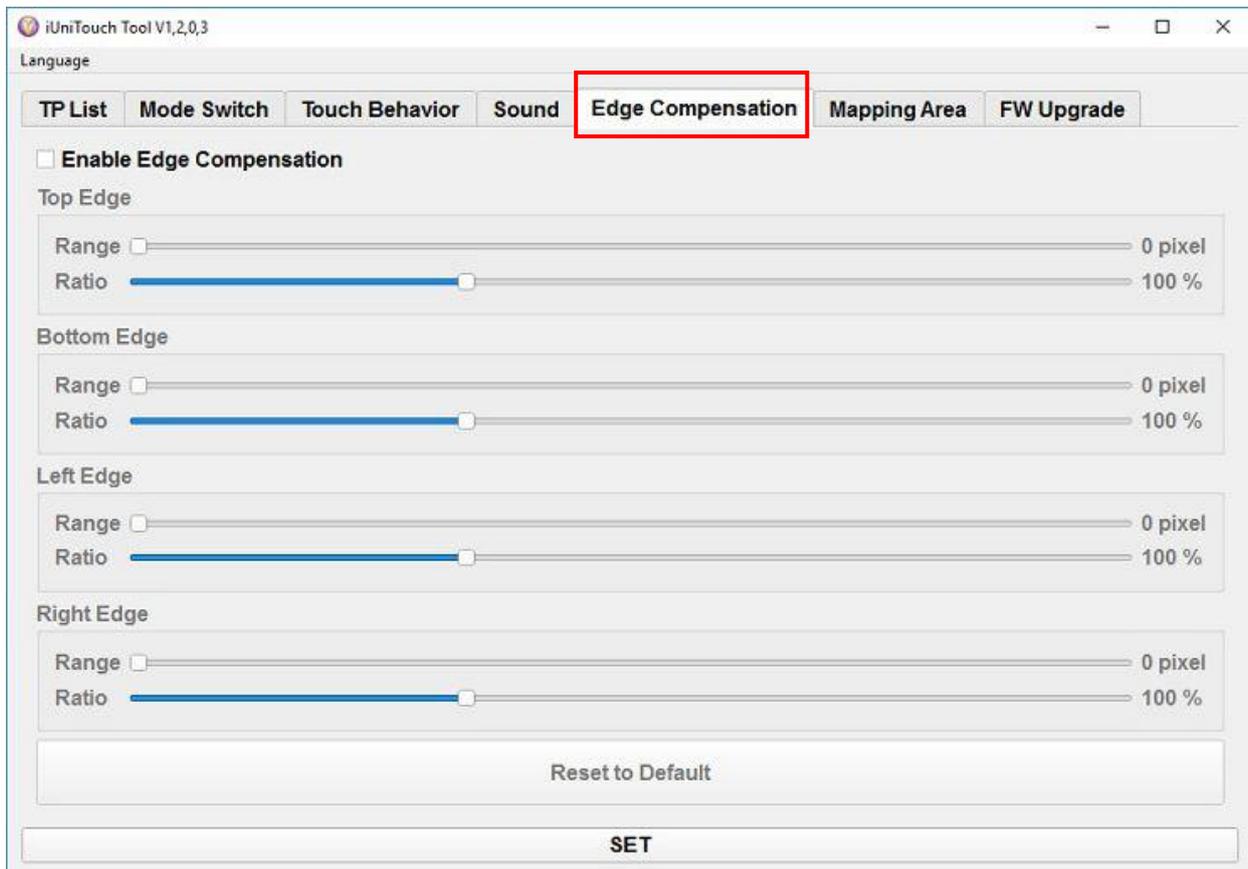1. Double click the icon to access the utility.

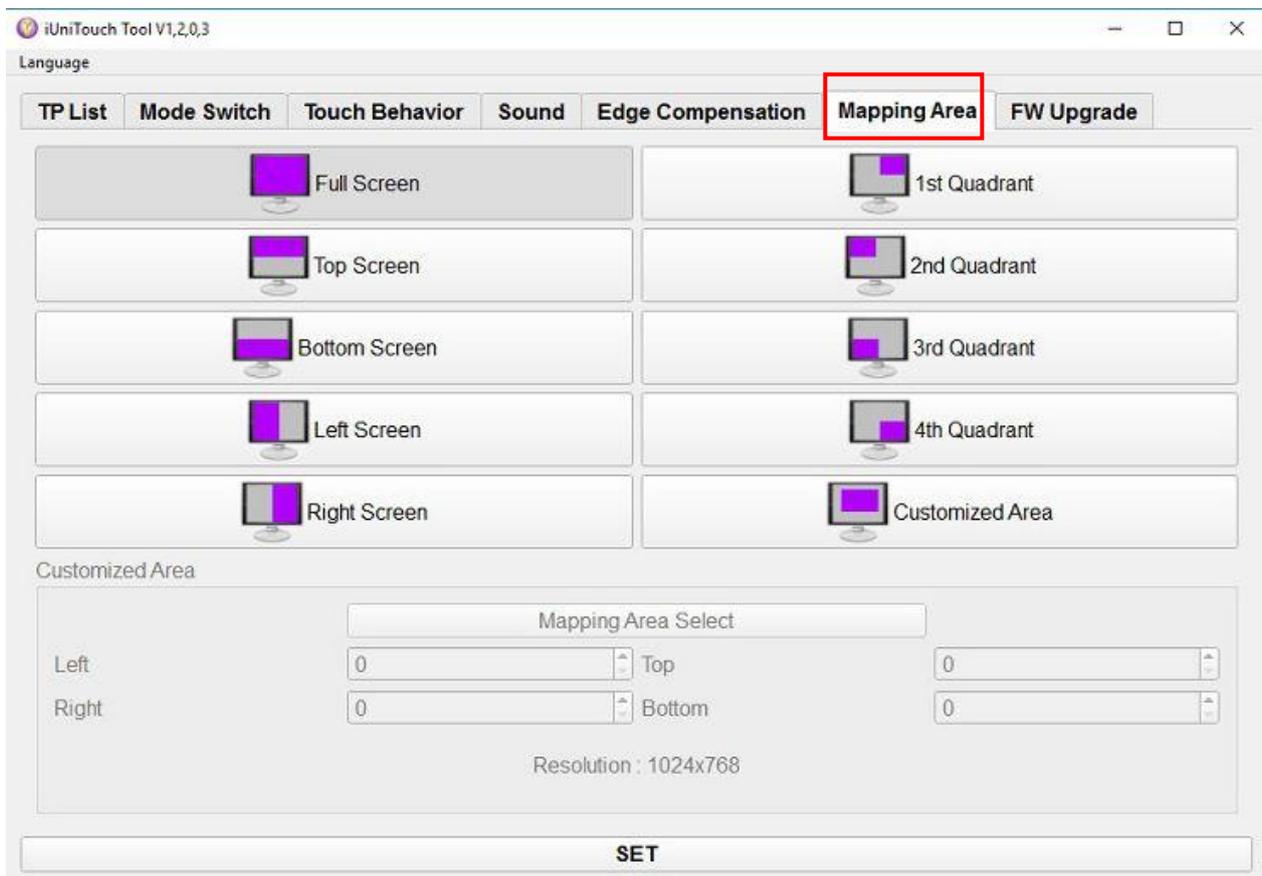2. The menu will show the controller name " ILI25100CN150O01".

3. The function setting will take effect when the program is opened,
the default is "OFF" → If you don't open this program is still working.

4. Sound setting.

5. Adjustable when the edge of the screen lacks sensitivity.

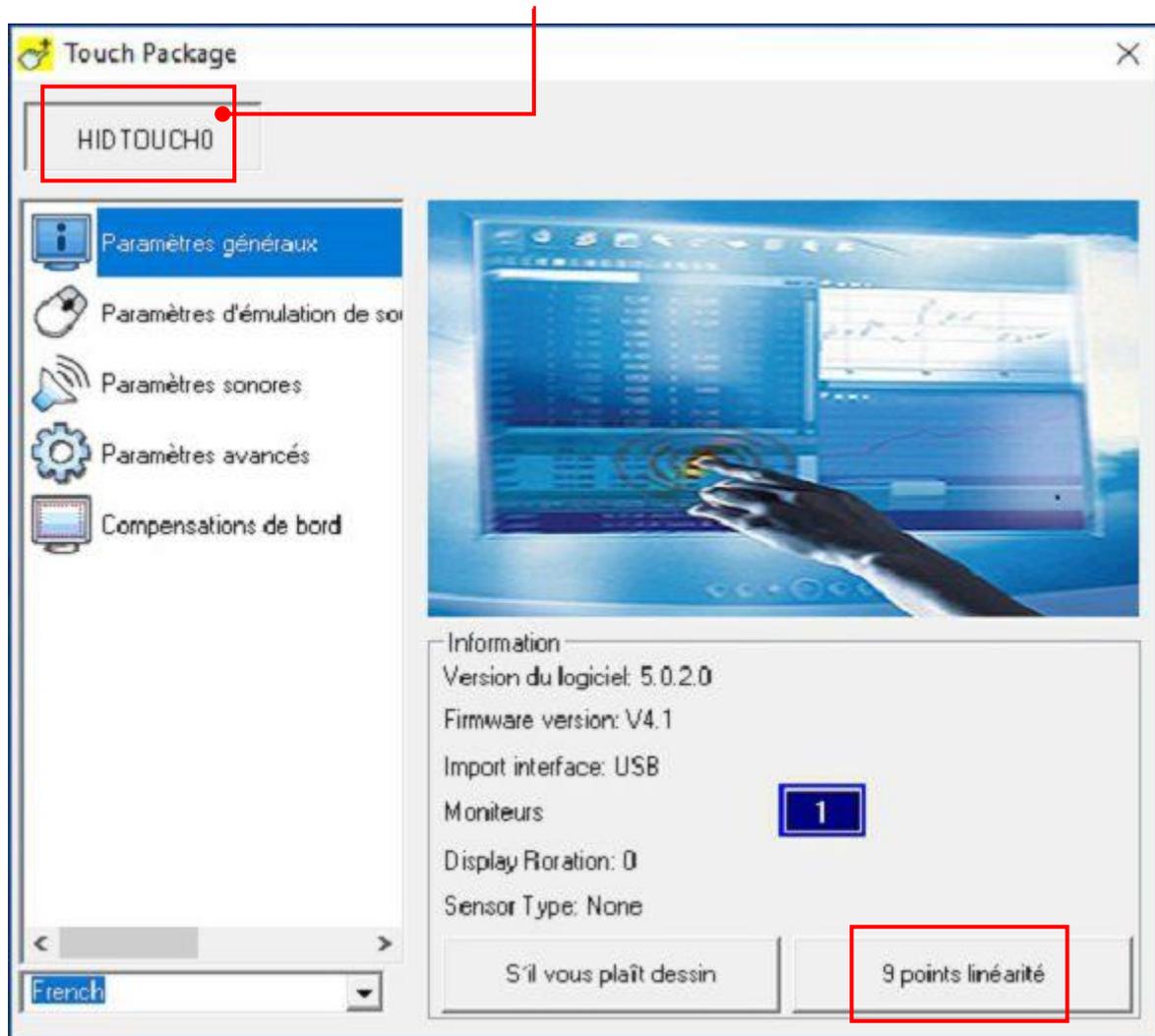6. Mapping area setting.

2. Resistive touch

Please refer the following file to install the utility.
"TP-2515_TP-8515_TP-7715_Touch Driver Installation_TYSSO_20180820.pdf"

1. Double click the icon to access the utility.
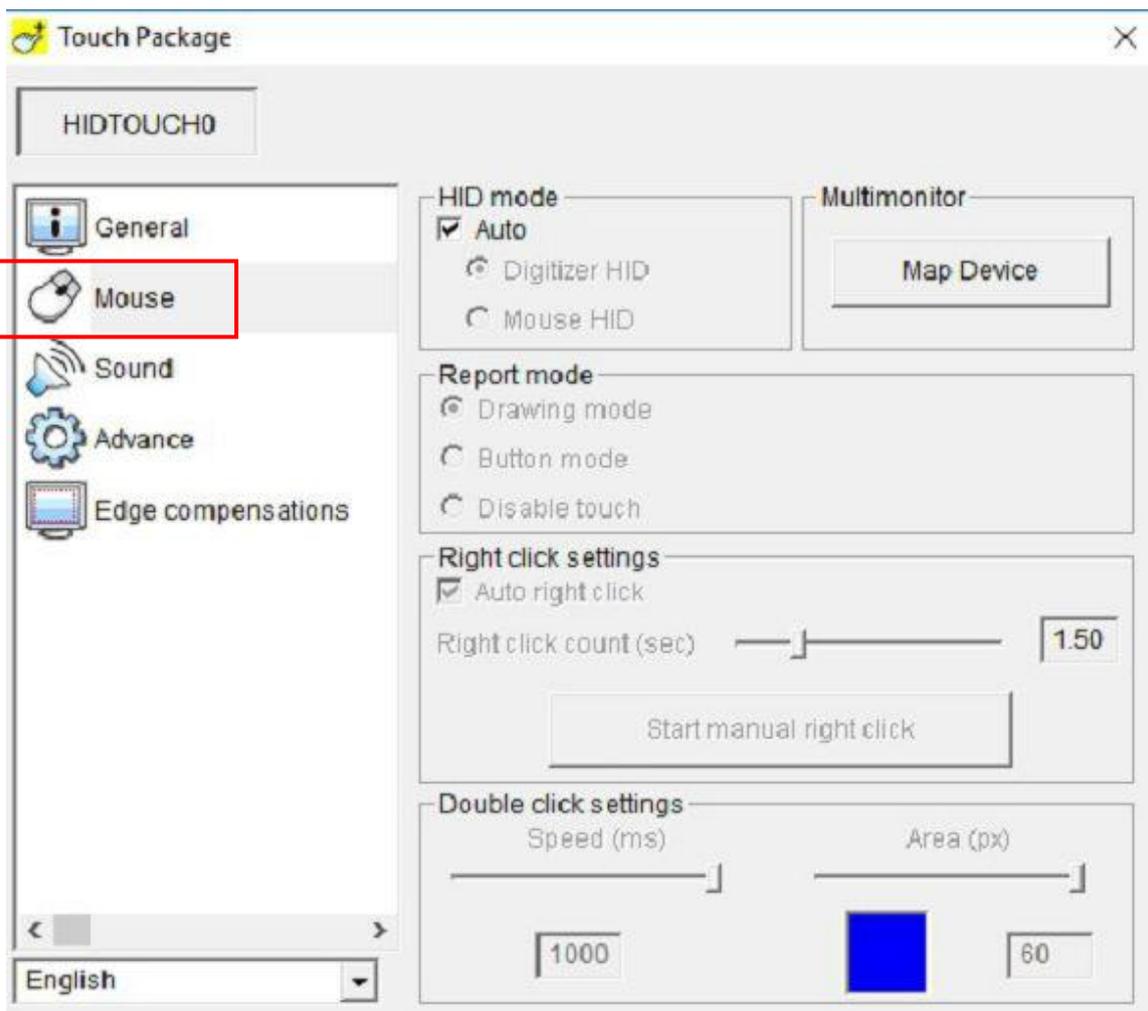
The controller is automatically detected

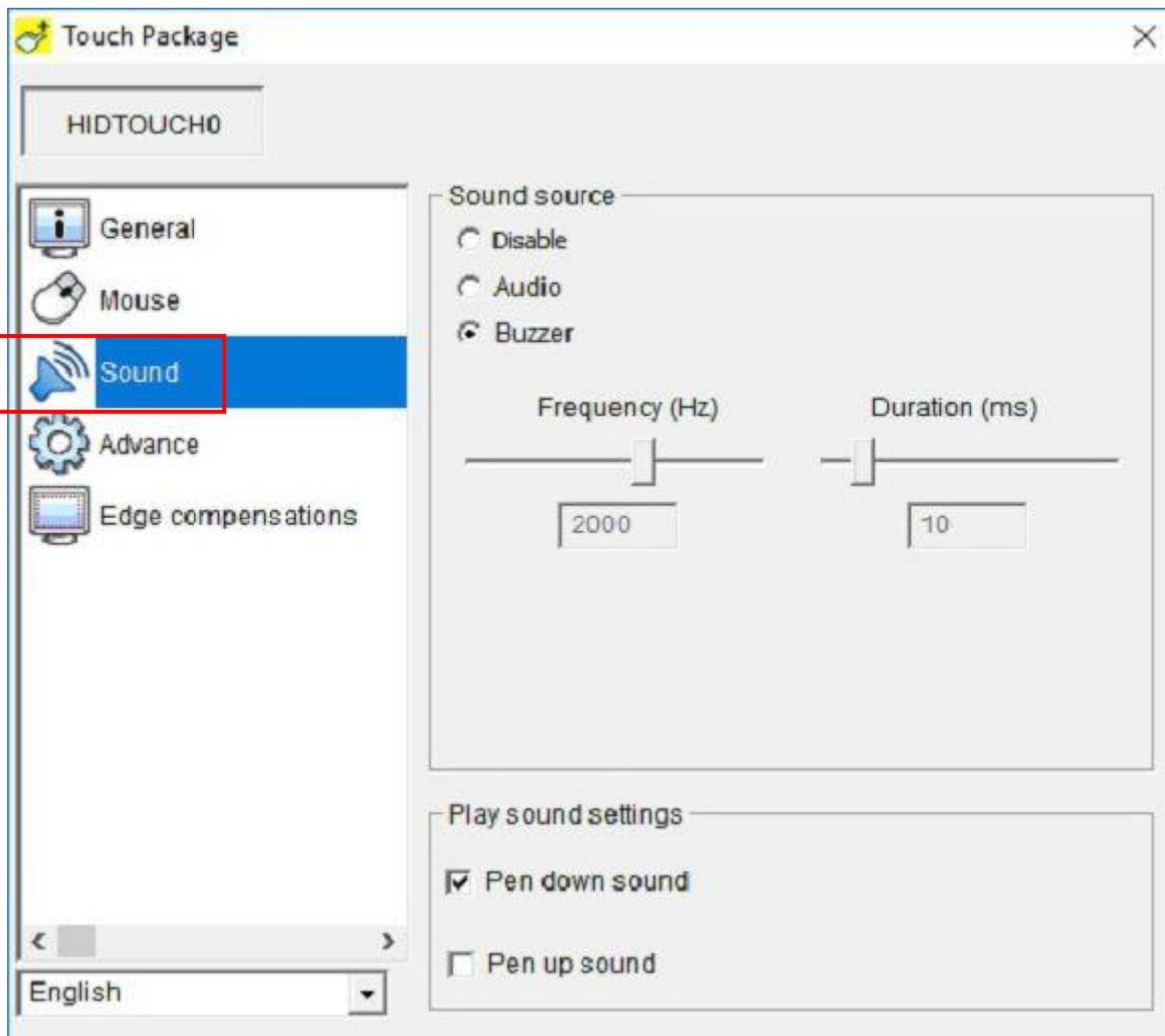2. The menu will show the controller name " HID TOUCH0".

Resistive touch panel requires calibration to maintain linearity.

Please touch the center of mark. 14

3. Perform 9 point calibration.

4. Mouse setting.

5. Sound setting.