

Chapter 1

Service Overview

Carefully read through this chapter for a look at various components of PB50 before performing any service and repair.

To provide the best service and support for PB50, we have provided below information for technicians from distributors and resellers to perform the complete PB50 disassembly. But before performing the procedures, please be sure to read through the overview in this chapter.

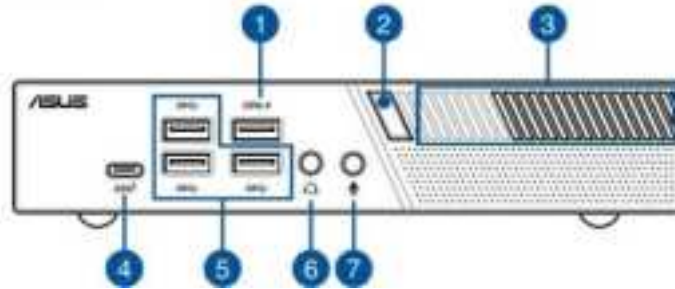
The following chapter includes:

- PB50 Overview
- HDD
- Memory Module
- WLAN Module
- Main Board
- Thermal Module
- Battery

PB50 Overview

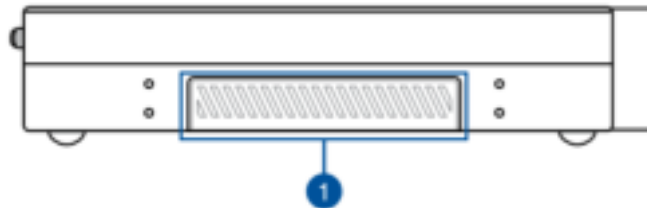
The illustrations below show the PB50 overview from rear panel view. Most of the parts will be discussed in this manual.

Front view



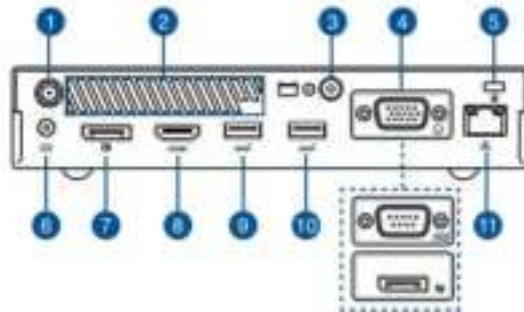
1. USB 3.1 Gen 1 port
2. Power Button
3. Air vents
4. USB3.1 GEN1 Type-C
5. USB 3.1 Gen 1 port
6. Headphone/Headset jack
7. Microphone jack

Left view



1. Graphics module port

Rear view



1. Wireless antenna jack
2. Air vents
3. Punch-out port
4. Configurable port
5. Kensington security slot
6. Power input
7. Display port
8. HDMI port
9. USB3.1 GEN2 port
10. USB3.1 GEN2 port
11. Lan port

COMPONENTS

Components

The illustrations below show the components of PB50.

HDD

The illustration below shows HDD.



MEMORY MODULE

Memory Module

The illustration below shows the Memory Module.



WLAN MODULE

WLAN Module

The illustration below shows the WLAN Module.



MAIN BOARD

Main Board

The illustration below shows the Main Board.



T H E R M A L F A N

Thermal Fan

The illustration below shows the Thermal Fan.



B A T T E R Y

Battery

The illustration below shows the battery.



Disassembly Procedure

Please follow the information provided in this section to perform the complete disassembly procedure of PB50. Be sure to use proper tools described below.

A SUS PB50 consists of various modules. This chapter describes the procedure for PB50 disassembly. In addition, the detailed disassembly procedure of individual modules will be provided for your service needs.

The disassembly procedure consists of the following steps:

- Diagnostics Tools
- Precautions and Tools
- Remove TOP Cover
- Remove HDD
- Remove thermal Fan
- Remove Memory
- Remove Power-Button CARD
- Remove VGA CARD
- Remove PCIE Cover
- Remove MB From the Case
- Remove WIFI card
- Remove Battery

Diagnostics Tools

Diagnostics tools are available to help you identify components that need to be replaced and ensure the functionality of the newly installed component(s).

For more information, visit

<https://www.asus.com/support/myasus-deeplink/>.

Precautions and Tools

Please pay special attention to the cautions below to prevent any damage to the PB50 and also please be sure to select the appropriate tools described in this section to perform any services desired.

Before you perform any service and or repair on the PB50, please follow the steps below first.

1. Be sure that the PB50 is powered down.
2. Disconnect the AC plug from the PB50
3. Remove all rings, watches and any other metal objects from your hands.



4. Always wear a ground strap on your hand to protect the PB50 from static discharge.
5. Please refer to “ANSI ESD S20.20” about ESD protection measure.
6. Put disassembled top case and bottom case in the PE BAG to avoid any damages.
7. Environment temperature is 20-30 °C and humidity is 40% - 70%.

Appropriate Tools

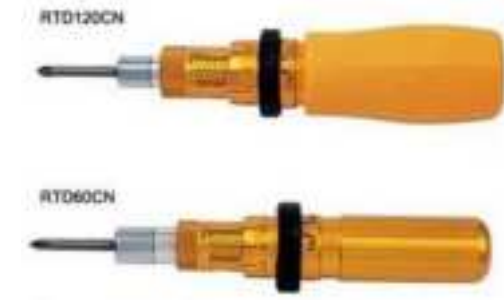
The illustrations below show the appropriate tools that should be used for the service and repair.

Cross Screwdriver

According to different screw specifications, please choose appropriate Screw driver and head. The photos below are for your reference only.

Use a cross screwdriver to fasten/remove screws. ⊕

The cross screwdriver below can make torque adjustment.



Plastic Blade (PN: 20LT0-0005O000)



Tweezers

Use a pair of tweezers to remove/insert flexible cables.



Thickness gauge (PN: 20LT0-0002J000)

Thickness compass specification 0.05mm-1.5mm. Use it to measure the gap.



Remove TOP Cover

1. Remove PCIE COVER (13MS01E0P0301 & 13MS01E0M02011)



2. Remove 1 screw (Screws : 13050-B280502)



3. Remove Top Cover (13MS01Q0AM0101 or 13MS01Q0AM0201)



Remove HDD

1. remove 4 screws. (13050-B251500 & 13050-B280502)
2. Pull out HDD cable from MB

Disassembly (Assembly) Procedure

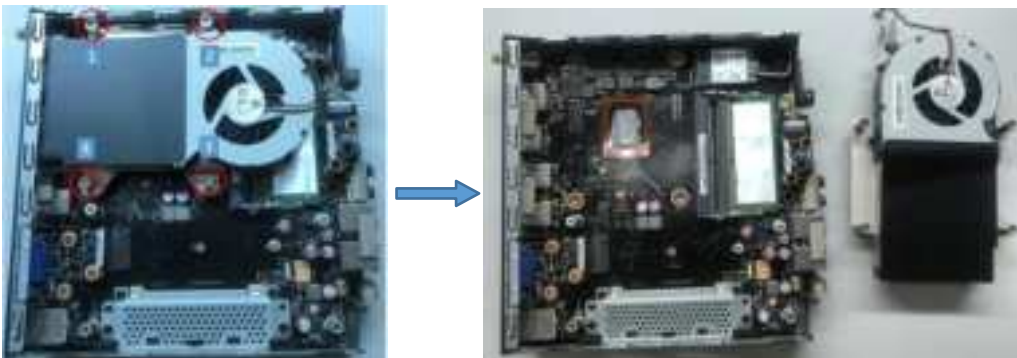


3. remove 4 screws. (13050-D250300)



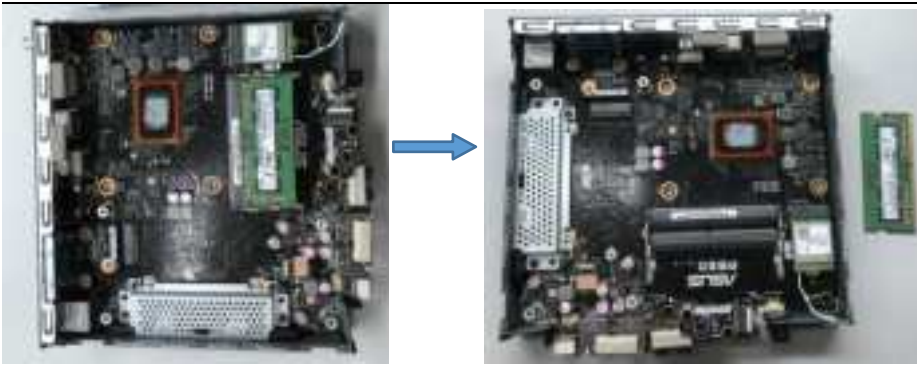
Remove thermal Fan

- 1.remove 4 screws, then pull out the Fan cable. (13MS01Q0AM050)



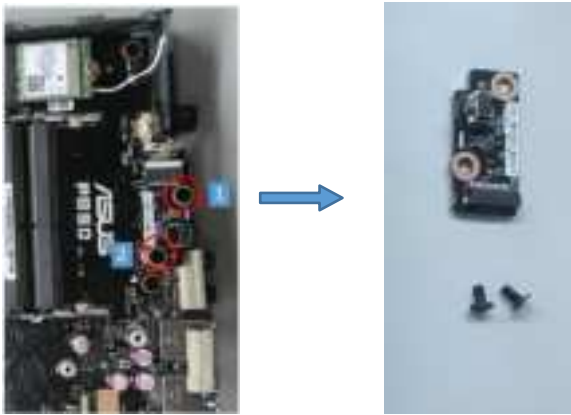
Remove Memory

1. Remove Memory



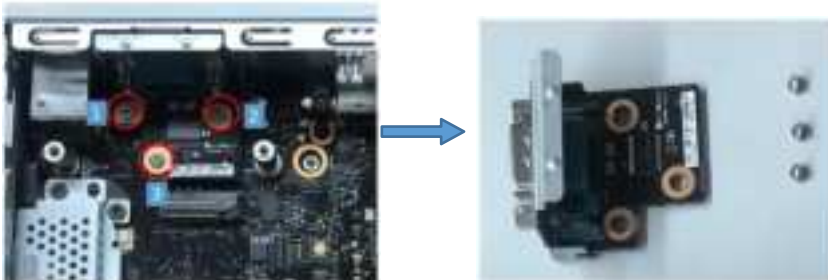
Remove Power-Button CARD

1. remove 2 screws, then pull out the power cable. (Screw : 13050-B280502, Power Cable: 14011-03140000)



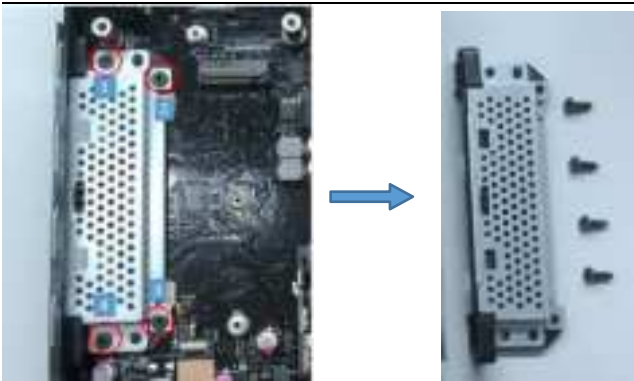
Remove VGA CARD

1. remove 3 screws, then take off VGA card. (Screw : 13GMBK3C031W-1)



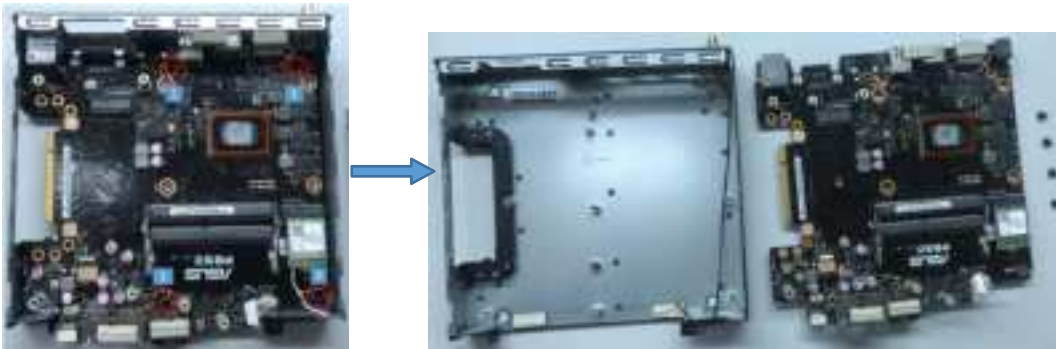
Remove PCIE COVER

1. Remove 4 screws, then take off PCIE COVER (Screw : 3G021056000TB PCIE COVER: 13MS01L0L03011)



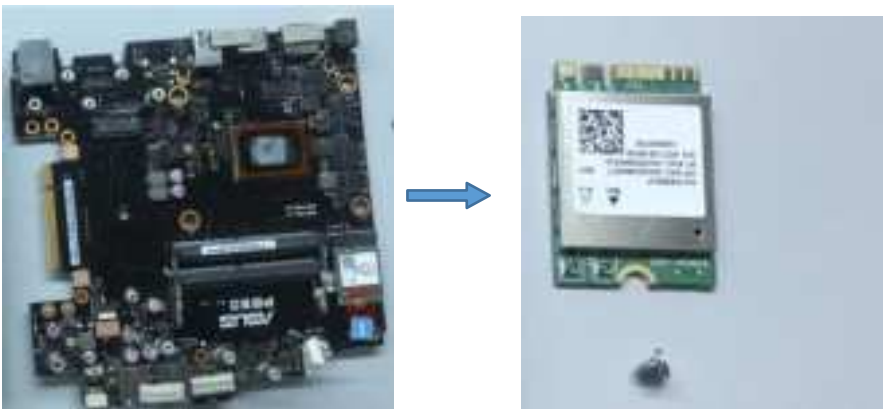
Remove MB from case

1. Pull out the antenna from WIFI card ,then remove 4 screws, then take off MB from case.
(Screw : 13050-B280502)



Remove WIFI CARD

1. Pull out the antenna from WIFI card, then remove 1 screws and take off WIFI card
(Screw : 13GMBK3C031W-1)



Remove Battery

1. Take off Battery from MB. (Battery : 0B100-00020100 or 0B100-00021000)

Disassembly (Assembly) Procedure

