Product End-of-Life Disassembly Instructions

Product Category: Workstation
Marketing Name / Model **[List multiple models if applicable.]**
HP Z6 G5 A Workstation ENERGY STAR / FCLSA-2301A, FCLSA-2301B

Purpose: The document is intended for use by end-of-life recyclers or treatment facilities. It provides the basic instructions for the disassembly of HP Inc. products to remove components and materials requiring selective treatment, as defined by EU directive 2012/19/EC, Waste Electrical and Electronic Equipment (WEEE).

NOTE: Recyclers should sort plastic materials into resin streams for recycling based on the ISO 11469 plastic marking code on the plastic part. For any questions on plastic marking or identification of location of parts or components requiring selective treatment, please contact HP's Sustainability Contact.

1.0 Items Requiring Selective Treatment

1.1 Items listed below are classified as requiring selective treatment. An "X" in the list of components and parts indicates the product contains the component or part requiring selective treatment

Item Description	Components and parts requiring selective treatments	Quantity of items included in product
Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA) with a surface greater than 10 sq cm	☒ Main board (MB) PCB*1 ☒ Solid state drive (SSD) PCB*2 ☐ Wireless WAN module (WWAN) PCB ☐ Touch module PCB ☒ Power supply PCB*4 ☒ External Keyboard (KB)*1 ☒ External Mouse*1 ☒ Graphic card PCB *1, ☒ FIO card *1 ☒ Memory PCB*4 ☒ HDD PCB*1	16
Batteries, excluding Li-Ion batteries. This includes standard alkaline, coin or button style batteries	☒ RTC/CMOS battery ☐ Others: _____	1
Li-Ion batteries. Includes all Li-Ion batteries if more than one is provided with the product (such as a detachable notebook keyboard battery, etc.)	Li-ion battery(ies) are attached to the product by: ☐ screws ☐ snaps ☐ adhesive ☐ other. Explain _____	0
Mercury-containing components. For example, mercury in lamps, display backlights, scanner lamps, switches, batteries		0

Item Description	Components and parts requiring selective treatments	Quantity of items included in product
Liquid Crystal Displays (LCD) with a surface greater than 100 sq cm. Includes background illuminated displays with gas discharge lamps	☐ Panel LCD	0
Cathode Ray Tubes (CRT)		0
Capacitors / condensers (Containing PCB/PCT)		0
Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height	☒ Power Supply capacitor(s) or condenser(s)	2
External electrical cables and cords	☒ AC power cord ☐ Audio, video or data cables ☐ Other: _____	1
Gas Discharge Lamps		0
Plastics containing Brominated Flame Retardants (not including external electrical cables and cords, PCBs or PCAs already listed as a separate item above)		0
Components and parts containing toner and ink, including liquids, semi-liquids (gel/paste) and toner. Include the cartridges, print heads, tubes, vent chambers, and service stations.		0
Components and waste containing asbestos		0
Components, parts and materials containing refractory ceramic fibers		0
Components, parts and materials containing radioactive substances		0
Components containing chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), hydrocarbons (HC)		0

2.0 Tools Required

List the type and size of the tools that would typically be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description	Tool Size (if applicable)
Screwdriver	PH0
Screwdriver	PH1
Screwdriver	SL5
Screwdriver	T15

3.0 Product Disassembly Process

3.1 List the basic steps that should typically be followed to remove components and materials requiring selective treatment including the required steps to remove the external enclosure.

Figure1 Remove to the cover from chassis.
Figure2 Press the lower buckle to remove the UPPER RETAINER BASE.
Figure3 Press the lower buckle to remove the LOWER-RETAINER-BASE
Figure4 Loosen the screw with a SL5 screwdriver and remove the SIDE-HANDLE-EMI-COVER
Figure5 Press the front buckle and remove the SIDE-HANDLE-POCKET
Figure6 Press the buckles on both sides and remove the SIDE-HANDLE-LOCK-COVER
Figure7 Loosen the screw with an SL5 screwdriver and remove the RETAINER-BRACKET
Figure8 Pull SIDE-PANEL-LATCH forward
Figure9 Press and release the fan clip from the chassis
Figure10 Disconnect the fan cable from MB and remove the fan
Figure11 Peel back the fixed SSD bayonet and remove the SSD
Figure12 Remove the SSD from SSD cage
Figure13 Remove the power screw using an SL5 screwdriver
Figure14 Unplug the graphics card power cord
Figure15 Open the front bracket of the fixed graphics card on the chassis
Figure16 Open the graphics card buckle on the motherboard outward and remove the graphics card
Figure17 Right push PCL Hold latch to unlock hold slider
Figure18 Press the front end of the Lower card guide and remove it
Figure19 Unplug the Lower card guide power cord
Figure 20 Right push PCL Hold latch to unlock hold slider
Figure 21 Press the front end of the Upper card guide and remove it
Figure 22 Unplug the Upper card guide power cord
Figure 23 Remove the Upper card guide housing
Figure 24 Remove the Lower card guide housing
Figure25 Remove the power cord from the motherboard
Figure26 Unplug all cables from the motherboard
Figure27 Release the front screw with a PH0 screwdriver and remove the CABLE-BRACKET
Figure28 Remove the cables from the cable clamp in sequence
Figure29 Press the lower buckle of the power supply
Figure30 Take out the power supply
Figure31 Use to T15 screwdriver to uninstall the CPU heat sink from MB
Figure32 Remove the memory from MB
Figure33 Unscrew the CPU back cover screw with a T15 screwdriver
Figure34 Open the CPU back cover
Figure35 Removing the CPU
Figure36 Removing the CPU from the CPU bracket
Figure37 Using a PH1 screwdriver to remove the motherboard screws
Figure38 Removing the MB from the chassis
Figure39 Use a PH1 screwdriver to remove the screws and remove VR heat sink Part1 and VR heat sink Part2
Figure40 Removing the PCH heat sink from MB
Figure41 Remove the cables from convert board
Figure42 Removing the cable from the HDD
Figure43 Remove INTERLOCK HOLDER from the chassis
Figure44 Removing the INTERLOCK switch
Figure45 Removing the HDD from the chassis
Figure46 Remove HDD-TRAY-ELAST
Figure47 Pull up ODD-CAGE-LATCH and push the FIO card out of the chassis
Figure48 Use an SL5 screwdriver to remove the screws on the FIO card
Figure49 Unplug the FIO card cable and remove the FIO card
Figure50 Remove the SD card reader carrier
Figure51 Push out 2 pins fixed on the front side of the switch card transceiver
Figure52 Use an SL5 screwdriver to remove the screws from the speaker
Figure53 Detailed parts of switch card assembly
Figure54 Pull up ODD-CAGE-LATCH and push the ODD-BLANK-HOUSING out of the chassis
Figure55 Removing the FRONT-BEZEL of the chassis

Figure56 Take out the antenna inside the chassis
Figure57 Using an SL5 screwdriver to remove the screws from the chassis casing
Figure58 Take out FRONT-HANDLE of the chassis
Figure59 Removing the antenna from the FRONT-HANDLE
Figure60 Use tool to unscrew five screws to loosen top cover
Figure61 Remove top cover from bottom chassis
Figure62 Remove the stand-off & Mylar from PCBA by hand-pulling
Figure63 Use tool to unscrew three screws to loosen EMI board
Figure64 Use tool to remove the cable tie
Figure65 Disconnect AC inlet connector and CN602A, CN601B cable connector from PCBA
Figure66 Remove EMI board
Figure67 Identity PCBA > 10 cm2 for further treatment (EMI board: 161.2053 cm2)
Figure68 Identity PCBA > 10 cm2 for further treatment (DC-6112 board: 14.72 cm2).
Figure69 Identity electrolyte capacitor > 2.5 cm for further treatment (Length: 5 cm).
Figure70 Remove the LED cable from CASE by hand-pulling. Disconnect fan connector from PCBA.
Figure71 Use tool to unscrew four screws to loosen Main board, Remove Main board
Figure72 Identity PCBA > 10 cm2 for further treatment (MAIN board: 160.923 cm2).
Figure73 Identity PCBA > 10 cm2 for further treatment (DC-6113 board: 25.506 cm2).
Figure74 Use tool to remove the cable tie, Use tool to unscrew five screws to loosen FAN & AC cable
Figure75 Remove FAN & Socket
Figure76 Remove the insulator from CASE by hand-pulling.

3.2 Location of components requiring selective treatment. The photos and/or graphics below identify the location of the parts or components requiring selective treatment within the main unit. For End-of-Life product disassembly instructions of external accessories including external power supply (EPS), external keyboard (KB) external mouse and external cables and cords, refer to the following URL: End-of-Life Product Disassembly Instructions (hp.com)

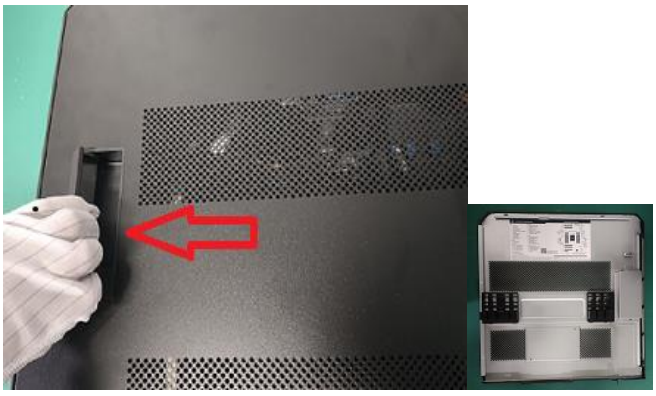
Figure1 Remove to the cover from chassis. 	Figure2 Press the lower buckle to remove the UPPER RETAINER BASE. 

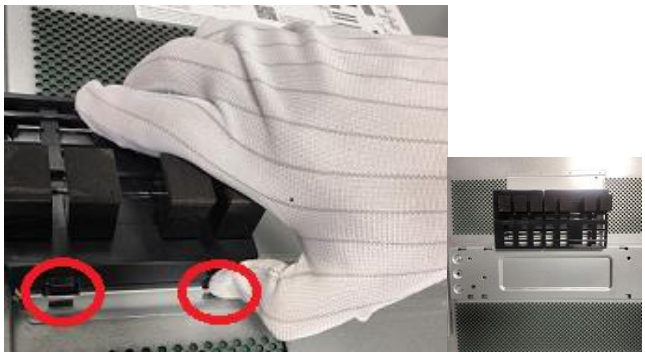
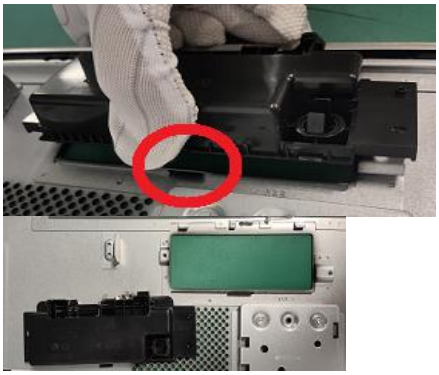
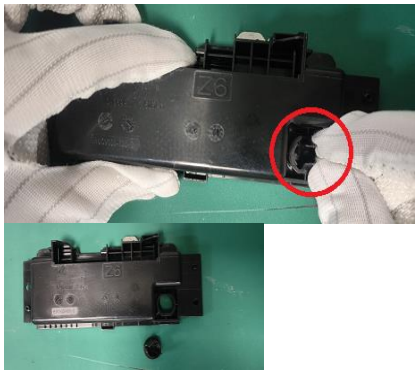
Figure3 Press the lower buckle to remove the LOWER-RETAINER-BASE 	Figure4 Loosen the screw with a SL5 screwdriver and remove the SIDE-HANDLE-EMI-COVER 
Figure5 Press the front buckle and remove the SIDE-HANDLE-POCKET 	Figure6 Press the buckles on both sides and remove the SIDE-HANDLE-LOCK-COVER 
Figure7 Loosen the screw with an SL5 screwdriver and remove the RETAINER-BRACKET 	Figure8 Pull SIDE-PANEL-LATCH forward 

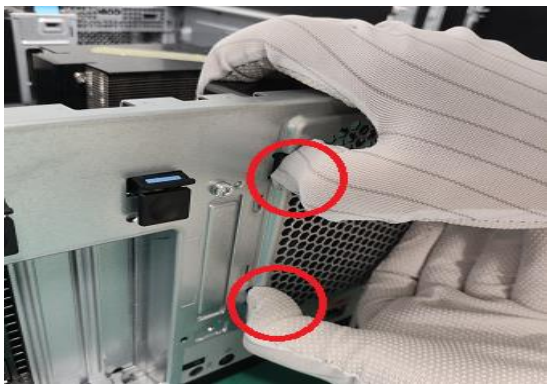
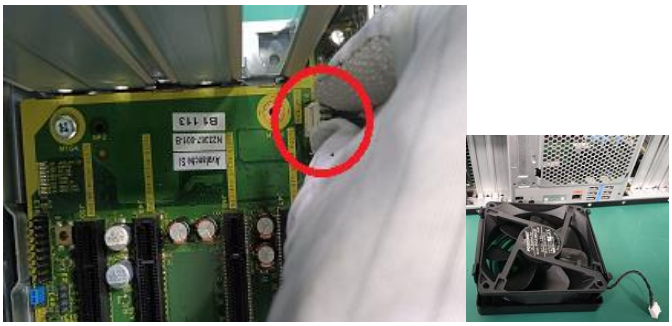
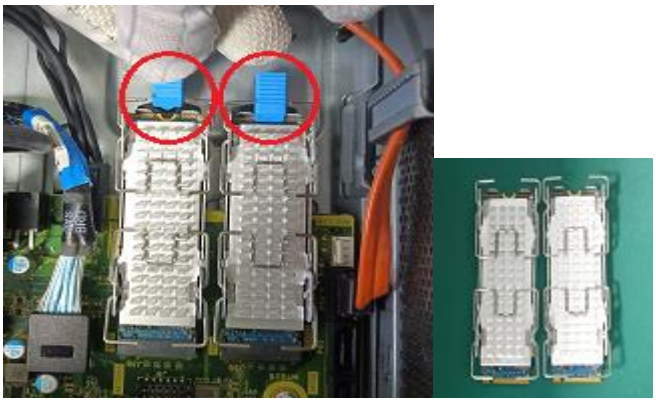
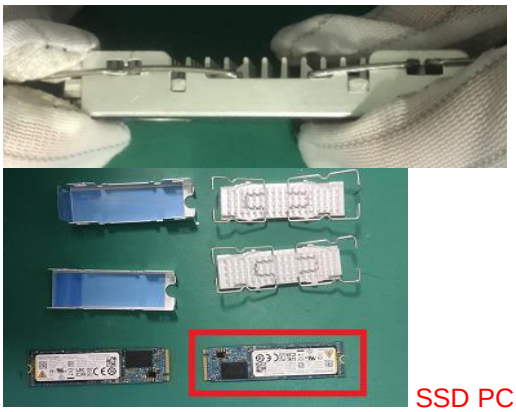
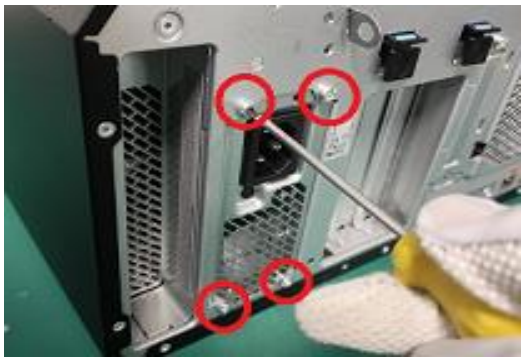
Figure9 Press and release the fan clip from the chassis 	Figure10 Disconnect the fan cable from MB and remove the fan 
Figure11 Peel back the fixed SSD bayonet and remove the SSD 	Figure12 Remove the SSD from SSD cage  SSD PCB>10 **cm²**
Figure13 Remove the power screw using an SL5 screwdriver 	Figure14 Unplug the graphics card power cord 

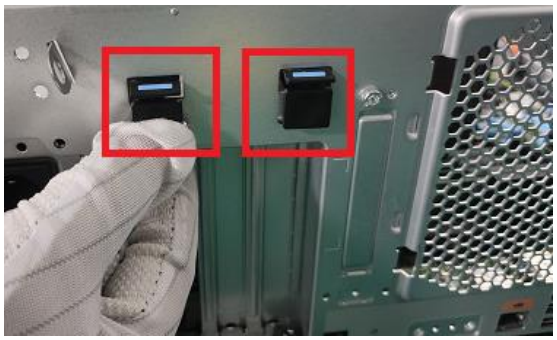
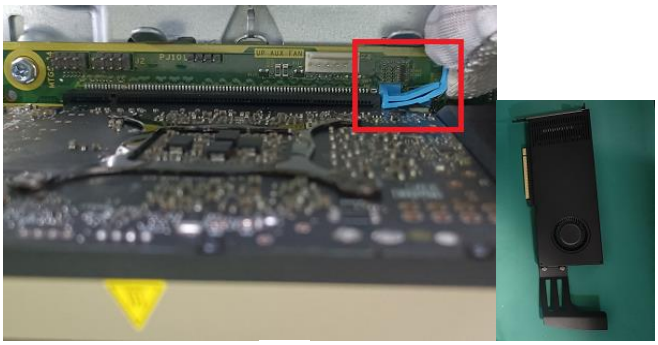
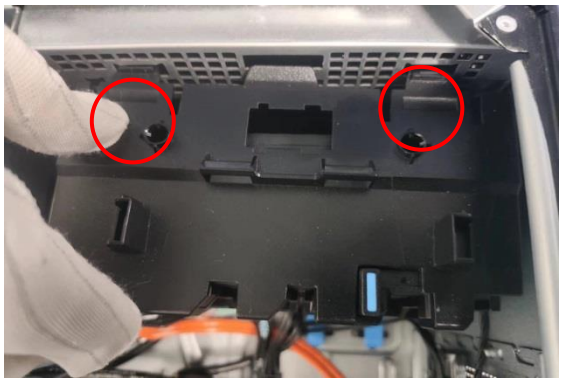
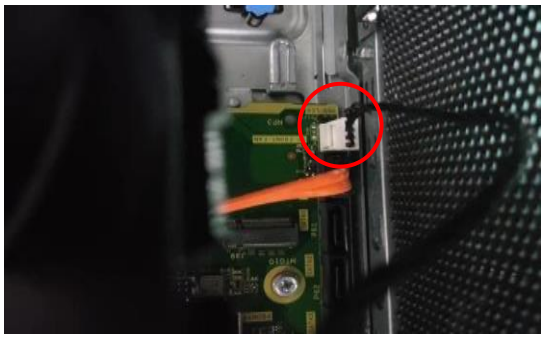
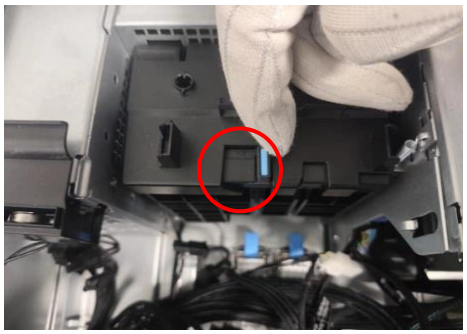
Figure15 Open the front bracket of the fixed graphics card on the chassis 	Figure16 Open the graphics card buckle on the motherboard outward and remove the graphics card  Graphic card PCB>10 **cm²**
Figure17 Right push PCL Hold latch to unlock hold slider 	Figure18 Press the front end of the Lower card guide and remove it 
Figure19 Unplug the Lower card guide power cord 	Figure 20 Right push PCL Hold latch to unlock hold slider 

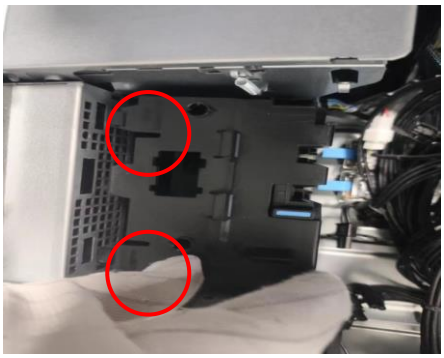
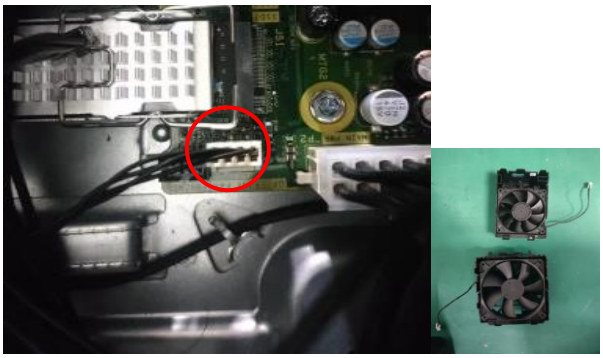
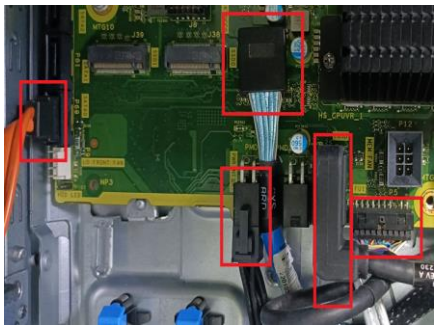
Figure 21 Press the front end of the Upper card guide and remove it 	Figure 22 Unplug the Upper card guide power cord 
Figure 23 Remove the Upper card guide housing 	Figure 24 Remove the Lower card guide housing 
Figure25 Remove the power cord from the motherboard  	Figure26 Unplug all cables from the motherboard  

Figure27 Release the front screw with a PH0 screwdriver and remove the CABLE-BRACKET

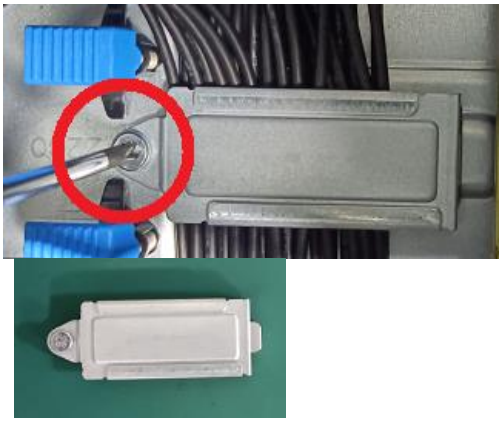


Figure28 Remove the cables from the cable clamp in sequence



Figure29 Press the lower buckle of the power supply

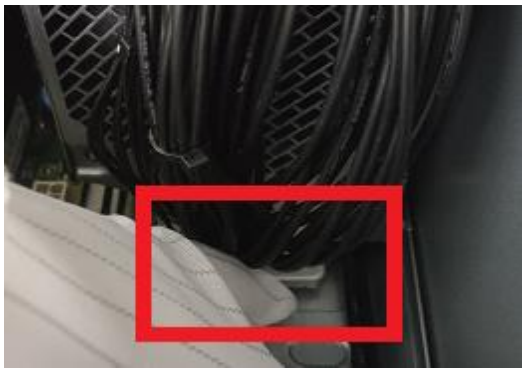


Figure30 Take out the power supply



Figure31 Use to T15 screwdriver to uninstall the CPU heat sink from MB

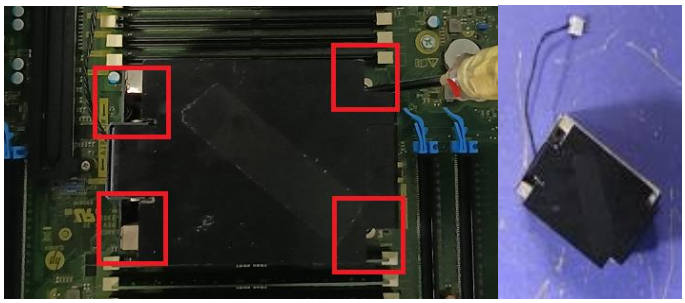
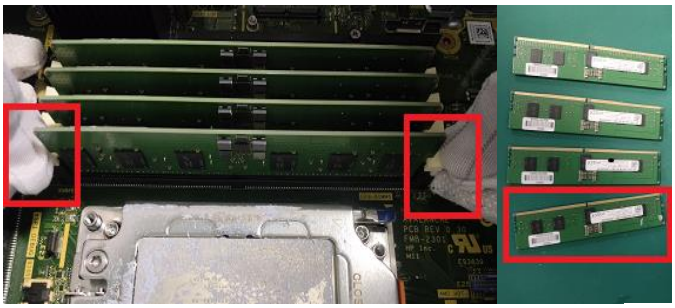


Figure32 Remove the memory from MB



Memory PCB>10 **cm²**

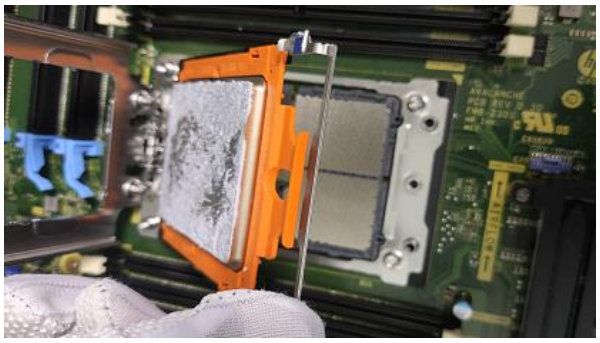
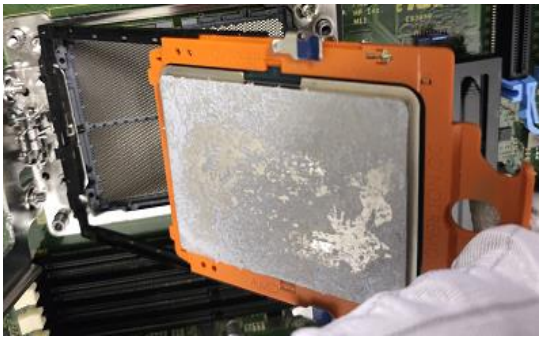
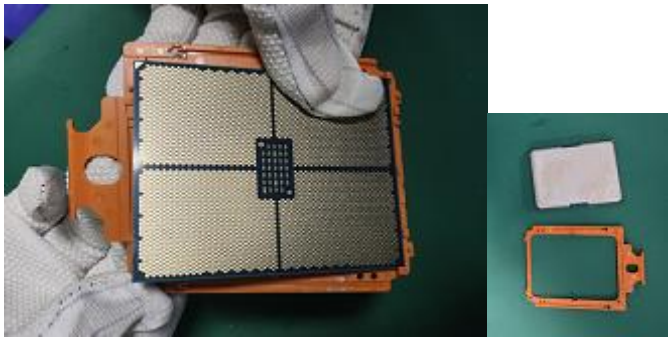
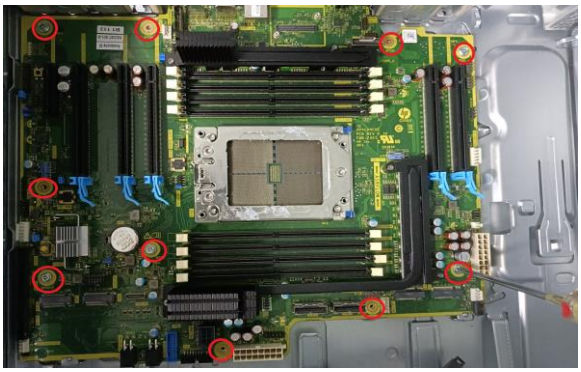
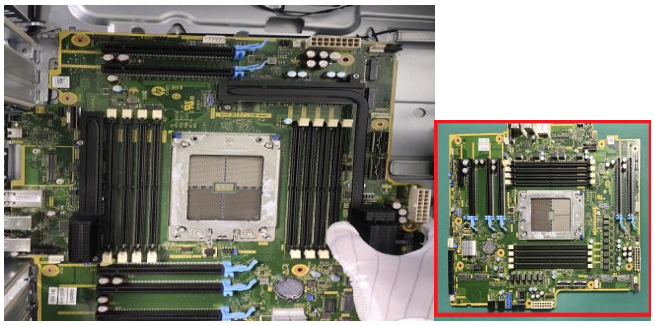
Figure33 Unscrew the CPU back cover screw with a T15 screwdriver 	Figure34 Open the CPU back cover 
Figure35 Removing the CPU 	Figure36 Removing the CPU from the CPU bracket 
Figure37 Using a PH1 screwdriver to remove the motherboard screws 	Figure38 Removing the MB from the chassis  Main board (MB) PCB>10 **cm²**

Figure39 Use a PH1 screwdriver to remove the screws and remove VR heat sink Part1 and VR heat sink Part2

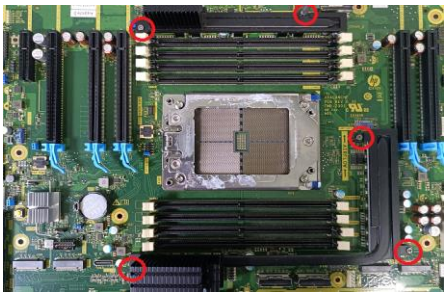
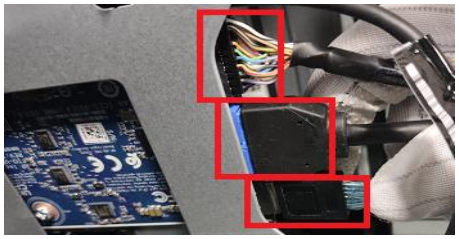




Figure40 Removing the PCH heat sink from MB



Figure41 Remove the cables from convert board



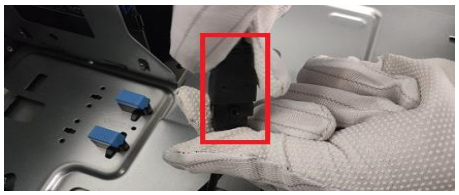


Figure42 Removing the cable from the HDD

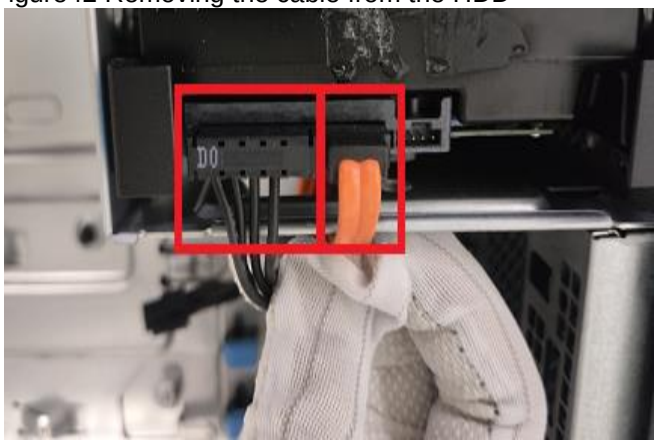


Figure43 Remove INTERLOCK HOLDER from the chassis



Figure44 Removing the INTERLOCK switch





Figure45 Removing the HDD from the chassis

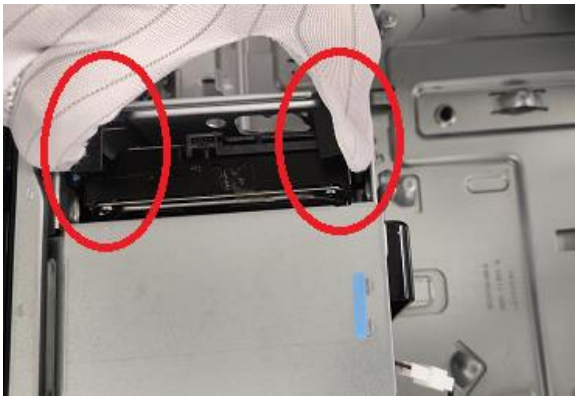


Figure46 Remove HDD-TRAY-ELAST



Figure47 Pull up ODD-CAGE-LATCH and push the FIO card out of the chassis

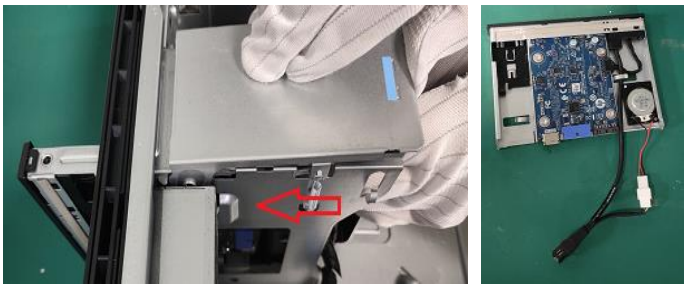


Figure48 Use an SL5 screwdriver to remove the screws on the FIO card

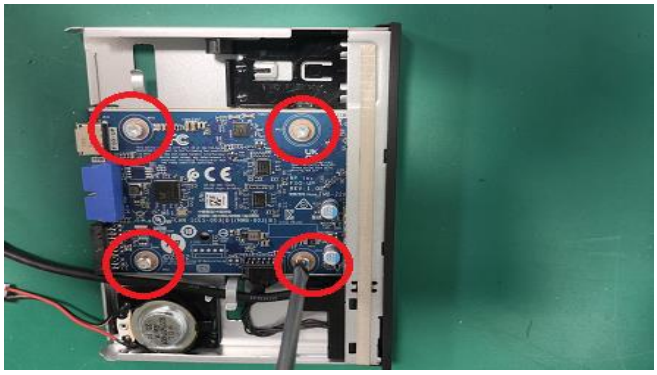


Figure49 Unplug the FIO card cable and remove the FIO card

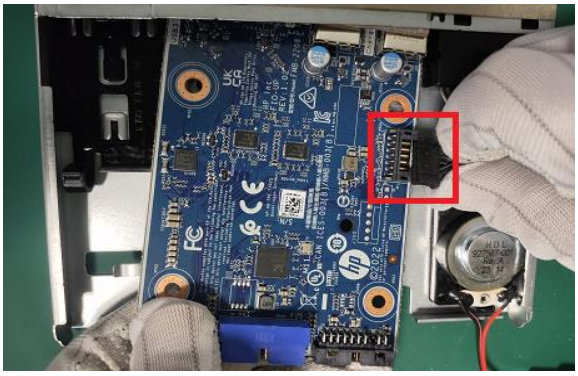


Figure50 Remove the SD card reader carrier

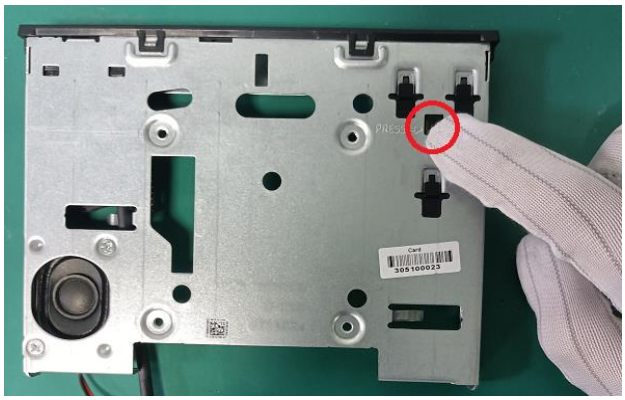


Figure51 Push out 2 pins fixed on the front side of the switch card transceiver

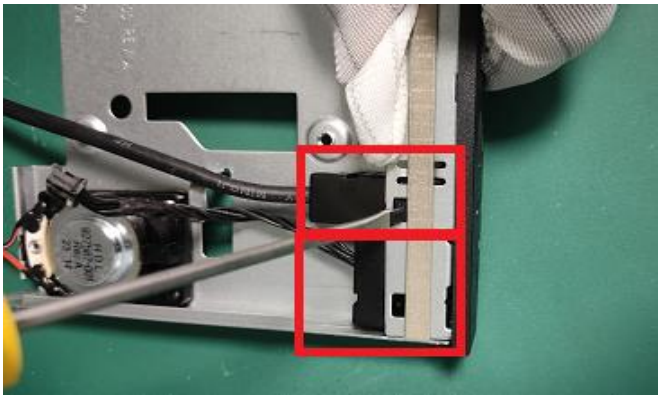


Figure52 Use an SL5 screwdriver to remove the screws from the speaker

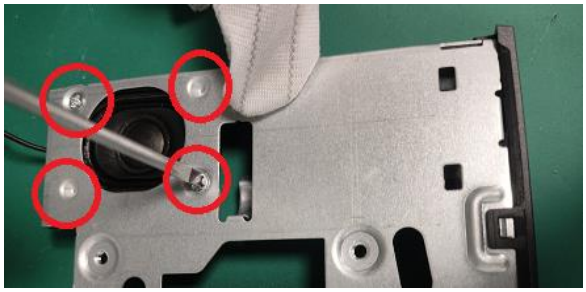
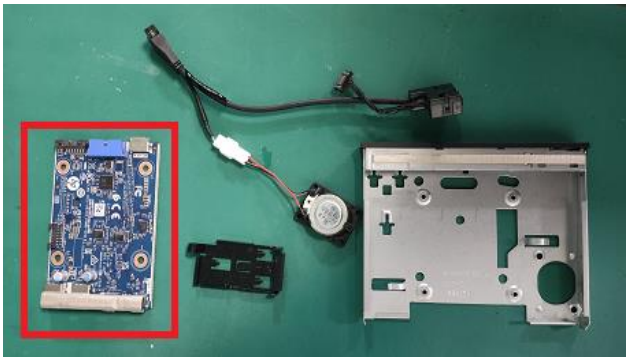


Figure53 Detailed parts of switch card assembly



FIO PCB>10 **cm²**

Figure54 Pull up ODD-CAGE-LATCH and push the ODD-BLANK-HOUSING out of the chassis

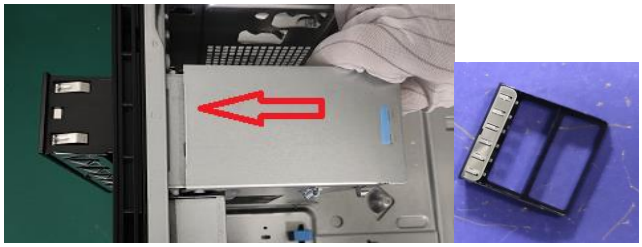


Figure55 Removing the FRONT-BEZEL of the chassis

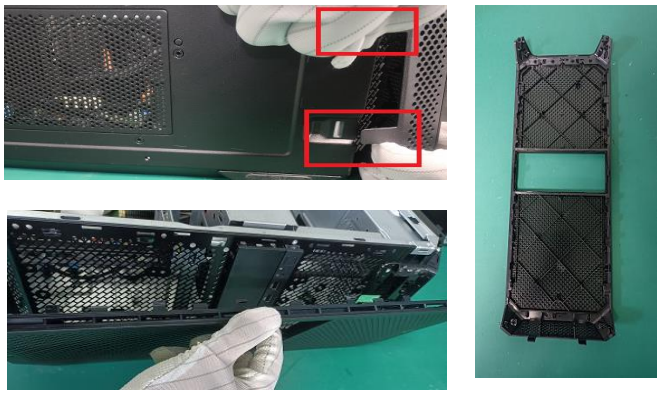


Figure56 Take out the antenna inside the chassis

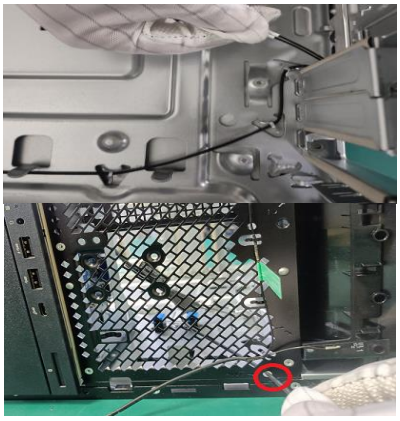


Figure57 Using an SL5 screwdriver to remove the screws from the chassis casing

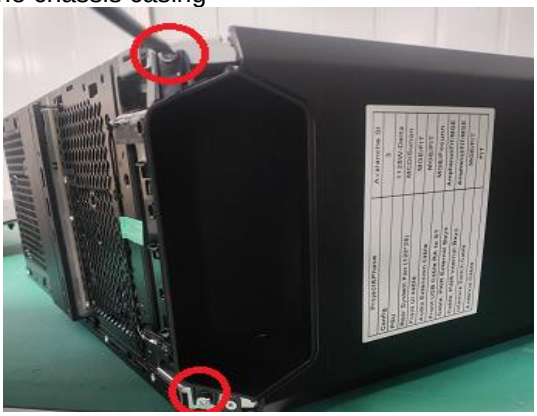


Figure58 Take out FRONT-HANDLE of the chassis

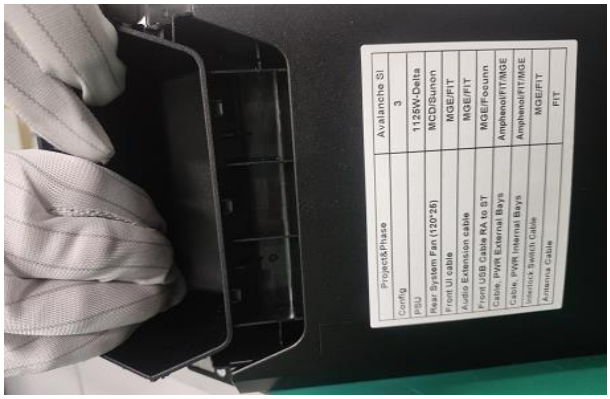


Figure59 Removing the antenna from the FRONT-HANDLE

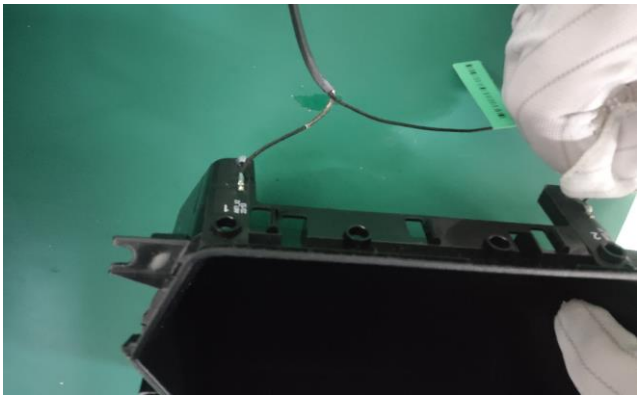


Figure60 Use tool to unscrew five screws to loosen top cover.

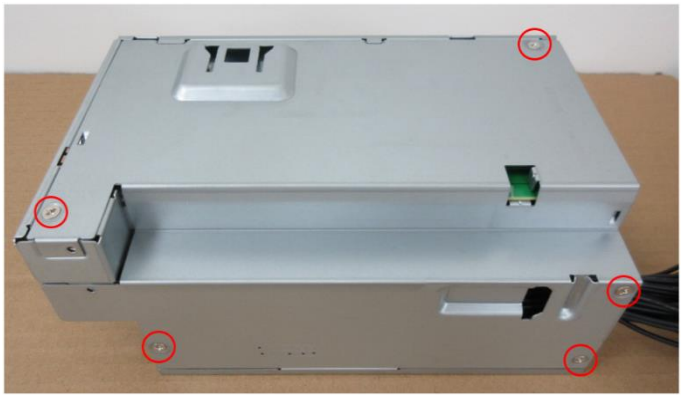


Figure61 Remove top cover from bottom chassis.



Figure62 Remove the stand-off & Mylar from PCBA by hand-pulling.

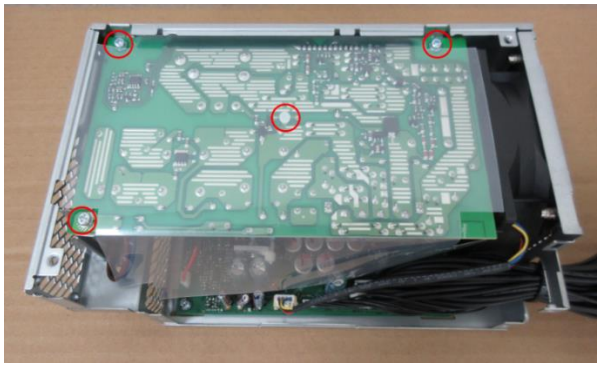


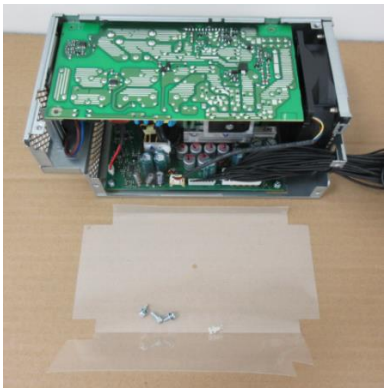
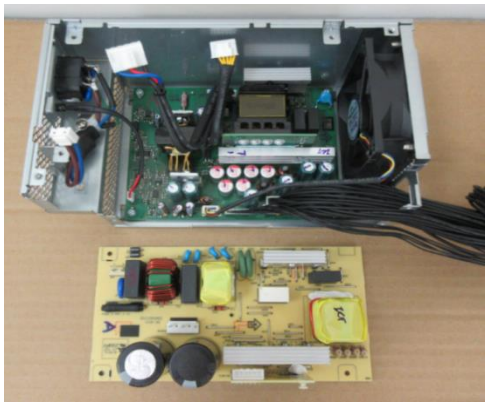
Figure63 Use tool to unscrew three screws to loosen EMI board. 	Figure64 Use tool to remove the cable tie. 
Figure65 Disconnect AC inlet connector and CN602A, CN601B cable connector from PCBA. 	Figure66 Remove EMI board 
Figure67 Identity PCBA > 10 cm^2 for further treatment (EMI board: 161.2053 cm^2) 	Figure68 Identity PCBA > 10 cm^2 for further treatment (DC-6112 board: 14.72 cm^2). 

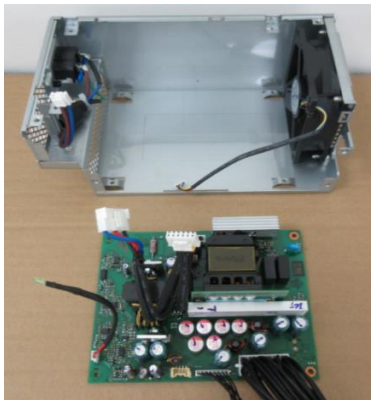
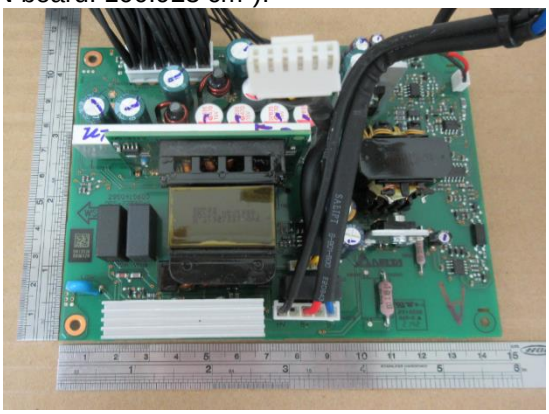
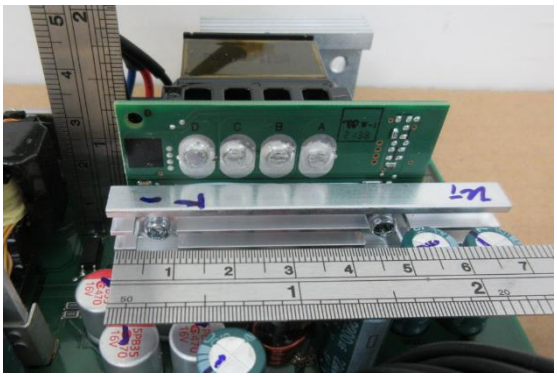
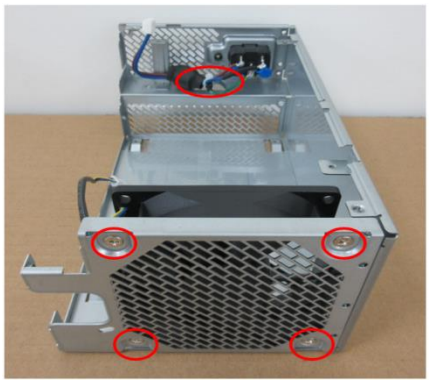
Figure69 Identity electrolyte capacitor > 2.5 cm for further treatment (Length: 5 cm). 	Figure70 Remove the LED cable from CASE by hand-pulling. Disconnect fan connector from PCBA. 
Figure71 Use tool to unscrew four screws to loosen Main board. Remove Main board. 	Figure72 Identity PCBA > 10 cm^2 for further treatment (MAIN board: 160.923 cm^2). 
Figure73 Identity PCBA > 10 cm^2 for further treatment (DC-6113 board: 25.506 cm^2). 	Figure74 Use tool to remove the cable tie. Use tool to unscrew five screws to loosen FAN & AC cable. 

Figure75 Remove FAN & Socket.	Figure76 Remove the insulator from CASE by hand-pulling.
