



# Maintenance and Service Guide

## Series 7 Pro 740pm model

### **SUMMARY**

This guide provides information about spare parts, removal and replacement of parts, diagnostic tests, problem troubleshooting, and more.

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Pro 740pm-MSG-V1

Assembly part number: N70021-001

#### **Product notice**

Only trained service personnel familiar with this product should service it. Before performing any maintenance or service, be sure to read "Important Safety Information".

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# 1 Getting started

Read this chapter to learn about safety information and where to find additional HP resources.

## Important safety information

Carefully read the cautions and notes within this document to minimize the risk of personal injury to service personnel. The cautions and notes are not exhaustive. Proper service methods are important to the safe, reliable operation of equipment. Improper service methods can damage equipment.

The service procedures recommended and described in this service manual provide effective methods of performing service operations. Service engineers should have prior repair knowledge and experience as well as appropriate training for the product before performing service procedures.

- Be sure your working environment is dry and clean and meets all government safety requirements.
- Be sure that other persons are safe while you are servicing the product.
- Do not perform any action that can cause a hazard to the customer or make the product unsafe.
- Use proper safety devices to ensure your personal safety.
- Always use approved tools and test equipment for servicing.
- Never assume the product's power is disconnected from the main power supply. Check that it is disconnected before opening the product's cabinet.
- Modules containing electrical components are sensitive to electrostatic discharge (ESD). Follow ESD safety procedures while handling these parts.
- Some products contain more than one battery. Do not disassemble or expose a battery to high temperatures, such as throwing into fire, or the battery may explode.
- Refer to government requirements for battery recycling or disposal.

This information provides general service information for the monitor. Adherence to the procedures and precautions is essential for proper service.

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**IMPORTANT:** Only trained service personnel who are familiar with this HP product should perform service or maintenance for it. Before performing any service or maintenance, personnel must read the important safety information.

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**IMPORTANT:** You must disconnect the power cord from the power source before opening the monitor to prevent component damage.

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## Important service information and precautions

- Repair must be performed by professional service technicians in a repair center. End users should not perform these procedures.
- Please note during servicing that the primary side is the high voltage area.
- This monitor meets ROHS requirements. Be sure to use lead-free solder wire when soldering.
- If you must change a capacitor, be sure to match the polarity as printed on the PCB.
- If you must replace a capacitor, make sure the specification and part number match the BOM and

location.

- If you must replace a capacitor, insert new parts carefully to avoid a short circuit caused by the near pin.
- Do not get the board wet. Water and moisture can cause a short circuit that causes malfunctions.
- To avoid damage, be sure to use lead-free solder.
- When soldering, work quickly to avoid overheating the circuit board.
- Keep the soldering iron tip clean and well tinned when replacing parts.
- After repair, perform a close inspection of the circuit board to confirm it is in good condition.
- After repair, perform a function test to confirm the power supply is working properly.

#### **ERP Lot5 requirement**

1. A professional repairer must have the technical competence to repair electronic displays and comply with the applicable regulations for repairers of electrical equipment in the Member States where the repairer operates. Reference to an official registration system as professional repairer, where such a system exists in the Member States, shall be accepted as proof of compliance.

2. A professional repairer must have insurance that covers liabilities resulting from repairs, regardless of whether required by the Member State.

## **RoHS (2002/95/EC) requirements**

### **Applied to all countries that require RoHS.**

The RoHS (Restriction of Hazardous Substance in Electrical and Electronic Equipment Directive) is a legal requirement by the EU (European Union) for the global electronics industry sold in the EU and other countries. Any electrical and electronics products launched in the market after June 2006 should meet this RoHS requirement. Products launched in the market before June 2006 are not required to be compliant with RoHS parts. If the original parts are not RoHS compliant, the replacement parts can be non-ROHS compliant. If the original parts are RoHS compliant, the replacement parts **MUST** be RoHS compliant.

If product service or maintenance requires replacing parts, confirm the RoHS requirement before replacement.

## **General descriptions**

This manual contains general information. There are two levels of service:

Level 1: Cosmetic/appearance/alignment service

Level 2: Circuit board or standard parts replacement

## **Firmware updates**

Firmware updates for the monitor are available at [support.hp.com](http://support.hp.com). If no firmware is posted, the monitor does not need a firmware update.

## **Before returning the repaired product to the customer**

Perform an AC leakage current check on exposed metallic parts to be sure the product is safe to operate without the potential of electrical shock. Do not use a line isolation transformer during this check.

Measurements that are not within specified limits present a possible shock hazard. You must check and repair the product before returning it to the customer.

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## 2 Monitor features

This chapter provides an overview of the monitor's features.

### Features

Depending on the model, your monitor might include the following features:

#### Display features

- Three-sided borderless 100.8 cm (39.7 in) curved diagonal viewable screen area with 5120 × 2160 @ 60 Hz resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- Liquid crystal display (LCD) with active matrix and in-plane switching (IPS)
- Wide color gamut to provide coverage of sRGB and P3(D65) color spaces
- Nonglare panel with an LED backlight
- Wide viewing angle to allow viewing from a sitting or standing position, or moving from side to side
- Tilt, swivel, and height adjustment capabilities
- Dual Picture beside Picture (PbP) functionality to enable the DisplayPort, HDMI, and Thunderbolt inputs to be viewed in each half of the screen
- Integrated pop-up infrared (IR) and RGB camera with noise canceling microphones for conferencing and Microsoft Windows® Hello support
- Integrated HP Device Bridge technology that allows you to use a single keyboard and mouse across two connected computers to control software and transfer files and data from one computer to the other
- Five on-screen display (OSD) buttons, four that you can reconfigure to quickly allow selection of the most commonly used operations
- On-screen display (OSD) adjustments in several languages for easy setup and screen optimization
- Color space presets for P3(D65)
- Energy saver feature to meet requirements for reduced power consumption
- Security cable slot on the rear of the monitor for an optional security cable
- Cable management feature for placement of cables and cords

#### Connectors

- DisplayPort™ video input (cable included in select regions)
- HDMI video input
- Two USB Type-C® Thunderbolt™ ports (cable included in select regions)
- RJ-45 (network) jack
- Four USB ports (downstream)
- Plug and Play capability, if supported by your operating system

## Monitor stand

- Removable stand for flexible monitor head mounting solutions
- HP Quick Release 2 device to quickly attach the monitor head to the stand with a simple click, and then remove it with the convenient sliding tab release
- VESA® mounting bracket for attaching the monitor head to a wall-mount device or swing arm
- VESA mounting capability (100 × 100 mm) for attaching the monitor to a swing arm mount
- Support for a mounting bracket to attach the monitor to a workstation

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**NOTE:** For safety and regulatory information, refer to the Product Notices provided in your documentation kit. To access the latest user guides or manuals for your product, go to <http://www.hp.com/support> and follow the instructions to find your product. Then select **Manuals**.

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# Front components

To identify the components on the front of the monitor, use this illustration and table.

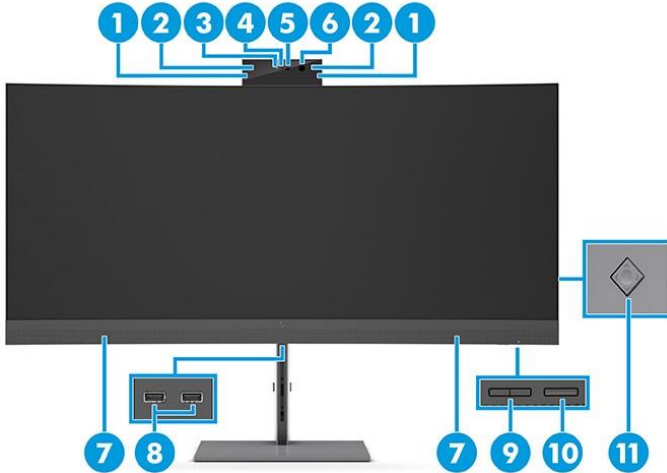


Table 2-1 Front components and their descriptions

Component	Description
(1) Tilt levers	Allow you to tilt the camera.
(2) Camera microphones	Allow you to participate in a video conference.
(3) Camera light	On: The camera is in use.
(4) Camera RGB lens	Transmits your image in a video conference.
(5) Camera IR lens	Transmits your image for Windows Hello facial recognition.
(6) Camera IR light	Additional IR light for facial recognition.  <b>NOTE:</b> You might not be able to see the camera IR light when it is on.
(7) Speakers	Produce sound. You can control the audio volume from the OSD menu in the Input menu.  <b>NOTE:</b> For the best audio experience, connect a USB cable from your monitor to your computer, and then select your monitor as the sound device.
(9) PbP or brightness buttons	The buttons function as left and right when PbP is on and brightness plus and minus when PbP is off.
(10) Power button	Turns the monitor on or off.
(11) OSD control	Activates the OSD buttons so that the button labels appear on the right side of the screen.



## Rear and side components

To identify the components on the rear of the monitor, use this illustration and table.

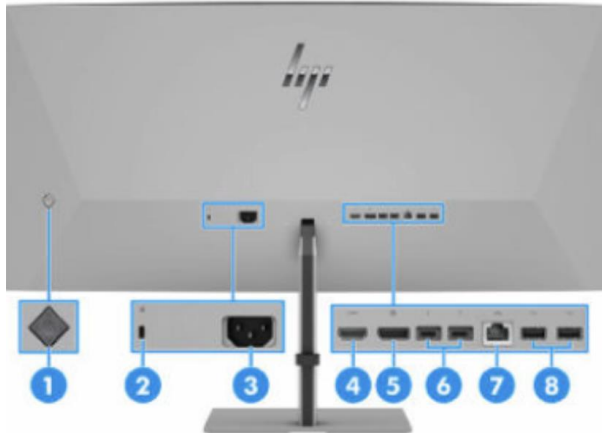


Table 2-2 Rear components and their descriptions

Component	Description
(1) OSD contro	Activates the OSD buttons so that the button labels appear on the right side of the screen.
(2) Security cable slot	Connects an optional security cable.
(3) Power connector	Connects your monitor to a power outlet.
(4) HDMI port	Connects the HDMI cable to a source device such as a computer or game console.
(5) DisplayPort connector	Connects the DisplayPort cable to a source device such as a computer or game console.
(6) USB Type-C Thunderbolt ports	Connect a display device that has a USB Type-C connector, providing DisplayPort output. <b>NOTE:</b> Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device.
(7) RJ-45 (network) jack	Connects a network cable.
(8) USB ports (downstream)	Connect a USB cable to a peripheral device, such as a keyboard, mouse, or USB hard drive, and supports battery charging.

# Locating the serial number and product number

The serial number and product number are located on the rear of the monitor. You may need these numbers when contacting HP about the monitor model.



**For all regions:**

Barcode label & Spec label

Regulatory Model / 規定型号 / 規定型號 / 型號: HSD-0107-W  
型号: HP 740gm Monitor / 液晶显示器 / 液晶顯示器 / 显示屏 100.8 cm (39.7 in.)  
Input Rating 电源电压 / 輸入電壓 / 交流電壓 / 交流輸出:  
100-240V (99W) ~ 3.8A (3.8A) 安培 50 / 60 Hz (赫茲)  
产地: 中国 / Made in China / Fabriqué en Chine / 製造地: 中国 / 製造地: 中國

This device complies with part 15 of the FCC Rules.  
Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference, and  
(2) this device must accept any interference received, including interference that may cause undesired operation.  
製造商: HP Inc.

ENERGY STAR  
Conservez votre énergie. économisez l'énergie.

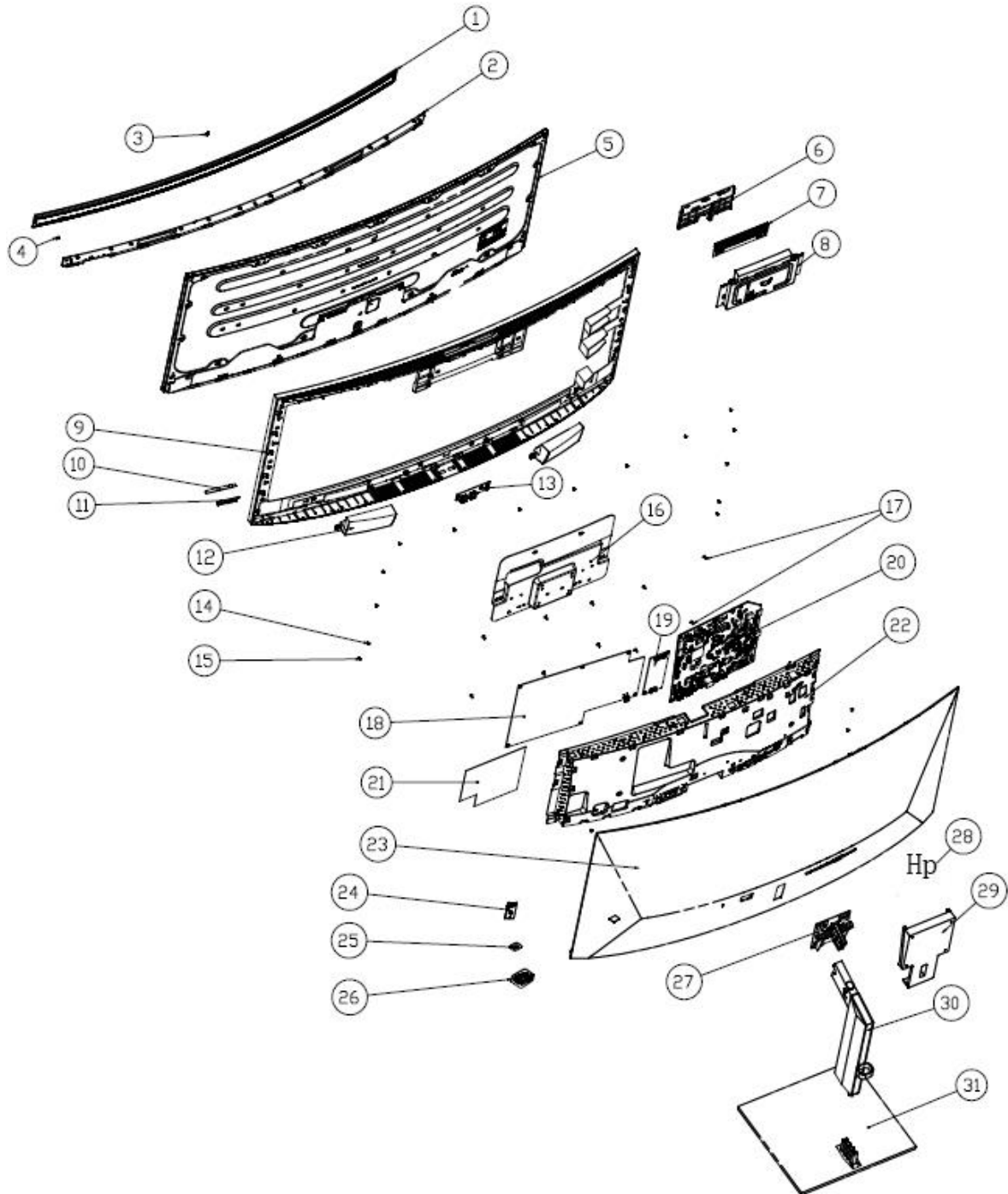
SAFETY MARK  
210809-11

Product No.: SY2R2AA  
Serial No. 序号/序號: CN43400001  
Assembly Part No.: N70021-001  
Spare Part No.: N70679-001/ASSY N70021-700  
Rev.: X000000X  
Manufactured / 製造/製造日期 /  
日期: 10/2023

Service label is 45X15mm, R=2mm  
QR code size is 11.75mm X11.75mm  
QR code just include Serial Number, eg/CNC0450001  
Serial No. Font is Arial Bold 6pt  
The rest of variate data font is Arial 5.7pt

# 3 Illustrated parts catalog

To identify the monitor major components, use this illustration and table.



**Table 3-1:** Monitor major components and their descriptions

Item	Description	Part number	Qty
1	# ASSY_BEZEL_CHIP		1
2	#FRONT_BEZEL_ABS_Ocean_Jack_black		1

3	#HP_LOGO_FRONT_7122-0613	1
4	#LENS	1
5	#LCM_Module	1
6	#ASSY_WEBCAM_MOBILE	1
7	#ASSY_WEBCAM_TILL HOLDER_PLASTIC_ABS	1
8	#ASSY_WEBCAM_COVER	1
9	#ASSY_MC_ABS_OCEAN_JACK_BLACK	1
10	#OSD_KEY_BD	1
11	#OSD_KEY_ABS_Ocean_Jack_black	1
12	#SPEAKER_BAR	2
13	#USB_BD	1
14	#SCREW_M3X5	29
15	#SCREW_M2X2.8	4
16	#ASSY_HINGE_BRACKET_SGCC_T1.	1
17	#Screw_M3X6	3
18	#POWER_BD	1
19	#DRIVER_BD	1
20	#IF_BD	1
21	#MYLAR_Power_BD_150*147	1
22	#ASSY_MAIN_BRACKET_SGCC_T0.8	1
23	#ASSY_REAR_COVER_ABS_TURBO SILVER	1
24	#OSD_BD	1
25	#JOYSTICK_CAP_Z_SERIES_NEW	1
26	#OSD_KEY_HOLDER_ABS_Ocean_Turbo Silver	1
27	#HIINGE_ASSY	1
28	#HP LOGO_BACK_7122-0597	1
29	#ASSY_VESA_MOUNT	4
30	#ASSY_STAND	1
31	#ASSY_BASE	1

## How to order parts

The HP authorized repair center can purchase the power board from HP.

### Power board

Description	HP spare part number	Manufacturer part number
PWR BD MA40UHC-BZCL(C)Z40c	N06249-001	755.04C05.0001

Capacitors and connectors are available for purchase from the following EU distributors:

- Digi-Key(RUBYCON ALU CAP): [www.digikey.com](http://www.digikey.com)

#### Capacitors by distributor

Component description	Location	Component distributor	Distributor part number
CAP EL 470U 35V M RT5 10*16	AC651,AC652,AC653,AC654, AC655,AC656,AC657,AC658	RUBYCON	35ZLH470MEFCT810X16

#### Connectors by manufacturer

Component description	Location identifier	Component distributor	Distributor part number	Remark
HDMI	HDMI1	Molex	<a href="https://www.digikey.com">https://www.digikey.com</a> PN: 0476591100	
DP	DP1	TE Connectivity AMP Connectors	<a href="https://www.digikey.com">https://www.digikey.com</a> PN: 2041441-1	
USB-C	SKT1/SKT 2	JAE Electronics	<a href="https://www.digikey.com">https://www.digikey.com</a> PN: DX07S024WJ1R350	
RJ45	RJ1	Würth Elektronik	<a href="https://www.digikey.com">https://www.digikey.com</a> PN : <a href="#">732-3170-ND</a>	
USB-A	USB3 USB4	Tensility International Corp	<a href="https://www.digikey.com">https://www.digikey.com</a> PN: 54-00013	

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**NOTE:** The connector may need to be modified to meet functionality, regulatory and safety requirements if it is not an exact match.

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You can purchase cables from the HP part store at <https://partsurfer.hp.com/Search.aspx>.

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**NOTE:** HP continually improves and changes product parts. For complete and current information about supported parts for your computer, go to <http://partsurfer.com>, select your country or region, and then follow the on-screen instructions.

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Internal and External Power Supplies are available for purchase from the following EU distributor: EET <https://www.eetgroup.com/en-eu/>

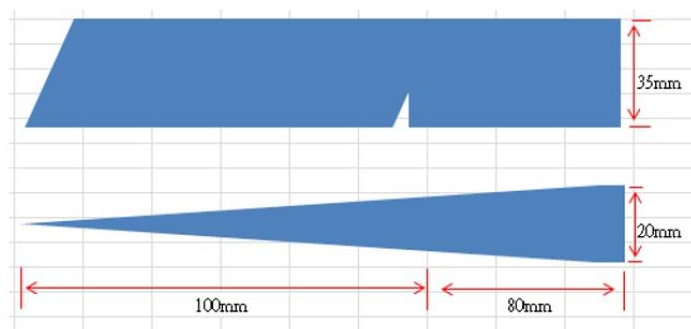
## 4 Removal and replacement procedures

Adherence to these procedures and precautions is essential for proper service.

### Preparation for disassembly

Use this information to properly prepare to disassemble and reassemble the monitor.

- 1) Read the “Important safety information” and “Important service information and precautions” sections in the “Getting started” chapter of this guide.
- 2) Clean the room for disassembly.
- 3) Identify the disassembly area.
- 4) Check the position that the monitors are to be placed along with the number of monitors. Prepare the area for material flow according to the disassembly layout.
- 5) Be sure to have the following equipment and materials:
  - Press fixture
  - Working table
  - Screwdriver
  - Knife
  - Gloves
  - Cleaning cloth
  - ESD protection
  - Scraper bar in the following dimensions:



### Rear Cover

Before removing the Rear Cover, follow these steps:

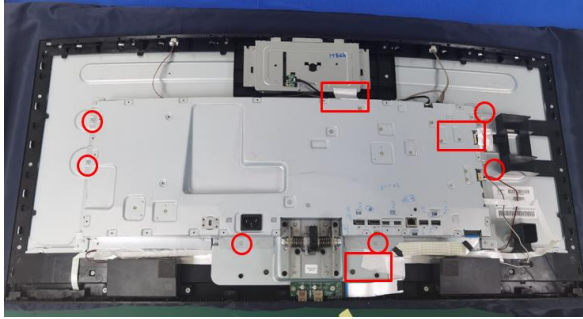
- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 11.
- 1) Remove Stand Base From Display Head by pushing the release button



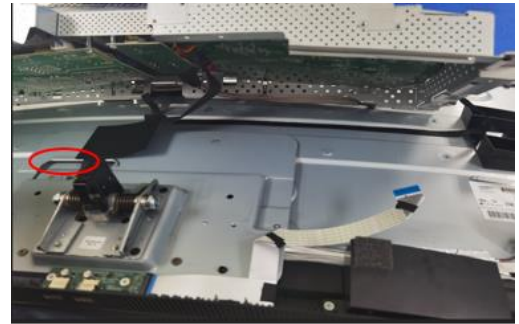
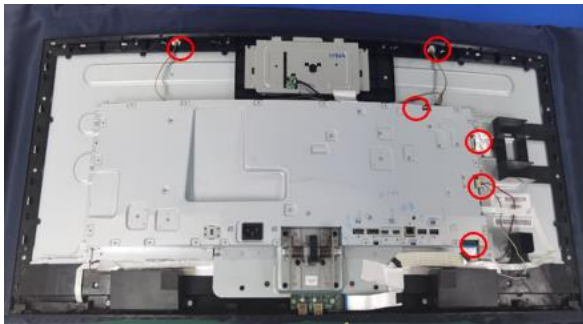
- 2) Remove Rear Cover From Display Head: Loose all the hooks by hand for pulling the rear cover, and disconnect the key cable away from the connector.



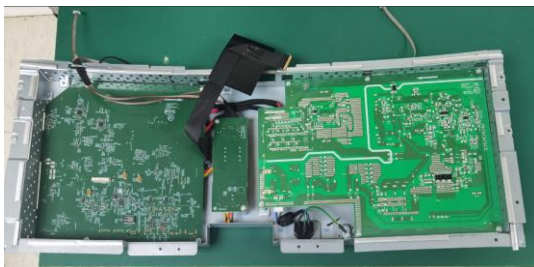
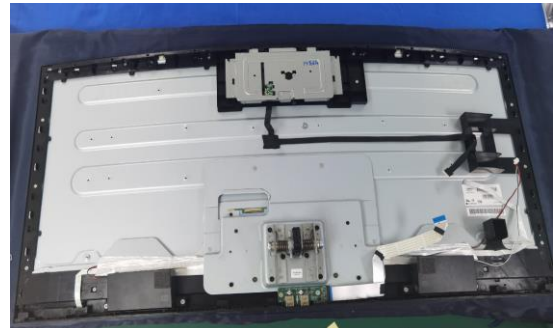
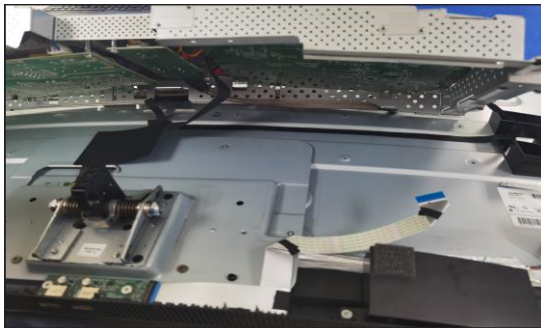
3) Remove 3pcs EMI AL and 6pcs screws From Display Head



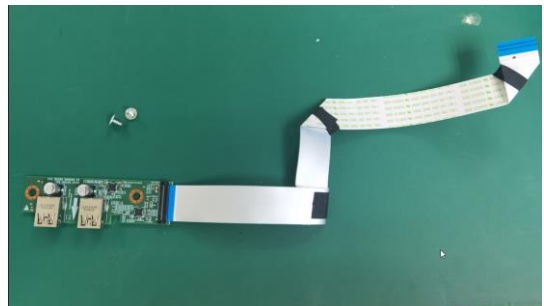
4) Disconnect all the cables from the connectors of Display Head



5) Remove Bracket Assembly From Display Head

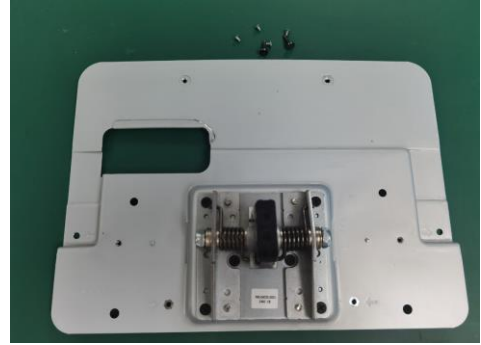
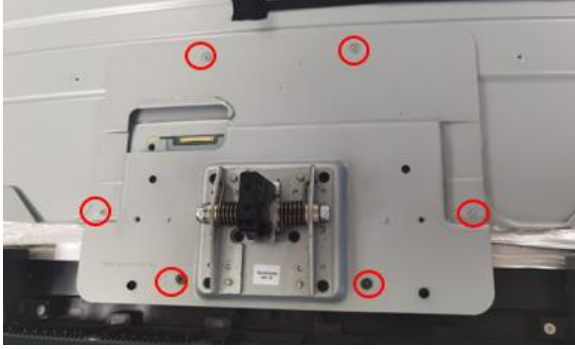


6) Remove USB board From the Display Head by unlocking 2pcs screws





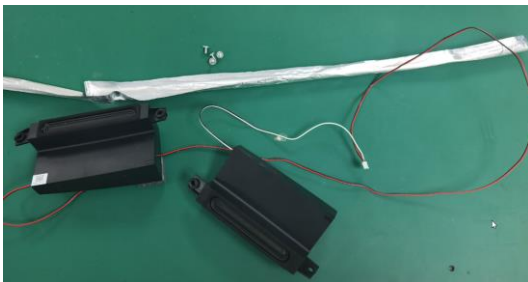
7) Remove 6pcs screws for releasing Hinge bracket holder From Display Head



8) Remove 5pcs screws for unlocking Webcam module assembly with Display Head by



9) Tear off 1pcs AL tape. Remove Speaker assembly From Display Head by unlocking 4pcs screws



10) Remove Bezel assembly From Display Head by unlocking 2pcs screws



11) Remove Middle cover assembly From Display Head by unlocking 19pcs screws



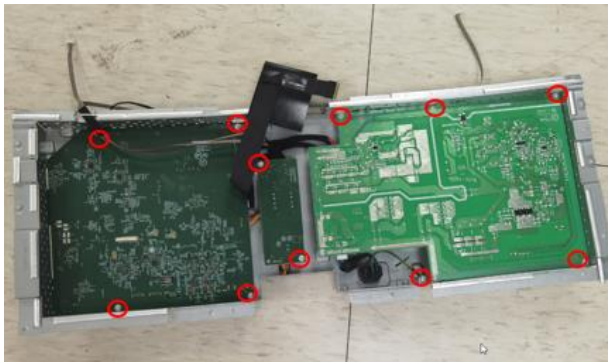
12) Remove Power key BD From Middle Bezel



13) Remove Joystick Board From back cover by unlocking 2pcs screws



14) Remove Power Board, Driver Board and interface Board From bracket Assembly by unlocking 11pcs screws



# Power board

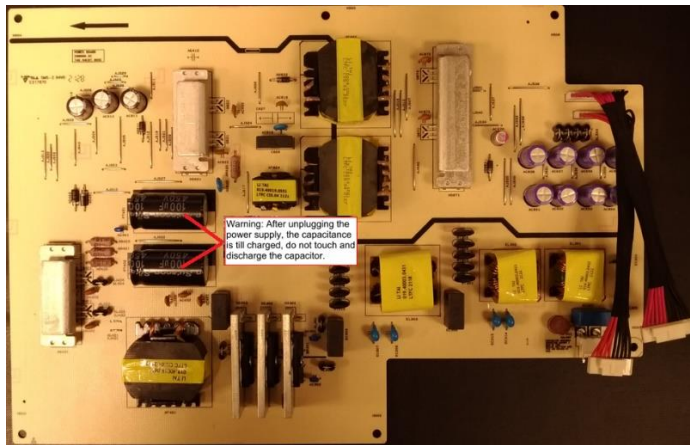
The power board part number is 755.04C05.0001.

Before removing the power board, follow these steps:

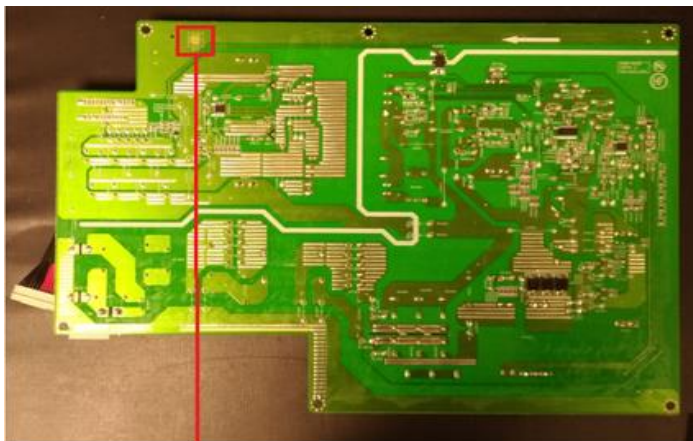
- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 11.

Remove the power board:

- 1) The HP Z40c G3 power board connector position is as follows:



- 2) Locate the part number location on the board.



- 3) Pin solder with soldering iron and absorber.  
NA
- 4) Lift the connector up and away from the PCB.  
NA

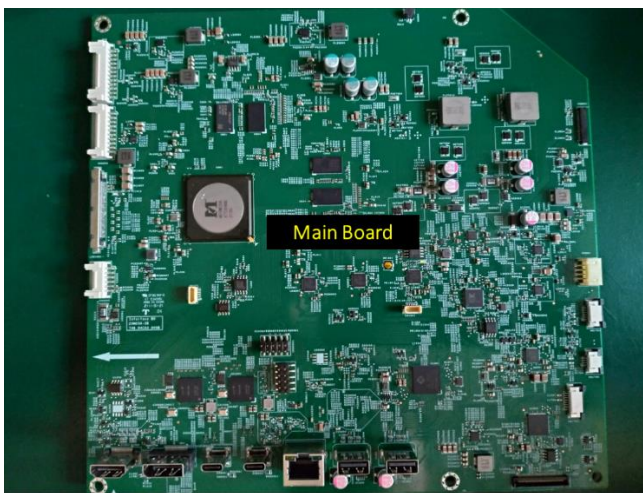
# Connector repair

This procedure includes HDMI, Display Port, Mini Display Port, USB-C LAN and USB-A connectors.

The connectors are on the main board (board part number 7ZB.04C01.0011).

The connector identifiers are as follows:

Connector	Location
HDMI	HDMI1
DP	DP1
USB-C	SKT1, SKT2
LAN	RJ1
USB-A	USB3, USB4



HDMI1 DP1 SKT1 SKT2 RJ1 USB3 USB4

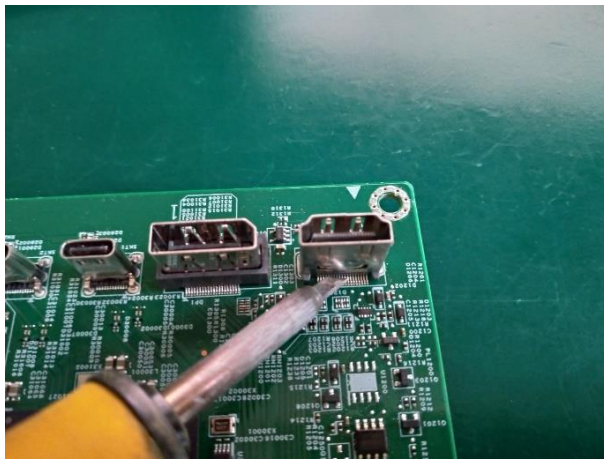
Before repairing connectors, follow these steps:

- ▲ Prepare the monitor for disassembly. See [Preparation for disassembly](#) on page 11.

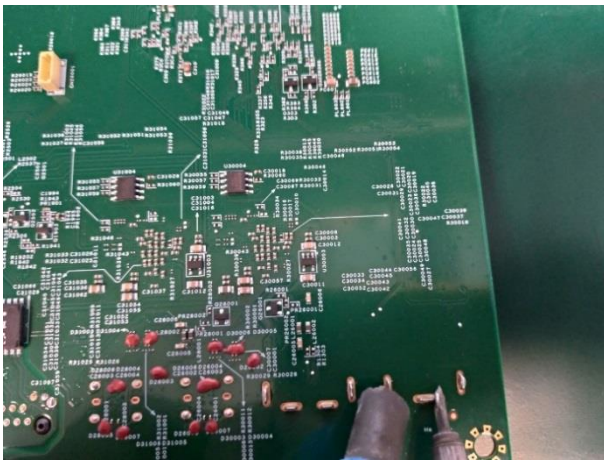
## HDMI connector HDMI1

Repair the HDMI connector:

- 1) Use a soldering iron and a de-soldering pump to remove as much solder as possible from the pin.



- 2) Use a hot air gun to melt the solder on the pins.

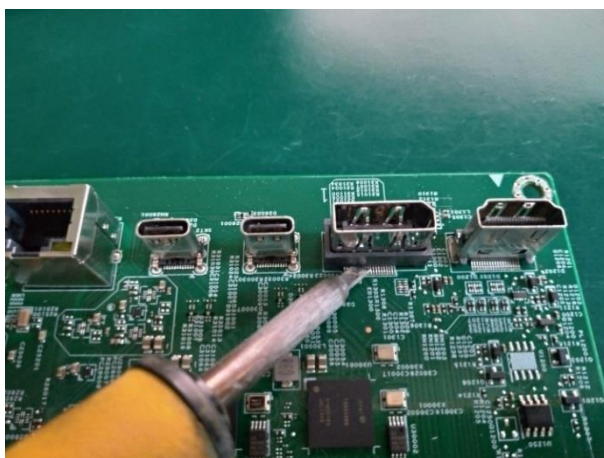


- 3) Lift the HDMI connector from the PCB.
- 4) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 5) Solder the new component.

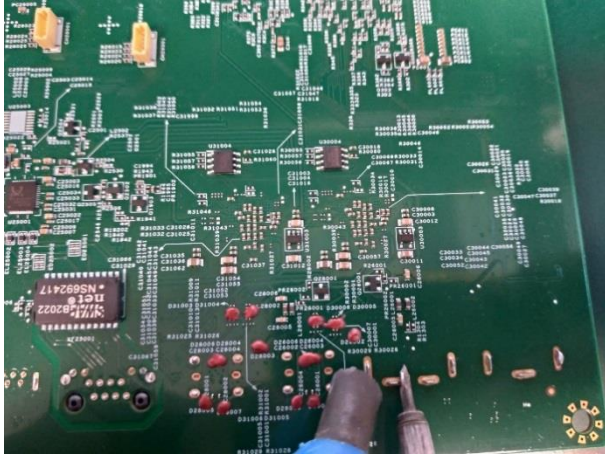
## DP connector DP1

Repair the DP connector:

- 1) Use a soldering iron and a de-soldering pump to remove as much solder as possible from the pin.



- 2) Use a hot air gun to melt the solder on the pins.

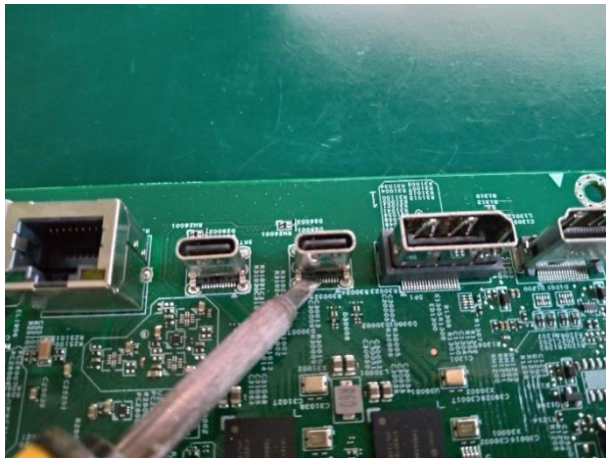


- 3) Lift the DP connector from the PCB.
- 4) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 5) Solder the new component.

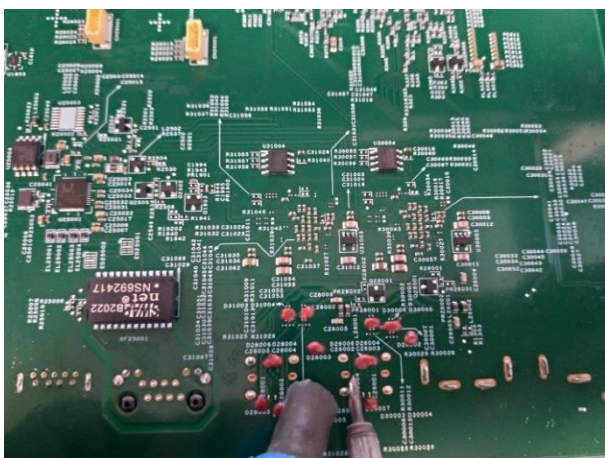
## USB-C connector SKT1/SKT2

Repair the USB-C connector:

- 1) Use a soldering iron and a de-soldering pump to remove as much solder as possible from the pin.



- 2) Use a soldering iron and a de-soldering pump to remove as much solder as possible from the pin

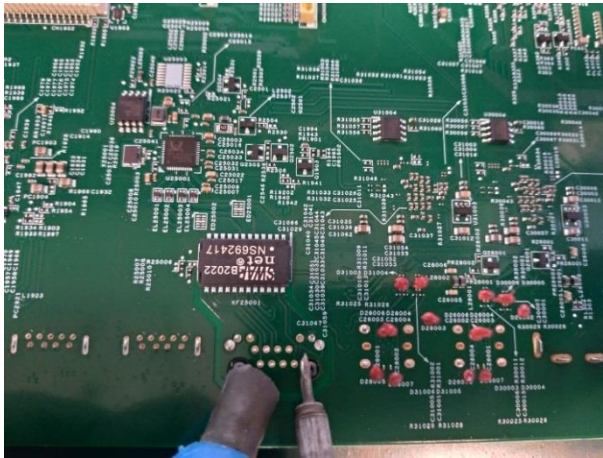


- 3) Lift the USB-B connector from the PCB.
  - 4) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- Solder the new component

## RJ45 connector RJ1

Repair the RJ45 connector:

- 1) Use a soldering iron and a de-soldering pump to remove as much solder as possible from the pin.

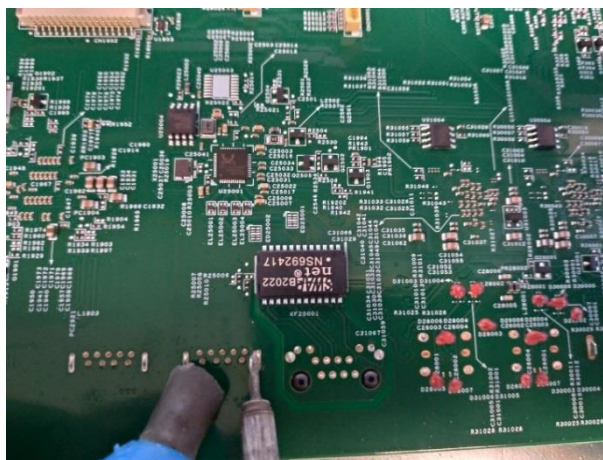


- 2) Lift the RJ45 connector from the PCB.
- 3) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 4) Solder the new component.

## USB-A connector USB3/USB4

Repair the USB-A connector:

- 1) Use a soldering iron and a de-soldering pump to remove as much solder as possible from the pin.



- 2) Lift the USB-A connector from the PCB.
- 3) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 4) Solder the new component.

# Function test

After repair, be sure to confirm that all functions are working.

**Table 4-1:** Function test

Test item	Operating description	Tool used
HDMI test	Confirm whether image displays	Computer or DVD player
DP test	Confirm whether image displays	Computer or DVD player
USB-C Alt-Mode	Confirm whether image displays and sound plays correctly on the monitor.	Computer or Notebook
USB-C PD Function	Confirm PDO/Charging working normally.	Notebook
USB Hub Test	Confirm USB function of 4-USB Type-A working normally.	Computer or Notebook

# Support and troubleshooting

The following table lists possible problems, the possible cause or each problem, and the recommended solutions.

**Table 4-2:** Solving common problems

Problem	Possible cause	Solution
Screen is blank or video is flashing.	Power cord is disconnected.	Connect the power cord.
	Monitor is turned off.	Power the power button. NOTE: If pressing the Power button has no effect, press and hold the power button for 10 seconds to disable the Power button lockout feature.
	Video cable is improperly connected.	Connect the video cable properly.
	System is in Sleep mode.	Press any key on the keyboard or move the mouse to exit Sleep mode.
	Video card is incompatible.	Open the OSD menu and select the <b>Input</b> menu. Set <b>Auto-Switch Input</b> to <b>Off</b> and manually select the input.  or Replace the video card or



		connect the video cable to one of the computer's on-board video sources.
Image appears blurred, indistinct, or too dark.	Brightness is too low.	Open the OSD menu and select <b>Brightness</b> to adjust the brightness scale as needed.
<b>Check Video Cable</b> is displayed on screen.	Monitor video cable is disconnected.	Connect the appropriate video signal cable between the computer and monitor. Be sure that the computer power is off while you connect the video cable.
<b>Input Signal Out of Range</b> is displayed on screen.	Video resolution and/or refresh rate are set higher than what the monitor supports.	Change the settings to a supported setting.
The monitor does not enter into a low-power sleep state.	The monitor's power saving control is disabled.	Open the OSD menu and select <b>Power</b> , select <b>Auto-Sleep Mode</b> and set auto-sleep to <b>On</b> .
"OSD Lockout" is displayed.	The monitor's OSD lock function is enabled.	Press and hold the <b>Menu</b> button for 10 seconds to disable the OSD lockout function.
"Power Button Lockout" is displayed.	The monitor's power button is locked.	Press and hold the <b>Power</b> button for 10 seconds to disable the power button lock function.
The camera and USB ports don't work, but the monitor is turned on.	There is no upstream USB connection.	Be sure that the host computer is connected to the monitor with a USB Type-C to USB Type-C cable or a USB Type-C to USB cable.

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