



# Maintenance and Service Guide

Z38c model

## **SUMMARY**

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

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## **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](https://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:

- 95.29 cm (37.5 in) curved 2300r with 3840 x 1600 resolution, Ultra-Wide Quad High Definition (UWQHD) backlit display, plus full-screen support for lower resolutions
- Tilt capability and easy viewing from sitting or standing position, or while moving from one side of the monitor to the other
- Swivel and height adjustment capabilities
- HDMI (High-Definition Multimedia Interface) video input
- DisplayPort video input
- USB Type-C port with power delivery up to 65 W and DisplayPort Alternate Mode
- USB 3.0 hub with three ports
- Audio-out (headphone) jack
- Premium integrated speakers
- Plug and Play capability if supported by your operating system
- On-screen display (OSD) adjustments in several languages for easy setup and screen optimization
- HP Display Assistant software for adjusting monitor settings and enabling theft-deterrence features
- HDCP (High-bandwidth Digital Content Protection) used on digital inputs
- In select regions, software and documentation optical disc provided with the monitor in select regions that includes monitor drivers and product documentation
- VESA mounting bracket for attaching the monitor to a wall-mount device or swing arm
- Low Blue Light Mode settings to create a more relaxing and less stimulating image
- NOTE: For safety and regulatory information, refer to the Product Notices provided on your optical disc, if one is included, or in your documentation kit. To locate updates to the user guide for your product, go to <http://www.hp.com/support>. Select Find your product, and then follow the on-screen instructions.

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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.

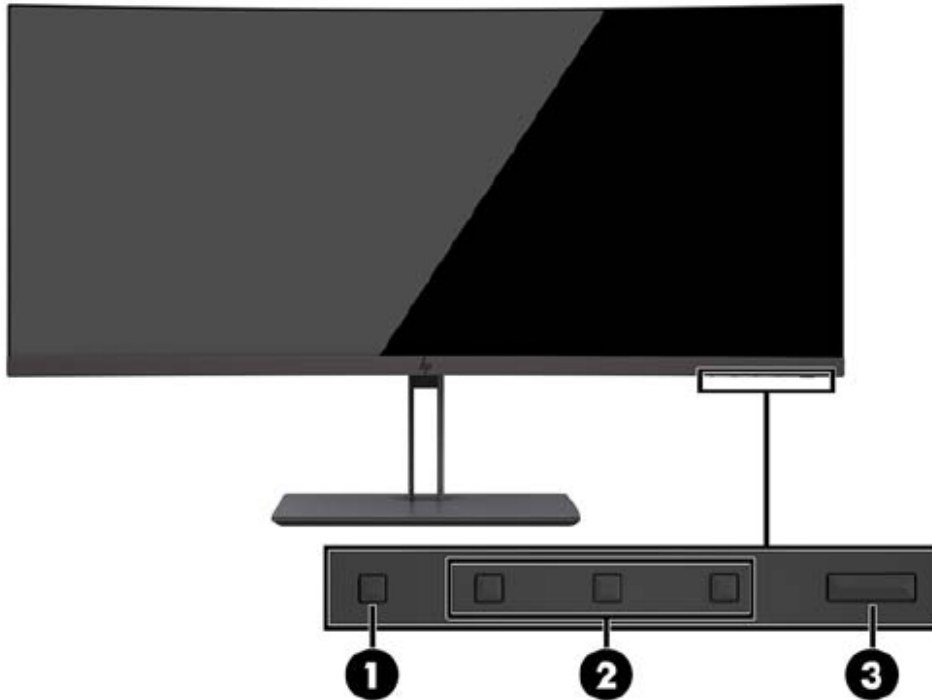
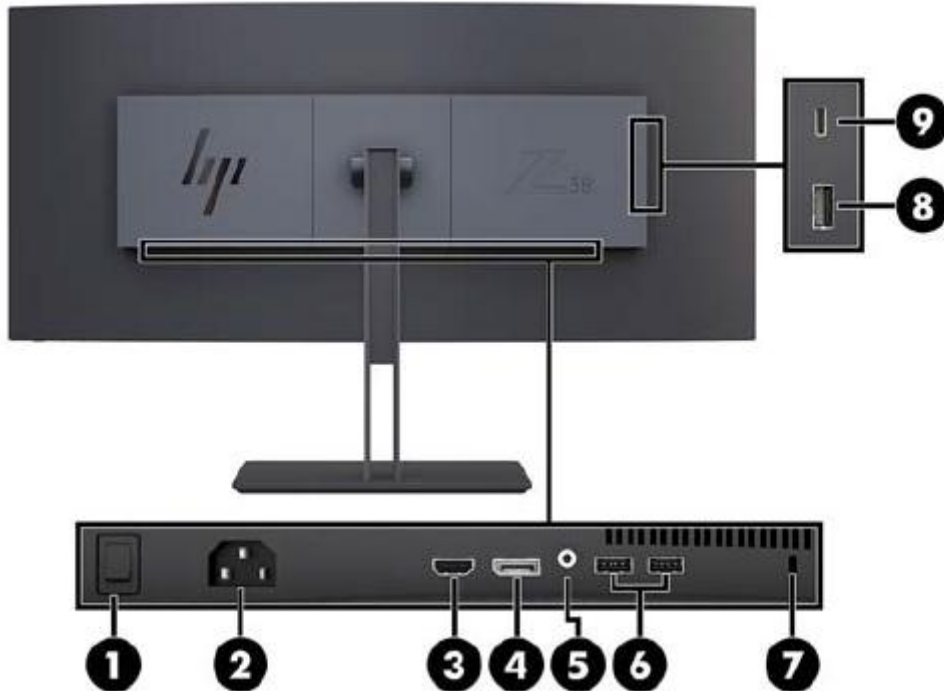


Table 1-1: Front components and their descriptions

Component	Function
1    Menu button	Press to open the OSD menu, select a menu item from the OSD, or close the
2    Function buttons	Use these buttons to navigate through the OSD menu based on the.
3    Power button	Press to turn the monitor on or off. When the monitor is on, the power light

# Rear components

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



**Table 1-2: Rear components and their descriptions**

Component	Function
1 Master power switch T	Turns off all power to the monitor. NOTE: Putting the switch in the Off position will yield the lowest power
2 Power connector	Connects AC power.
3 HDMI port.	Connects an HDMI cable to the source device.
4 Display Port	Connect Display Port cable to the source device.
5. Audio out (headphone) jack	Connects optional powered stereo speakers, headphones, earbuds, a Head set, or a television audio cable.
6 USB Type-A ports (2)	Connects a USB device
7 Security cable slot	Connects a security cable to a stationary object
8 USB Type-A ports (2)	Connects a USB Type-A cable to the source device.

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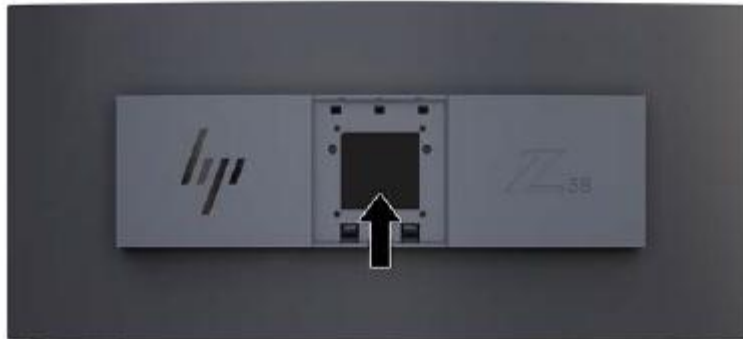
9 USB Type-C port  
(upstream)

Connects a USB Type-C cable to the source device.

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# Locating the serial number and product number

The SPEC label (1) and Barcode label (2) are located on the rear of the monitor. The serial number and product number are located on a Safety label. You may need these numbers when contacting HP about the monitor model.



For worldwide models (except India):

Barcode label



Spec label



For India:

Bar code label



Spec label

























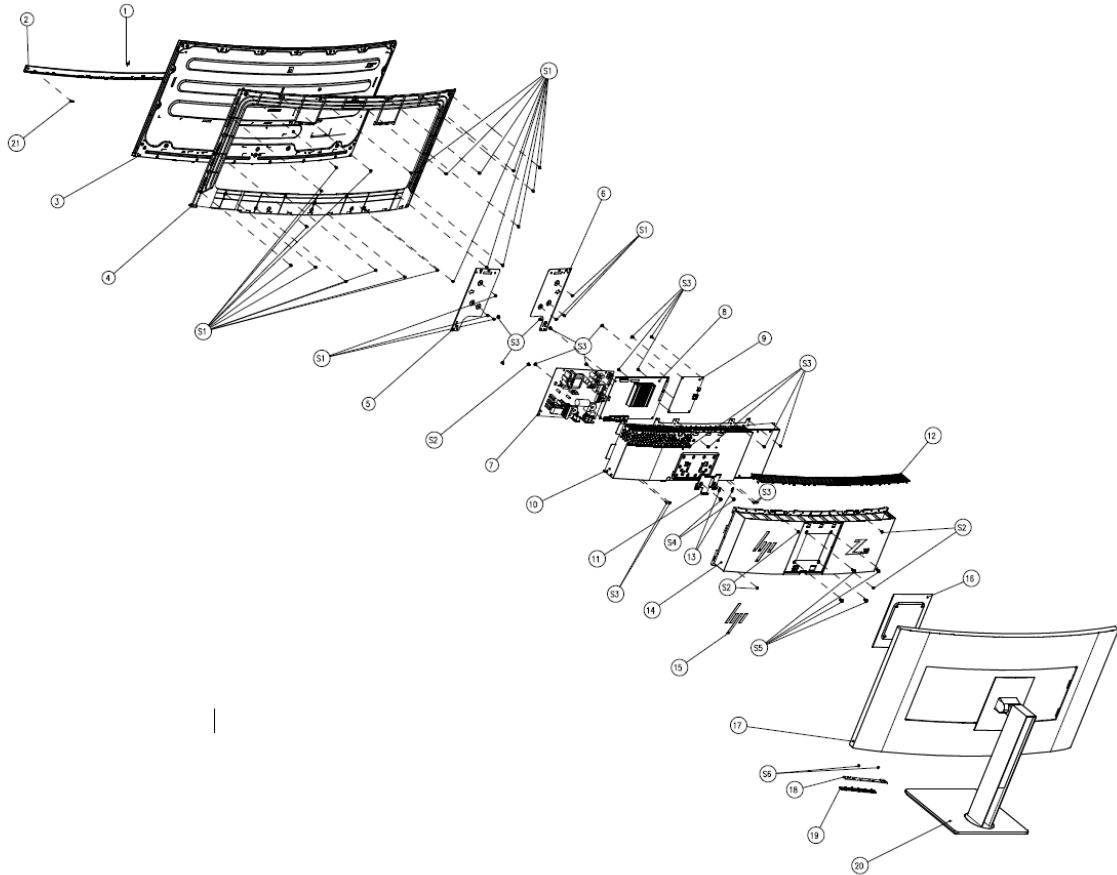


CAN ICES-3(B)/NMB-3(B)  
 MSIP-P22A-104HSTND-8401-L  
 XU100102-17031  
 L&T Display Technology (Fujian) Ltd.  
 中国地址：1588-3003

警告：使用過度恐傷害視力。

# 3. Illustrated parts catalog

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



item	part name	q'ty
1	HP LOGO 18mm	1
2	Z38C DECO COVER	1
3	37.5" LG PANEL	1
4	Z38C MIDDLE FRAME	1
5	Z38C PANEL BKT L	1
6	Z38C PANEL BKT R	1
7	Z38C POWER BOARD	1
8	Z38C MAIN BOARD	1
9	Z38C SIDE BOARD	1
10	Z38C MAINFRAME	1
11	Z38C RELEASE BUTTON	1
12	Z38C TOP VENT COVER	1
13	SPRING	2
14	Z38C BACKPACK	1
15	HP LOGO 100mm	1



16	Z38C WALL MOUNT ASS'Y	1
17	Z38C REAR COVER	1
18	Z38C KEY PCB	1
19	Z38C KEY	1
20	Z38C STAND	1
21	Z38C LENS	1
S1	SCREW M3L4-I	38
S2	SCREW M4	1
S3	SCREW M3L6	12
S4	STEP SCREW-M3	2
S5	SCREW M4L10-I	4
S6	SCREW Q3L3	2

## 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
Z38c	M74280-001	ADPCG2015AB3
Z38c	M74280-002	ADPCG2015AC3

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

- Farnell: [Farnell UK - Electronic Components Distributor](#)
- RS Component: [Capacitors | RS Components \(rs-online.com\)](#)
- DK : <https://www.digikey.com/>

### Capacitors by distributor

Component description	Location	Component distributor	Distributor part number
Capacitor 470uF 20% 25V 10*12 2000hr 1490mA	C9218 and C952	Farnell	A750MS477M1EAAE015
470uF 20% 25V 10*12 5000hr 1600mA	C9216,C9217,C9222,C954	RS	EEUFR1E471

### Connectors by manufacturer

Component description	Location identifier	Component distributor	Distributer part number
HDMI	J2	DK	A35071TR-ND A35071CT-ND

			A35071DKR-ND/TE
DisplayPort	J3	DK	A99341-ND/TE
Audio	M1	DK	CP1-3553 (or 3554) NG-ND/CUI
USB 3.0 TYPE A	J4	DK	732-3146-2-ND 732-3146-1-ND /WE
USB 3.0 TYPE A	J5	DK	732-3146-2-ND 732-3146-1-ND /WE

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**NOTE:** Rear cover and chassis need to be modified to hold connector. Connector may need modifications to meet functional, safety and regulatory requirements accordingly if it doesn't match exactly.

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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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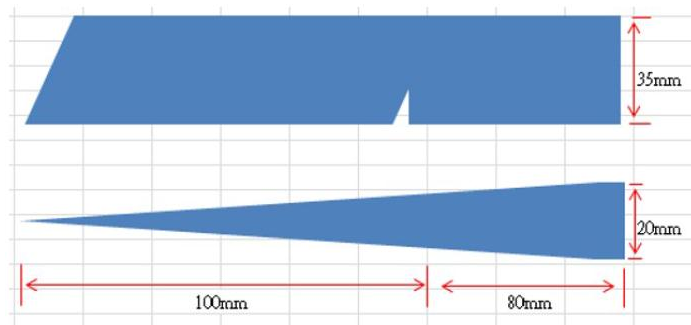
## 4. Removal and replacement procedures

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:


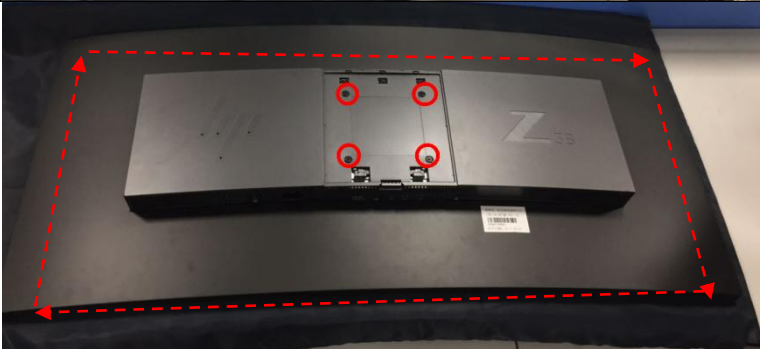



# RC

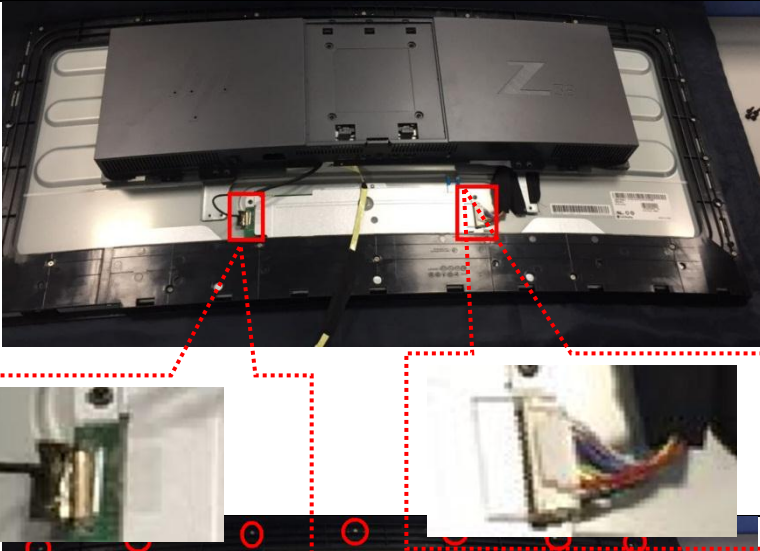
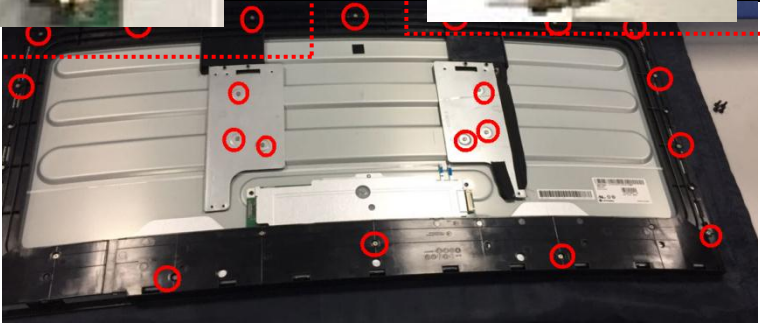
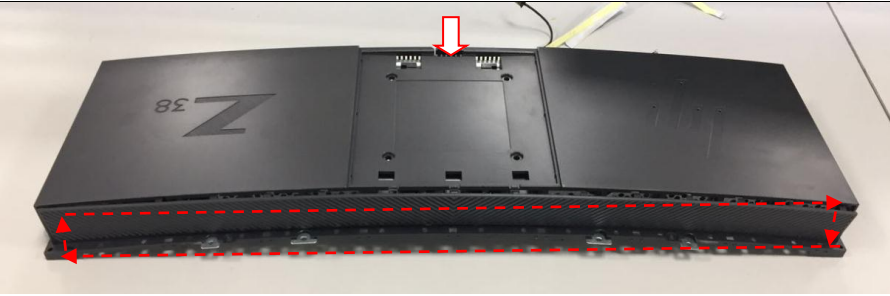
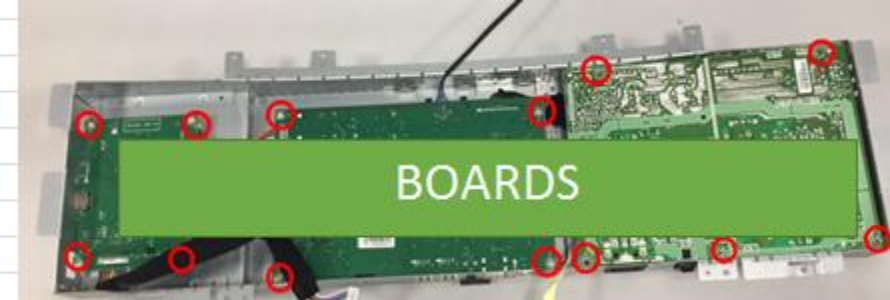
Before removing the RC, follow these steps:

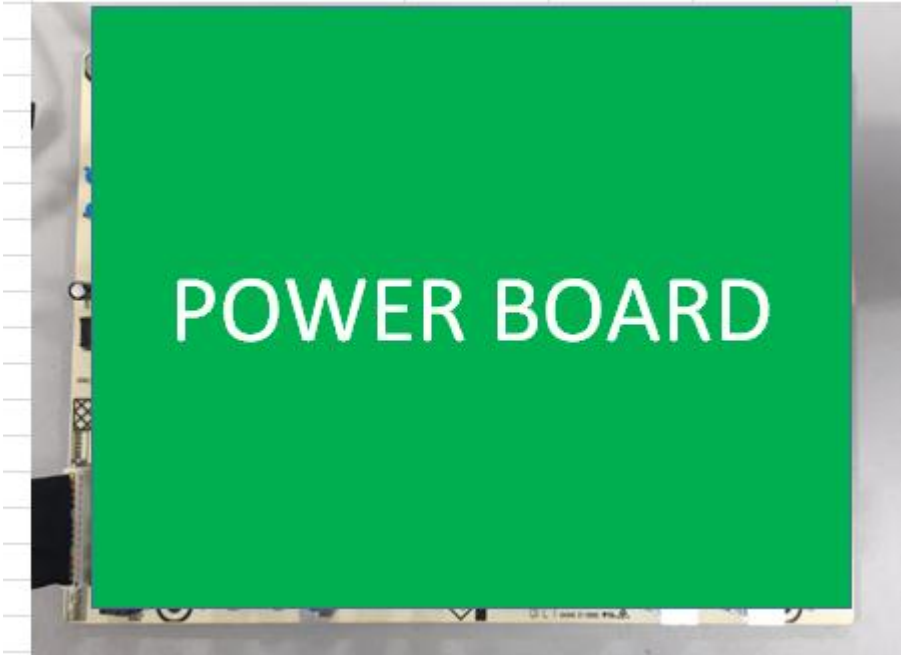
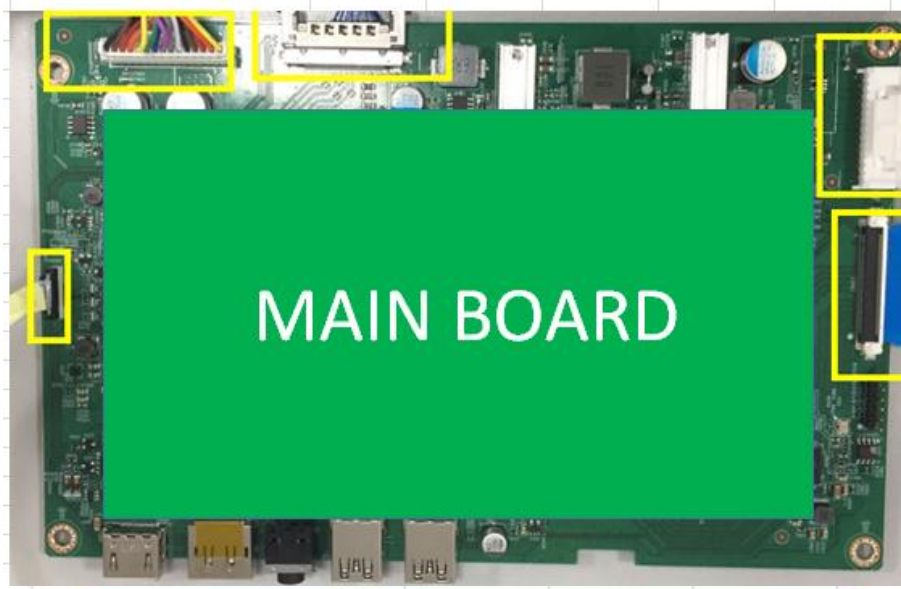
- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 13.

Remove the RC:

Step	Figure	Description
<p><b>Remove the HINGE ASS'Y</b></p>		<p>Put the monitor face down on a matched cushion Press the button to remove HINGE ASSY.</p>
<p><b>Remove the REAR_COVER</b></p>		<p>Remove screws and open the latches with tool to remove rear cover.</p>
<p><b>Remove main frame</b></p>		<p>Remove the Screws  Disconnect the cables.</p>



		
<p><b>Separate the MIDDLE FRAME</b></p>		<p>Remove the screws to separate the MIDDLE FRAME and PANEL.</p>
<p><b>Separate main frame</b></p>		<p>Open the latches with tool and press the button to remove rear cover.</p>
<p><b>Remove the MAIN BOARD and POWER BOARD</b></p>		<p>Remove the screws and disconnect the connectors to remove the MAIN BOARD and POWER BOARD.</p>



The panel



The panel

# Power board

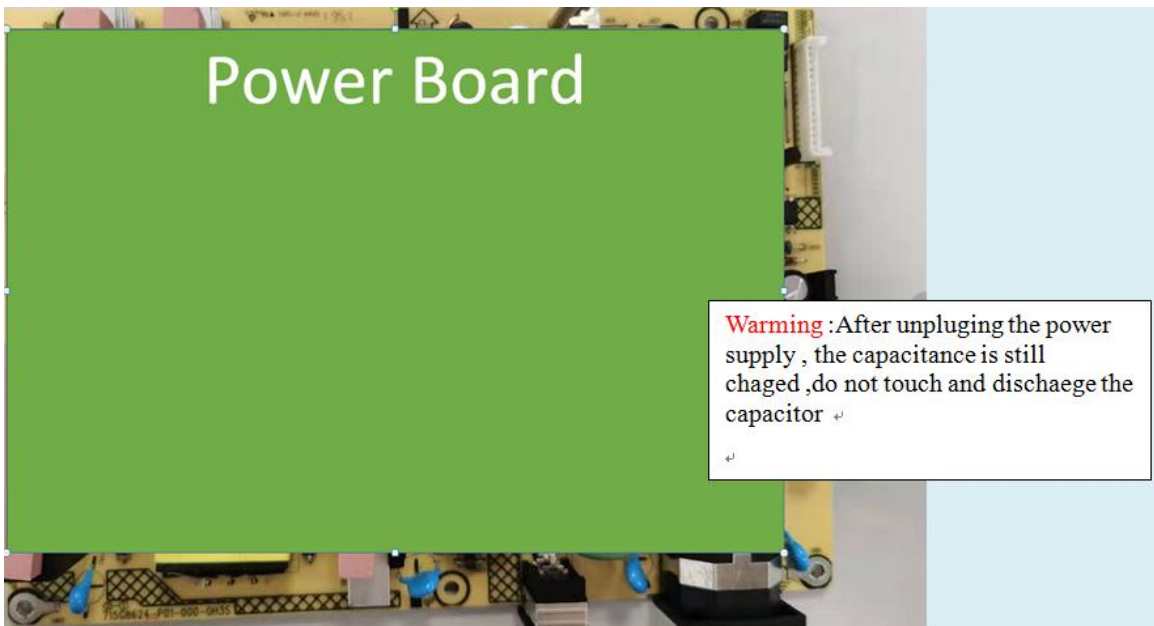
The power board part number is ADPCG2015AB3.

Before removing the power board, follow these steps:

- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 13.

Remove the power board:

- 1) The HP Z38c power board connector position is as follows:



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



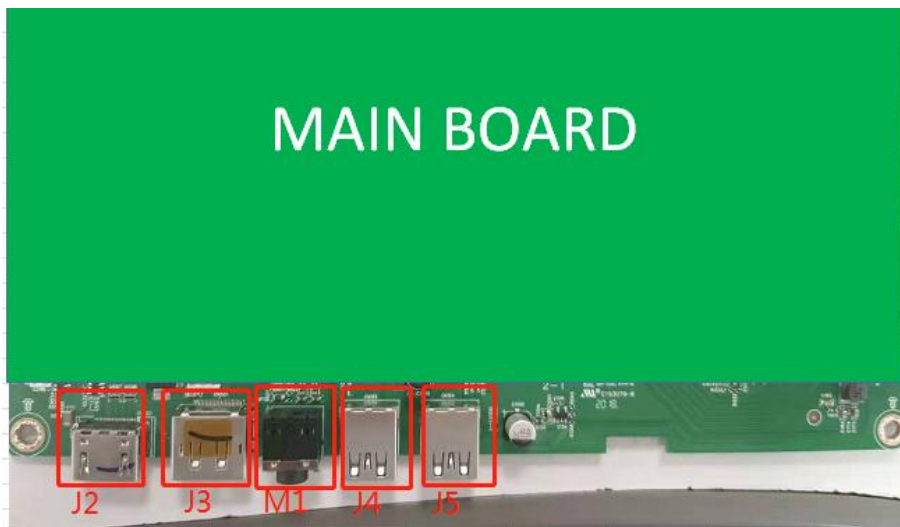
## Connector repair

This procedure includes HDMI, DisplayPort , USB and audio connectors.

The connectors are on the main board (board part number CBPCGD9HPQA).

The connectors identifiers are as follows:

Connector	Location
HDMI	J2
DisplayPort	J3
Audio	M1
USB 3.0 TYPE A	J4
USB 3.0 TYPE A	J5



Before repairing connectors, follow these steps:

- ▲ Prepare the monitor for disassembly. See [Preparation for disassembly](#) on page 13.

### IMPORTANT:

- **Repair Condition: Connector repair is only for out of warranty.**
- **Repairing must operate by professional repairers (Note) in repair center, not applicable for end user.**
- **Electrostatic protection is required when component replacement is required.**
- **The monitor meets ROHS, please use Lead-free solder wire for soldering.**
- **If Connector need to replace, must check specification and part number whether match the BOM and location.**
- **If connector need to replace, please insert new parts carefully because the near pin may cause short circuit by inappropriate operate.**
- **DO NOT allow any liquid on the board. Water and moisture may cause short-circuit to the electronic**



components and lead to malfunctions.

- The fusion point of Lead-Free solder is requested. Repairing with conventional lead wire may cause damage.
- Work quickly to avoid overheating the circuit board as soon as you confirm the steady soldering condition.
- Keep the soldering iron tip clean and well tinned and when replacing parts.
- A close inspection of the circuit board revealed look in good condition.
- After repaired, must connect source to each port to check Main board function is ordinary.

**Note:** (The requirement of professional repairers' regulation by ERP lot5)

1) The professional repairer has the technical competence to repair electronic displays and complies with the applicable regulations for repairers of electrical equipment in the Member States where it operates. Reference to an official registration system as professional repairer, where such system exists in the Member States concerned, shall be accepted as proof of compliance with this point.

2) The professional repairer is covered by insurance covering liabilities resulting from its activity, regardless of whether this is required by the Member State.

## Audio connector M1

Repair the audio connector:

- 1) Use a hot air gun to melt the solder on the pins. Pin solder with soldering iron and absorber. You can gently push down with the soldering iron once everything is molten to move the M1 out of the through holes.

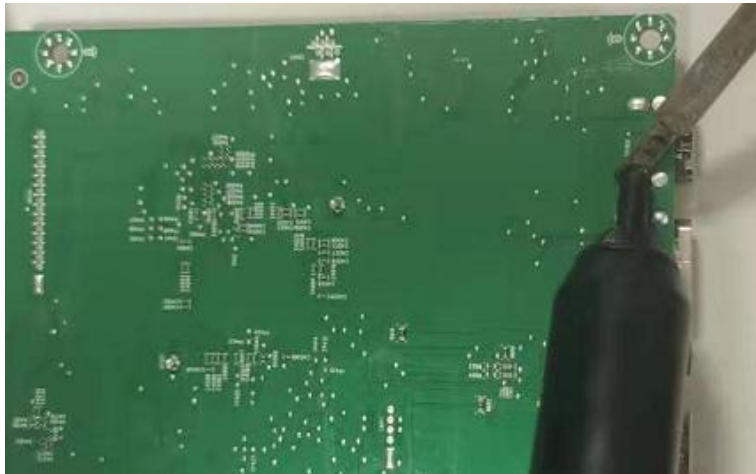


- 2) Lift the M1 connector from the PCB.
- 3) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 4) Solder the new component.

## HDMI connector J2

Repair the HDMI connector:

- 1) Use a soldering iron and a desoldering 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 J2 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 J3

Repair the DP connector:

- 1) Use a soldering iron and a desoldering 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 J3 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 connector J4

Before removing the USB connector, follow these steps:

- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 13.

Remove the USB connector:

1. Use a hot air gun to melt the solder on the pins. Pin solder with soldering iron and absorber. You can gently push down with the soldering iron once everything is molten to move the J4 out of the through holes.



2. Lift the J4 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 connector J5

1. Use a hot air gun to melt the solder on the pins. Pin solder with soldering iron and absorber. You can gently push down with the soldering iron once everything is molten to move the J5 out of the through holes.



2. Lift the J5 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 and sound plays correctly on the monitor.	Computer or DVD player
DP test	Confirm whether image displays and sound plays correctly on the monitor.	Computer or DVD player
Audio test	Change volume and balance to confirm whether volume is smooth and loud enough.	Speaker
D-SUB test	Confirm whether image displays and sound plays correctly on the monitor.	Computer or DVD player

# 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

<b>Problem</b>	<b>Possible cause</b>	<b>Solution</b>
Screen is blank or video is flashing.	Power cord is disconnected.	Connect the power cord.
	Monitor is 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 Input Control menu. Set Auto-Switch Input to Off and manually select the input
Image appears blurred, indistinct, or too dark.	Brightness is too low.	Open the OSD menu and select Brightness to adjust the brightness scale as needed.
Check Video Cable 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.
Input Signal Out of Range 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 is off, but it did not seem to enter into Sleep mode.	The monitor's power saving control is disabled.	Open the OSD menu and select Power Control > Auto-Sleep Mode and set auto-sleep to On.
On-Screen Menus are Locked is displayed.	The monitor's OSD lock function is enabled.	Press and hold the Menu button on the front bezel to 10 seconds to disable the OSD lockout function.
Power Button is Locked is Displayed	The monitor's power button is locked.	Press and hold the power button for 10 seconds to disable the power button lock function.

