



Maintenance and Service Guide

HyperX OMEN 24 G2 model

SUMMARY

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

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MSG-V1

Assembly part number: P61628-001

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.

 **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.

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

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. 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.

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

- 60.5 cm (23.8 in) diagonal viewable screen area with 1920 × 1080 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 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
- Pivot capability to rotate the monitor head from landscape to portrait orientation
- On-screen display (OSD) adjustments in several languages for easy setup and screen optimization
- Energy saver feature to meet requirements for reduced power consumption
- Cable management feature for placement of cables and cords

Connectors

- DisplayPort video input
- High-Definition Multimedia Interface™ (HDMI™) video input (2)
- Audio-out (headphone) jack
- 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

NOTE: For safety and regulatory information, see the Product Notices at [HP Regulatory, Safety, Compliance, and Warranty Information](#). To access the latest user guide, go to <http://www.hp.com/support>, and follow the instructions to find your product. Then select **Setup & User Guides**.

Rear components

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

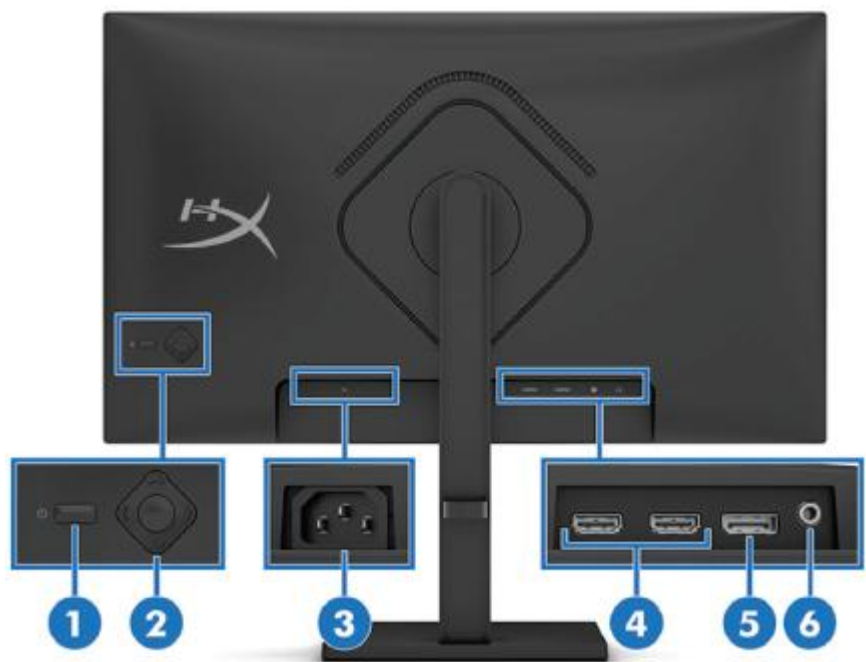


Table 2-1: Rear components and their descriptions

Component		Description
1	Power button	Turns the monitor on or off.
2	OSD control	Adjusts settings in the OSD menu.
3	Power connector	Connects the power cable to the monitor
4	HDMI ports (2)	Connect 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	Audio-out (headphone) jack	Connects optional powered stereo speakers, headphones, earbuds, or a television audio cable. CAUTION: To reduce the risk of personal injury, adjust the volume before using headphones or earbuds.

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 label on the rear of the monitor or on a label under the front bezel of the monitor head. You might need these numbers when you contact HP for support.

For worldwide models:



HyperX OMEN 23.8 inch FHD 180Hz Gaming Monitor – OMEN 24 G2 型号/모델명: OMEN 24 G2 Monitor/液晶显示器/液晶显示器/모니터 60.5cm (23.8") 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. HP Inc.

Regulatory Model No./规定型号/型号/모델명: HSD-0198-V
Input Rating/输入规格/输入规格/정격인력: 100-240V~ 1.3A (1.3A) 50/60Hz
Made in Vietnam/Fabriqu  au Vietnam/越南制造/越南製造/제조국:베트남

Serial No./序号/序號: VNEYWWZZZZ Manufactured/制造日期/製造日期/제조년월: September 2025
Assembly Part No.: P81628-001 Rev.: C2IM1000
Spares No.: P72800-001/ASSY P81628-001
Product No./제품명: C2JP4AA/C2JP4AS/C2JP4E9

00108-57570 XX

Image Quality ISO 9241-307 TÜV Rheinland CERTIFIED
Type Approved safety Register Production Surveillance TÜV Rheinland
Free of harmful substances Apparent Variations permitted TÜV Rheinland
Appar t m  tilk ples j rdet st tkontakt. Appar ten sk ll ansl tas till j rdet uttag. L fte  n till tt v r s v j k ss tt m ll  var st tt u n pi st r s l  n. Appar lets st tk pp sk ll t sl tt s  n st tk ntakt med j rd, som g ver f r r ndelse ill st tk ppens j rd.

HP REG 23010, 08028 Barcelona, Spain. reg@hp.com
UK CA HP Inc UK Ltd, Regulatory Enquiries, Earley West, 300 Thames Valley Park Drive, Reading, RG6 1PT
CAN ICES (B) / NMB (B) 00115-41330 XX

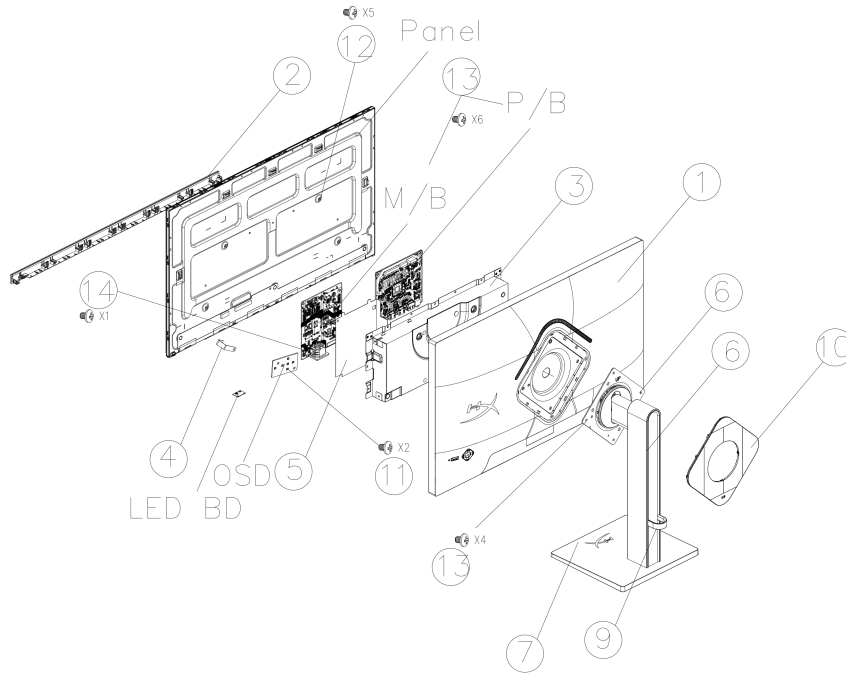
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IS 13252 (Part 1)/ IEC 60950-1
251238-11
EAC
X-XXXXXXXXX
www.bis.gov.in
R-R-hpi-HSD-0198-V
XXXXXXXX-XXXXX
BOE Vision-Electronic (Vietnam) Co., Ltd
A/S인력서: 1588-3003

SAFETY MARK
00108-57590 XX

3 Illustrated parts catalog

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



Item	Part Number	Description	Qty
1	81301-05994	Bucket(Rear Cover) assy	1
-	80301-07786	Bucket(Rear Cover) plastic	1
-	80602-00224	VESA NUT	1
	80302-06082	POWER Button	1
	80302-06083	OSD Button A	1
	80302-06084	OSD Button B	1
2	81301-05993	Front bezel assy	1
-	80301-07787	Front bezel plastic	1
	80501-04866	LED Lens	1
-	80302-06085	Sponge	1
3	80401-06054	Chassis	1
4	80402-07302	ESD Spring	1
5	80507-02172	Power BD Mylar	1
6	81302-05956	Stand- Neck	1

7	81302-05959	Stand- Base	1
8	81302-05957	Stand-Hinge	1
9	81302-05958	Stand-Cable clip	1
10	80302-06152	VESA cover	1
11	80601-01749	M3*L4 (OSD)	2
12	80601-00232	M3*L3	5
13	80601-00220	M3*L6	6
14	80601-00545	M4*10	4
15	80601-00195	M4*8	1

How to order parts

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

Power board

Description	HP power board spare part number	Manufacturer part number
OMEN 24 G2	P90259-001	21204-01538
OMEN 24 G2	P90259-002	21204-01580

Capacitors Connectors are available for purchase from the following EU distributors:

- Digi-Key: [Digikey.co.uk](https://www.digikey.co.uk)

Capacitors by distributor

Component description	Location	Component distributor	Distributor part number
Capacitor_330uF_25V_10*7	C828、C829	DigiKey	KZE25VB331M10X12LL

Connectors by manufacturer

Component description	Location identifier	Component distributor	Distributer part number
HDMI1	P109	DigiKey	1175- 1701-ND
HDMI2	P106	DigiKey	1175- 1701-ND
DP	P105	DigiKey	A99342-ND

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

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

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.

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

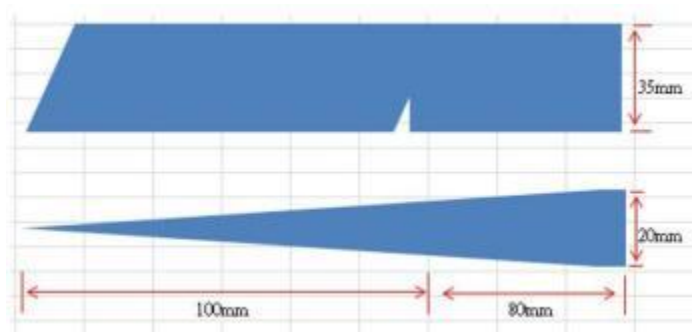
4 Removal and replacement procedures

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

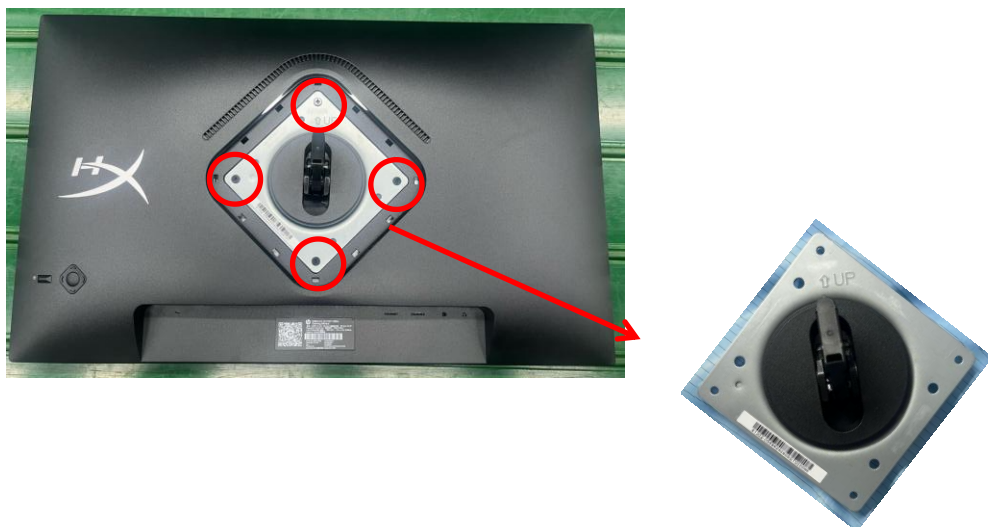
Before removing the Rear Cover, follow these steps:

▲ Prepare the monitor for disassembly

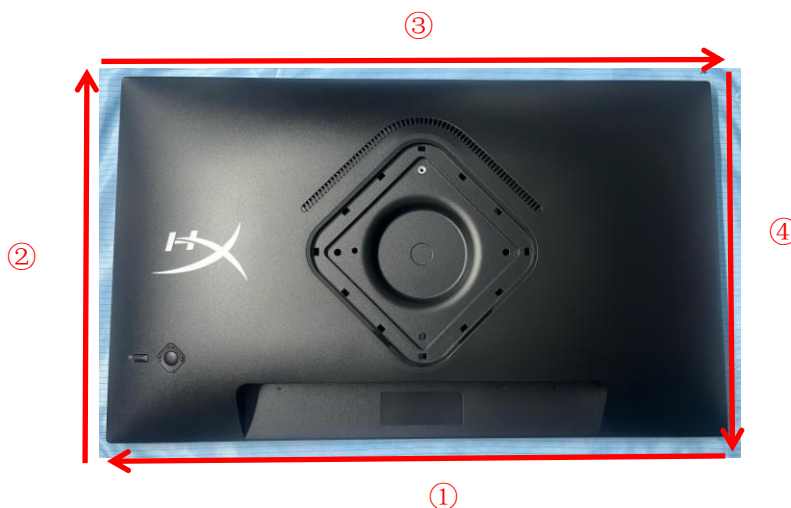
- 1) Put the monitor on a flat surface(Put the EPE on under the monitor)



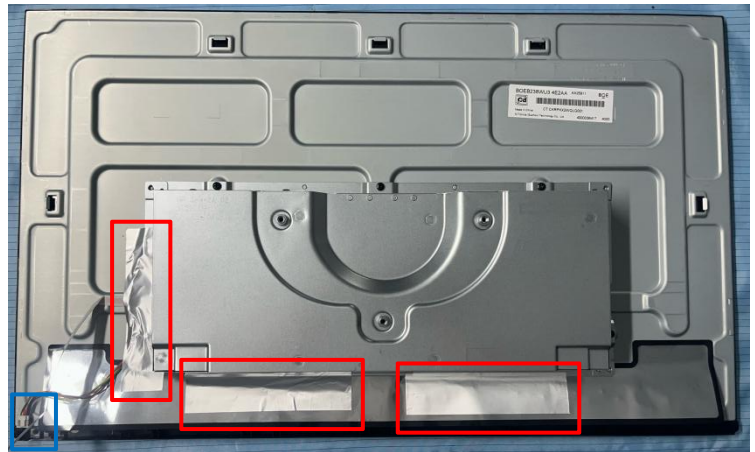
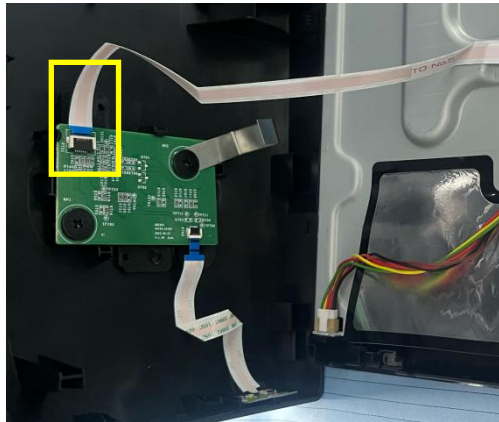
- 2) Use a screwdriver to unscrew the four screws (marked by red circles *4) on the rear shell bracket



- 3) Insert the disassembly tool into the gap of the rear shell, then remove the rear shell from the machine.
Follow the sequence of ①-②-③-④ for disassembly



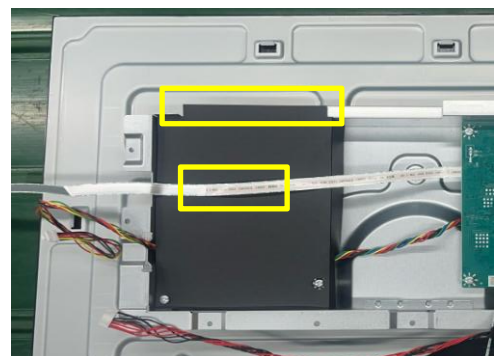
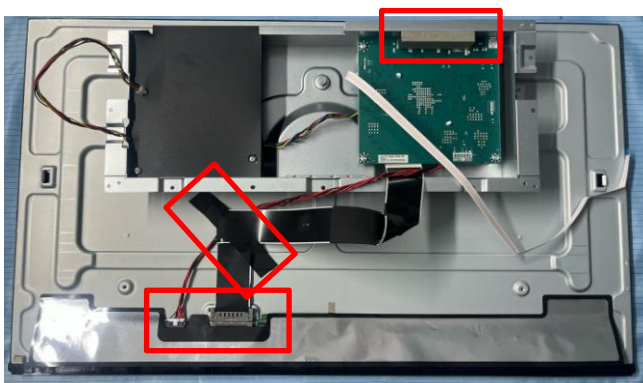
- 4) Remove the function key line interface and the adhesive on the keypad (in the yellow area), remove the aluminum foil on the isolation cover (in the red area)*3, and pull out the backlight interface (in the blue area)



- 5) Use a screwdriver to unscrew the 4 screws on the isolation cover (at the red circle positions)



- 6) Turn the isolation cover upside down and place it downward. Then remove the acetate tape, pull out the power cord and the connector cable, remove the foam on the motherboard (in the red box position), remove the function key cable on the Mylar (in the yellow box position), and remove the Mylar itself (in the yellow box position)

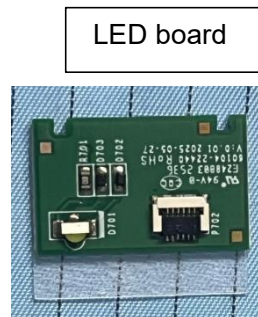
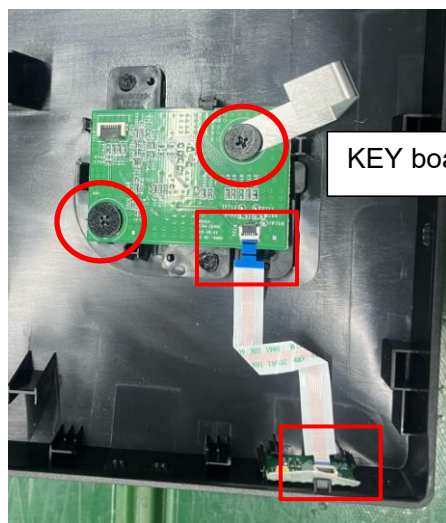


7) Remove the decorative strip

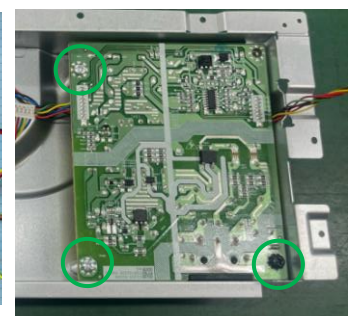
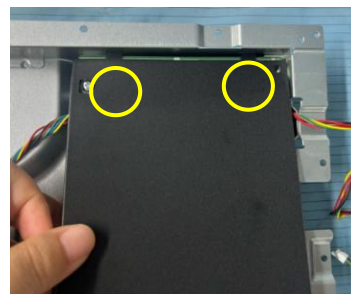
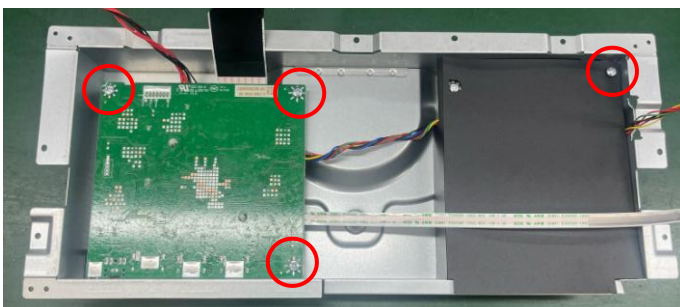


▲ Remove the key board and led board

8) Remove the LED board on the back cover. Use a screwdriver to unscrew the two screws (marked with red circles) on the key board, and remove the LED wire and the iron sheet

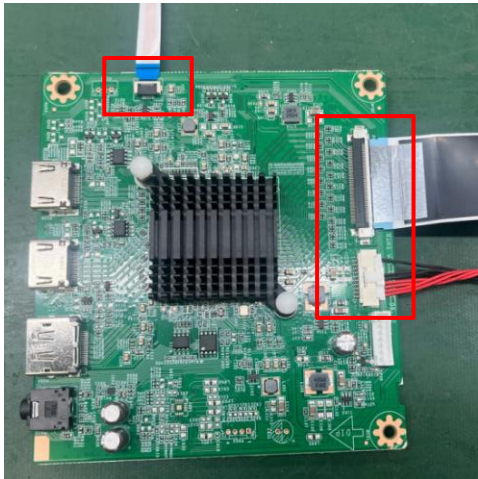
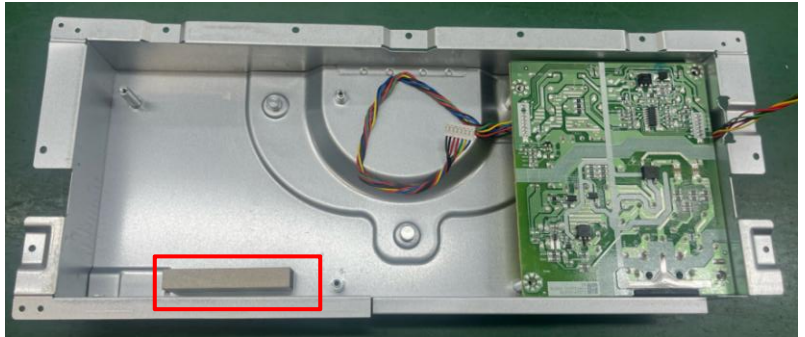


9) Use a screwdriver to unscrew the 3 screws on the motherboard and the 1 screw on the power board (at the red circle position), then remove the Mylar on the power board. Use a screwdriver to unscrew the 3 screws on the power board (at the green circle position)

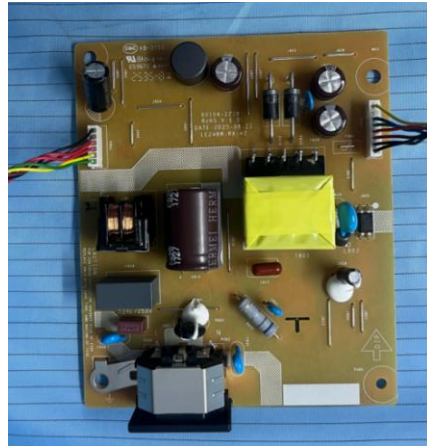


- ▲ Remove the main board and power board

10) Remove the connecting wires on the motherboard power board and then remove the power board. Remove the motherboard and unplug the cables and function key cables attached to it



Main board



power board

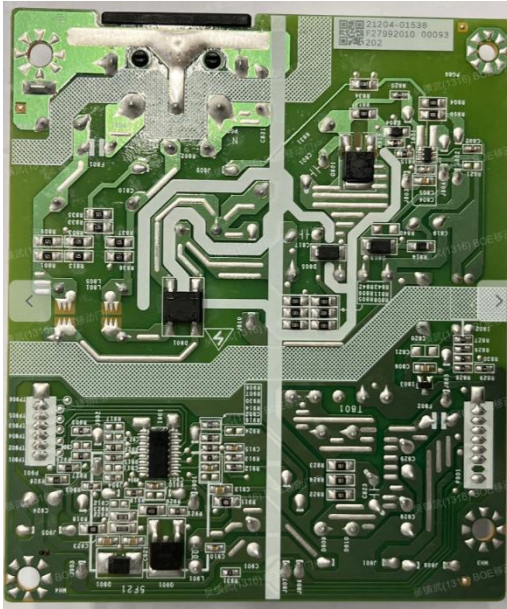
Power board

The power board part number is 21204-01538

- 1) The board connector position is as follows:



2) Locate the part number location on the board.



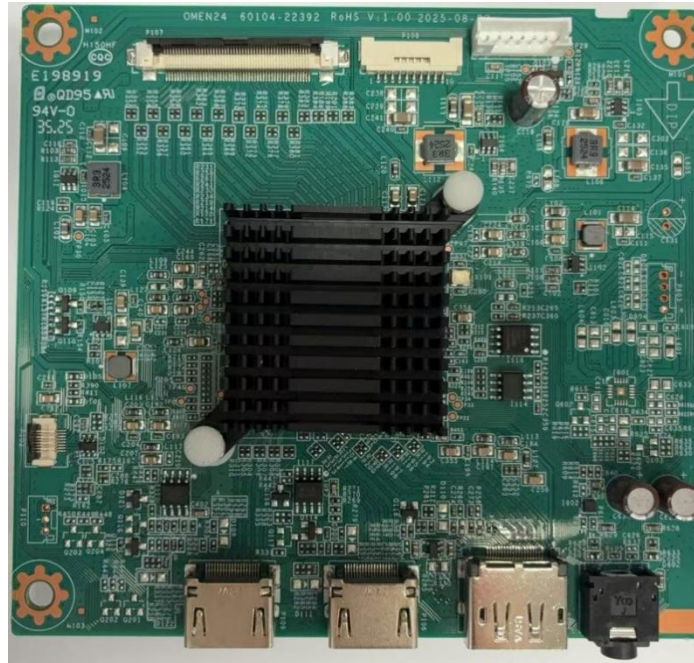
Connector repair

This procedure includes DP, HDMI2, HDMI1 connectors.

The connectors are on the main board (board part number 21201-05022).

The connectors identifiers are as follows:

Connector	Location
DP	P105
HDMI2	P106
HDMI1	P109



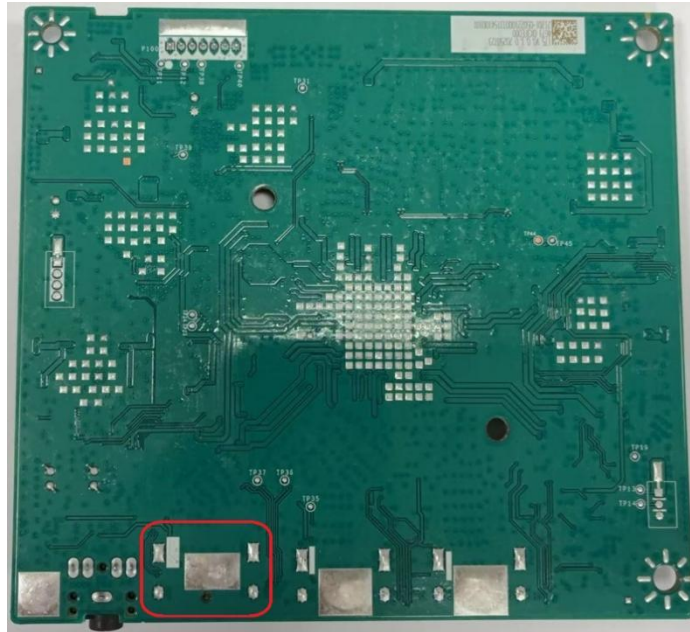
Before repairing connectors, follow these steps:

- ▲ Prepare the monitor for disassembly. See [Preparation for disassembly](#) on page 12.

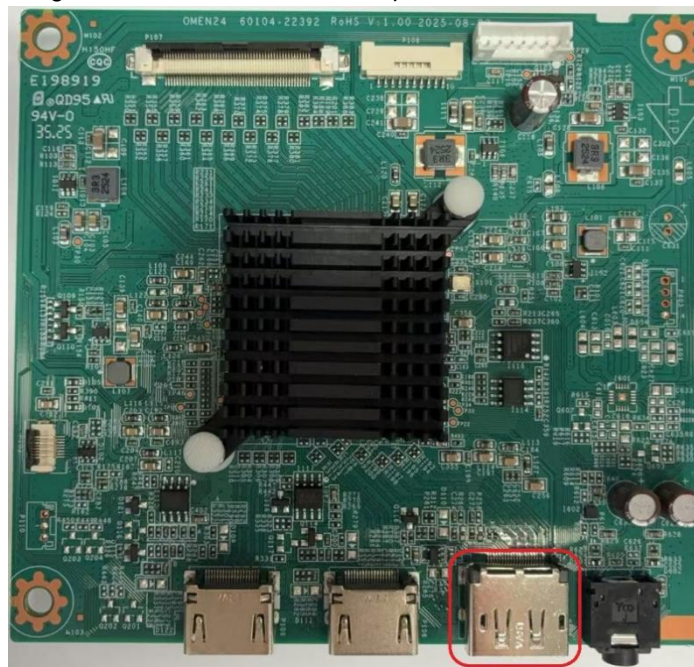
DP connector P105

Repair the DP connector:

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



- 4) Use a hot air gun to melt the solder on the pin

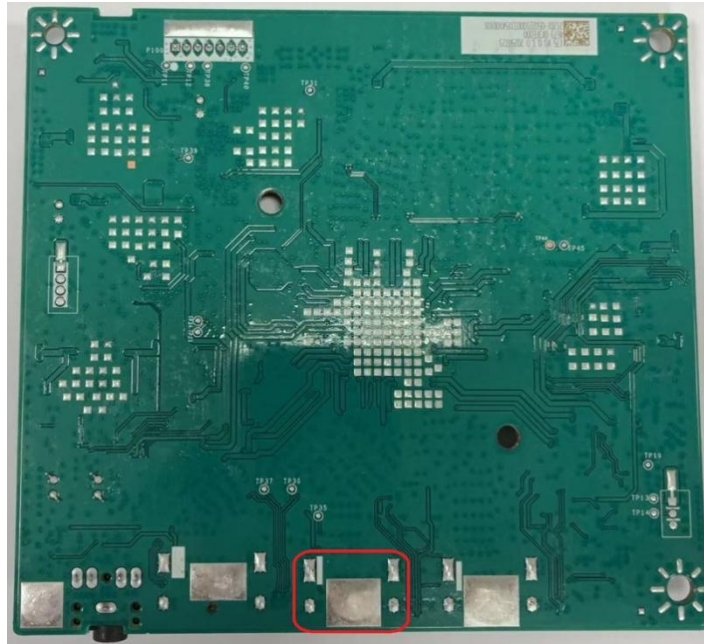


- 5) Lift the P105 connector from the PCB.
- 6) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 7) Solder the new component.

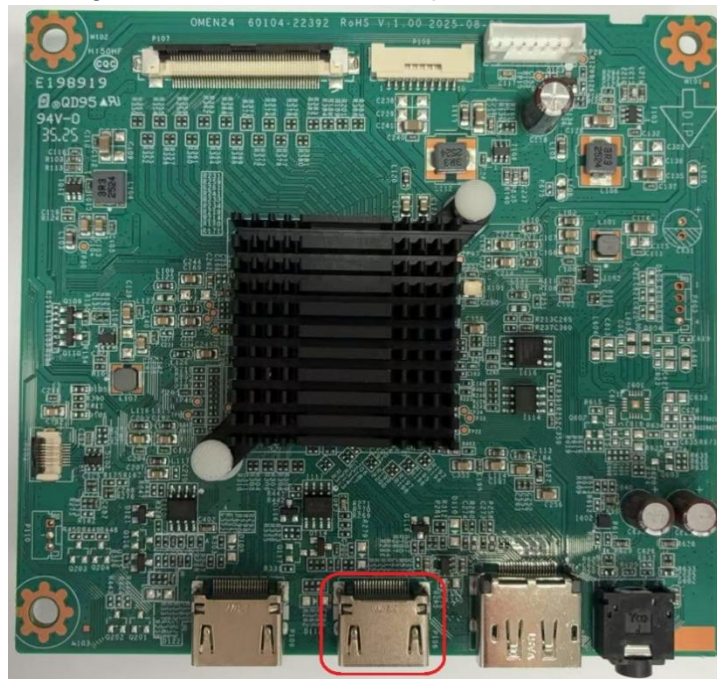
HDMI connector P106

Repair the HDMI connector:

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



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

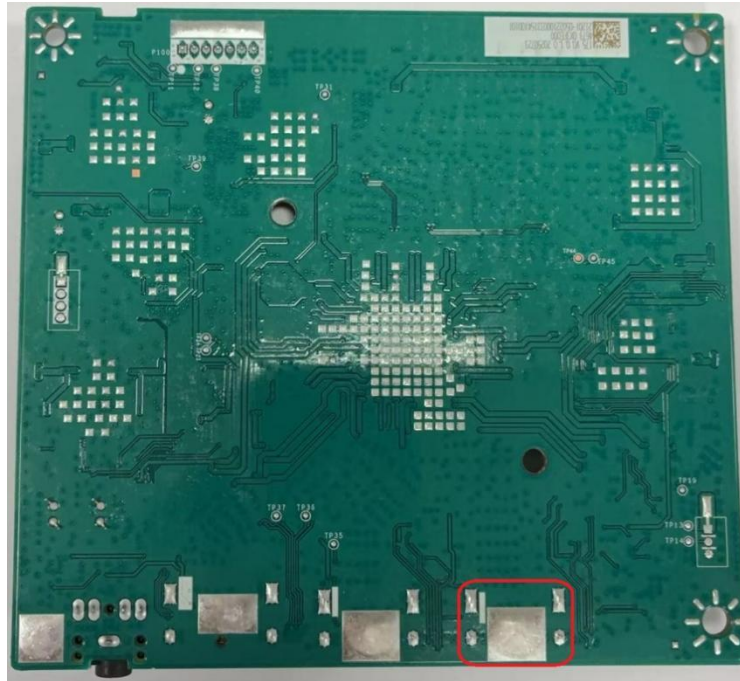


- 10) Lift the P106 connector from the PCB.
- 11) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 12) Solder the new component.

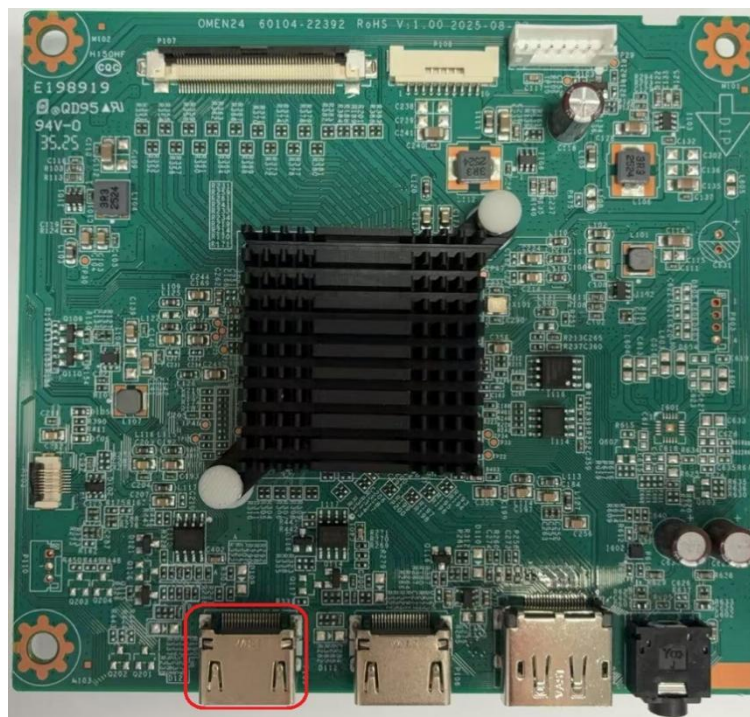
HDMI connector P109

Repair the HDMI connector:

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



- 14) Lift the P109 connector from the PCB.



- 15) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 16) 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
DisplayPort test	Confirm whether image displays and sound plays correctly on the monitor.	Computer

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 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 inactivate the screen blanking utility.
	Video card is incompatible.	Open the OSD menu and select the Input menu. Set Auto-Switch Input to Off 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 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 , select Auto-Sleep Mode , and then set auto-sleep to On
On-Screen Menus are Locked is displayed.	The monitor' s OSD lock function is enabled.	Press and hold the Left 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
Monitor has trouble waking from Sleep mode		DisplayPort inputs: Set the DisplayPort hot-plug detection to Always Active . Power mode monitors: Set the hot-plug detection to Always Active to switch the monitor to Performance mode.

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