



Maintenance and Service Guide

U32 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.

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:

80.0 cm (31.5-inch) diagonal viewable screen area with 3840 x 2160 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

The monitors include the following features:

- Liquid crystal display (LCD) with active matrix and in-plane switching (IPS)
- Nonglare panel with an LED backlight
- Wide color gamut to provide coverage of sRGB color spaces
- Wide viewing angle to allow viewing from a sitting or standing position, or when moving from side to side
- Tilt, swivel, and height adjustment capabilities
- Pivot capability to rotate the monitor head from landscape to portrait orientation
- Picture in Picture (PIP) functionality to enable the DisplayPort and HDMI inputs to be viewed in each half of the screen
- On-Screen Display (OSD) adjustments in several languages for easy setup and screen optimization
- Color space presets for sRGB and BT.709
- VESA HDR 400
- Energy saver feature to meet requirements for reduced power consumption
- Security cable slot provision on rear of monitor for optional security cable
- Cable management feature for placement of cables and cords

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**.

Front components

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

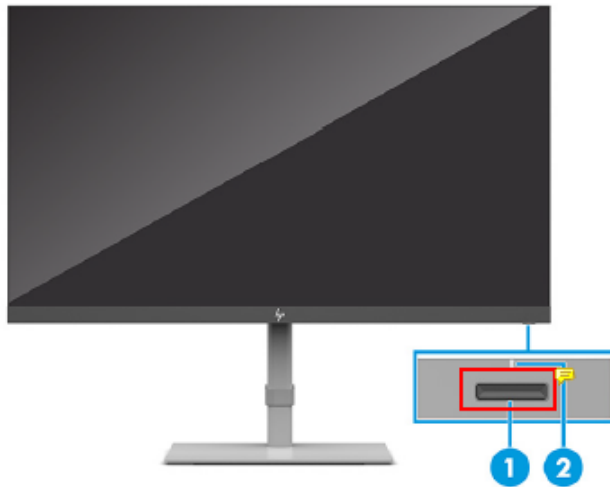


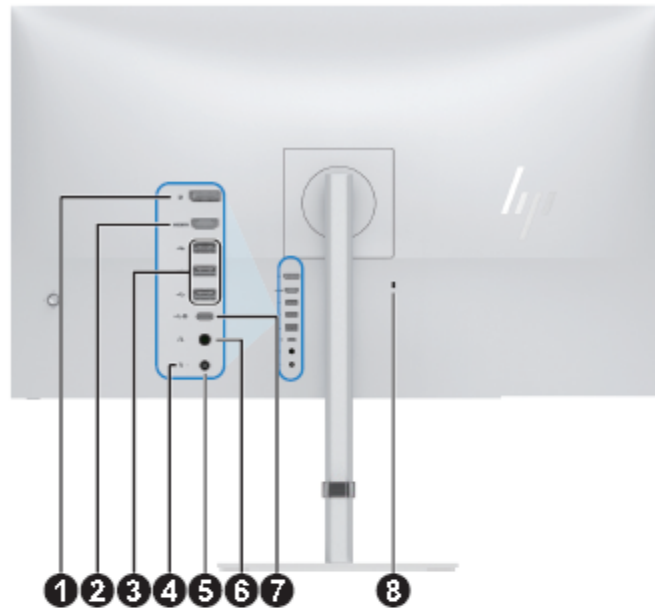
Table 1-2 Front components and their descriptions

Component	Description
(1) Power button	Turns the monitor on or off. NOTE: Be sure that the master power switch on the monitor is in the On position to turn on the monitor.
(2) Power light	White: The monitor is on. Amber: The monitor is in a reduced power state because of inactivity. See Using Auto-Sleep Mode on page 19 .

Table 1-1: Front components and their descriptions

Rear components

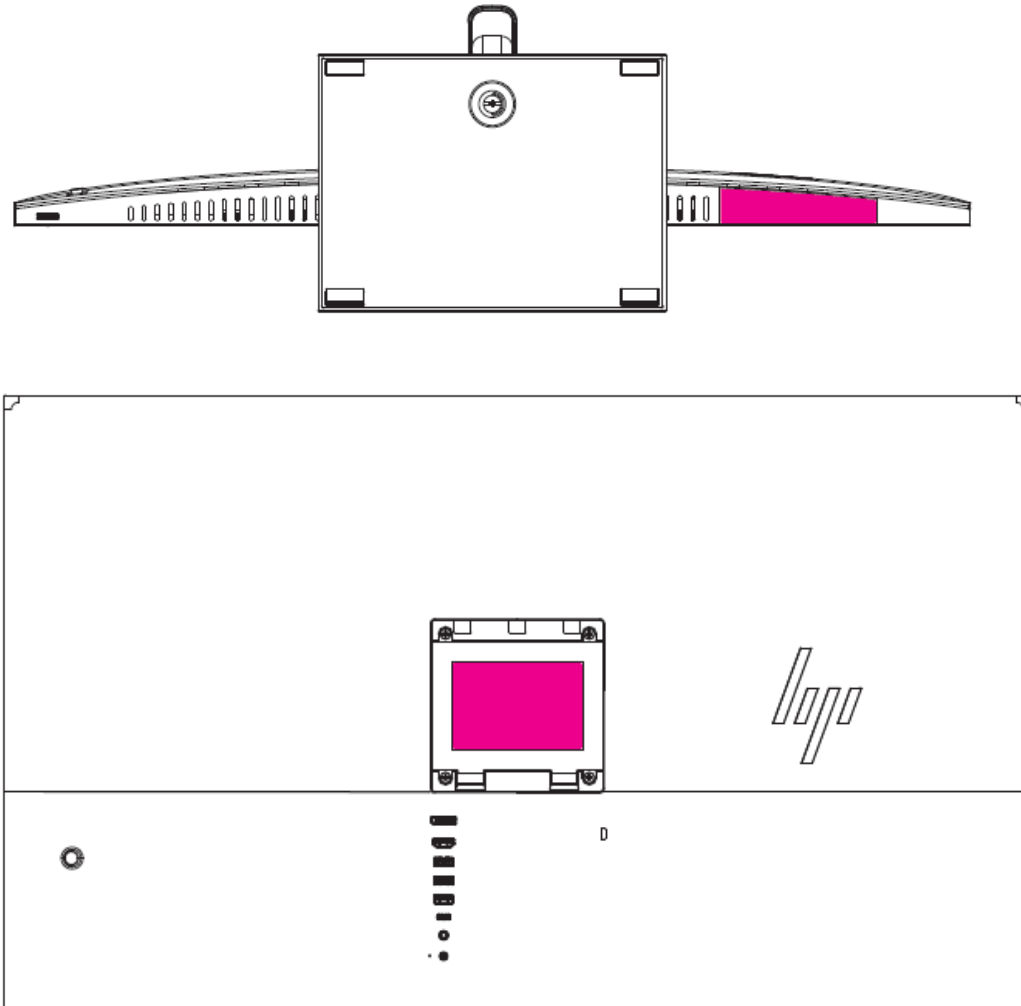
To identify the components on the rear of the monitor, use this illustration and table.



Component	Description	
1	DisplayPort connector	Connects the DisplayPort cable to the monitor
2	HDMI connector	Connects the HDMI cable to the monitor
3	USB Type-A port (3) (downstream)	Connect USB cables to peripheral devices, such as a keyboard, mouse, or USB hard drive
4	Power Good LED Indicator	White: The monitor is turned on
5	Power connector	Connects an AC adapter
6	Headphone jack	Connects headphones to the monitor. CAUTION: To reduce the risk of personal injury, adjust the volume before using headphones or earbuds. For additional safety information, see the <i>Product Notices</i> provided in your documentation kit
7	USB Type-C port (upstream)	Connects a USB Type-C cable to a source device such as a computer or gaming console. This USB Type-C upstream port can function as a DisplayPort audio/video input. It can also be used to deliver up to 65 watts of power to a device. Power outputs are 5 W/9 W/12 W/15 W/20 W to achieve a 65 W output. This upstream port also enables the USB Type-A downstream ports to perform their functions.
8	Security cable slot	Connects an optional security cable to the monitor

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):

eyesafe DISPLAY LOW BLUE LIGHT COLOR ACCURATE

TÜVRheinland ZERTIFIZIERT Low Blue Light (Hardware Solution) www.tuv.com ID: 0205009412

ENERGY STAR ENERGY STAR

PC リサイクル

TÜVRheinland CERTIFIED

TÜVRheinland ZERTIFIZIERT Type Approved Safety Regular Production Surveillance www.tuv.com ID: 0217098087

NOM NYCE

VCCI HDMI

Bildqualität ISO 9241-307 TÜVRheinland ZERTIFIZIERT www.tuv.com ID: 0217008322

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

FCC 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.

R3A304 RoHS 警語: 使用過度恐傷害視力 警語: 使用過度恐傷害視力 CAN ICES-003(B)/NMB-003(B)

cd CE HP, HQ-TRE, 71025 Boeblingen, Germany EAC

CCC 10 TÜVRheinland 显示器合格证 SMP R-R-hpi-HSD-0106-V K-Tronics (Suzhou) Technology Co., Ltd A/S 연락처: 1588-3003

UK CA HP Inc UK Ltd, Regulatory Enquiries, Earley West, 300 Thames Valley Park Drive, Reading, RG6 1PT Consumo de energia: 27.78 Wh 40421

hp HP U32 4K HDR 31.5-inch Monitor

型号/型號/모델명: HP U32 4K HDR

液晶显示器/液晶顯示器/모니터

80cm (31.5") Monitor

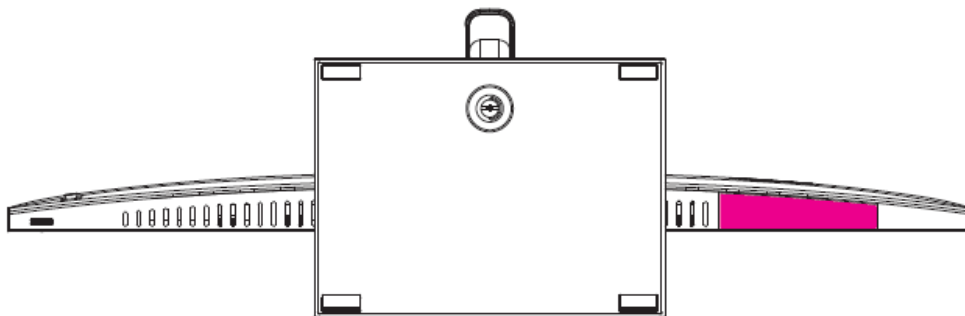
Regulatory Model No./規定型号/型號/모델명: HSD-0106-V

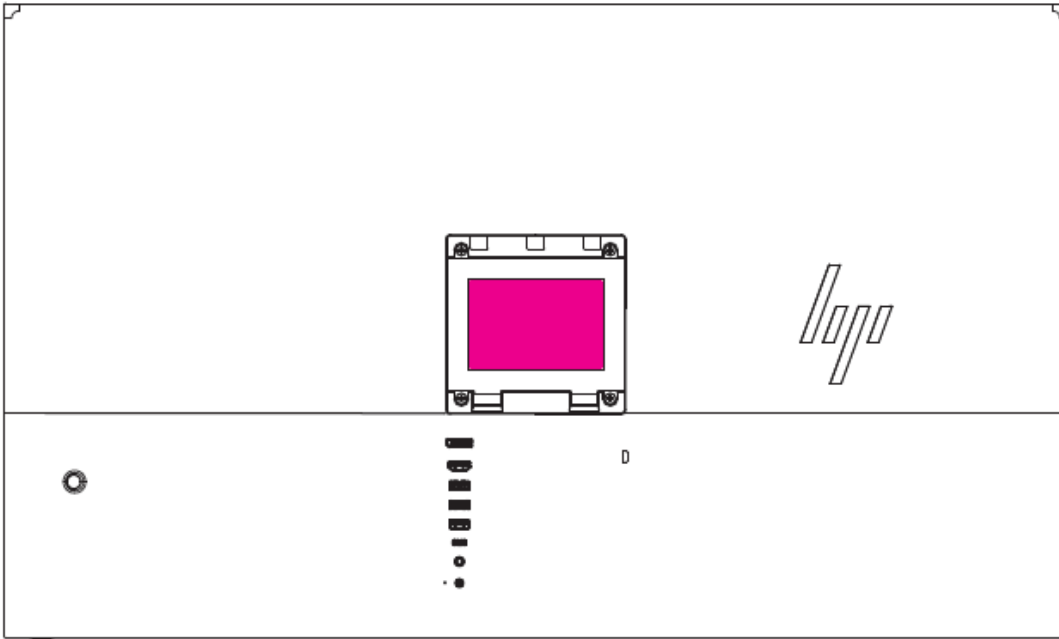
Input Rating/輸入規格/輸入規格/정격입력: DC 19.5V = 10.3A (10.3A)

Made in China/Fabriqués en Chine/中国制造/中國製造/제조국: 중국 HP Inc. SMP

Adapter source refer to User's Manual
 Voir le manuel de l'utilisateur pour plus de détails sur l'adaptateur d'alimentation applicable.
 适用的电源适配器请参阅说明书
 適用的電源變壓器請參閱說明書

For India:





label

		Low Blue Light (Hardware Solution) www.tuv.com ID 0235005412					
	Type Approved Safety Regular Production Surveillance www.tuv.com ID 0217008067						
	Bildqualität ISO 9241-307 www.tuv.com ID 0217008322	WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov .					
	警告：使用過度恐傷害視力 警告：使用過度恐傷害視力 CAN ICES-003(B)/NMB-003(B)		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, HQ-TRE, 71025 Boeblingen, Germany
						R-R-hpi-HSD-0106-V K-Tronics (Suzhou) Technology Co., Ltd A/S 연락처 : 1588-3003	
	HP Inc UK Ltd, Regulatory Enquiries, Earley West, 300 Thames Valley Park Drive, Reading, RG6 1PT		Consumo de energia: 27.78 Wh				XXXXXXXX

IS 13252 (Part 1)/
IEC 60950-1



R-41083445
www.bis.gov.in



Video Monitor/液晶显示器/液晶顯示器/모니터

Regulatory Model No./规定型号/型號/모델명: HSD-0106-V

Input Rating/输入规格/輸入規格/정격입력: DC 19.5V = 10.3A (10,3A)

Made in China/Fabriqués en Chine/中国制造/中國製造/제조국:중국

Adapter source refer to User's Manual

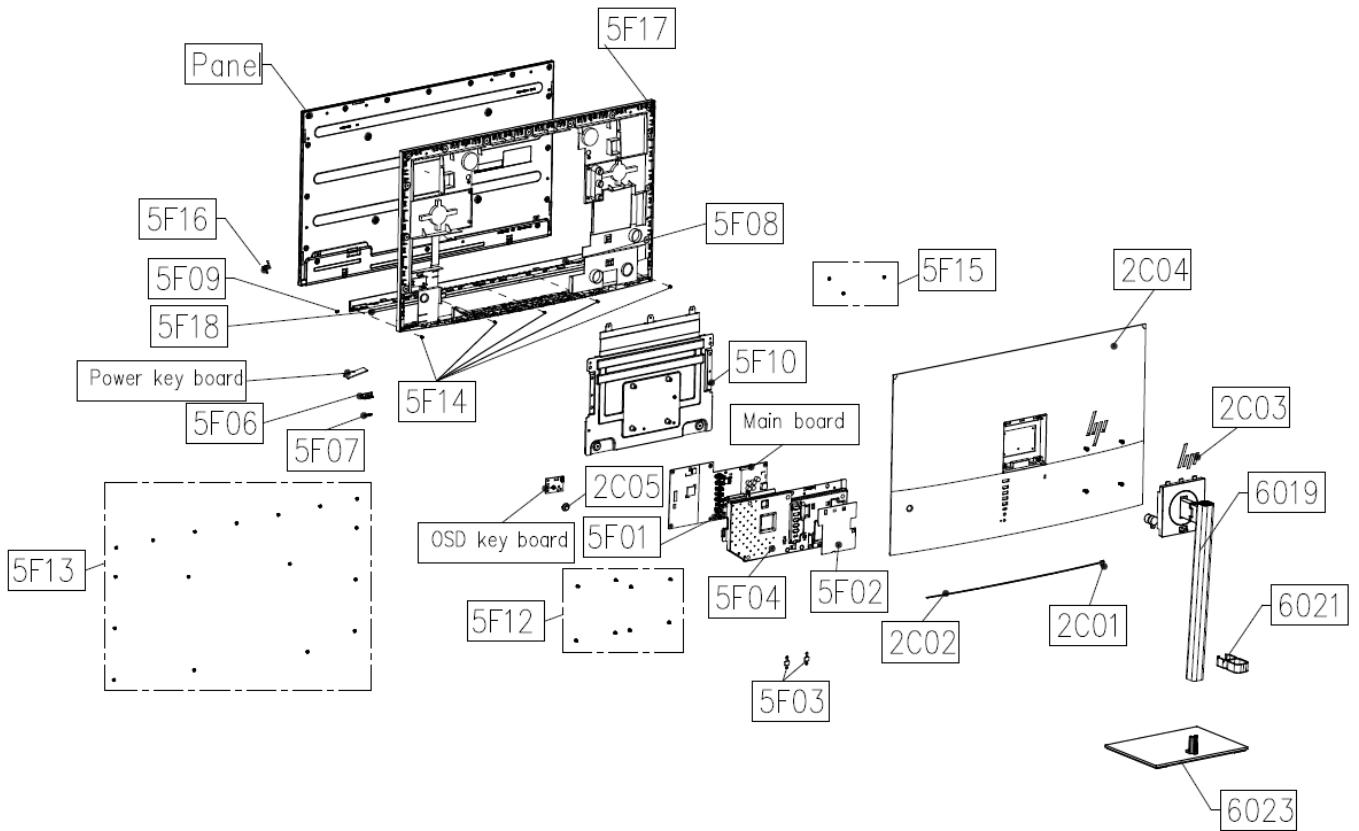
Voir le manuel de l'utilisateur pour plus de détails sur l'adaptateur d'alimentation applicable

适用的电源适配器请参阅说明书 / 適用的電源變壓器請參閱說明書



3 Illustrated parts catalog

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



How to order parts

Connectors are available for purchase from the following EU distributors:

- Digi-Key: digikey.co.uk
- RS Component: [Capacitors | RS Components \(rs-online.com\)](http://Capacitors | RS Components (rs-online.com))

Connectors by manufacturer

Component description	Location identifier	Component distributor	Distributor part number
HDMI	P103	Digi Key	900-0476591100TR-ND
DP	P105	Digi Key	A118339-ND
USB-C	P111	Digi Key	670-2949-1-ND
USB-A	P502	RS Component	769-3466

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/>

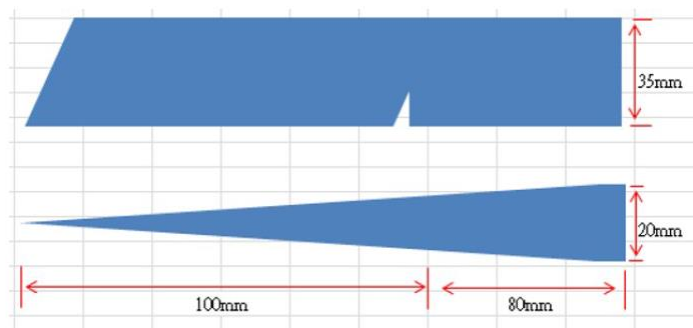
4 Removal and replacement procedures

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

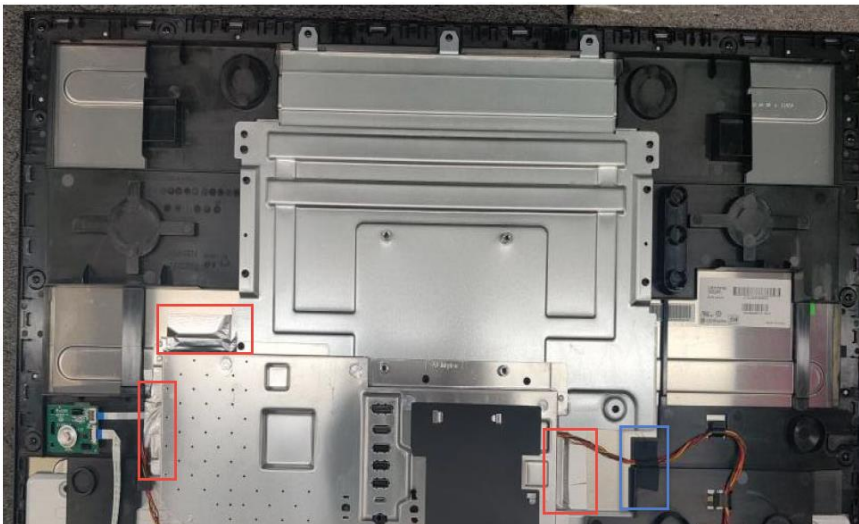
Before removing the Rear Cover, follow these steps:

- ▲ Prepare the monitor for disassembly.

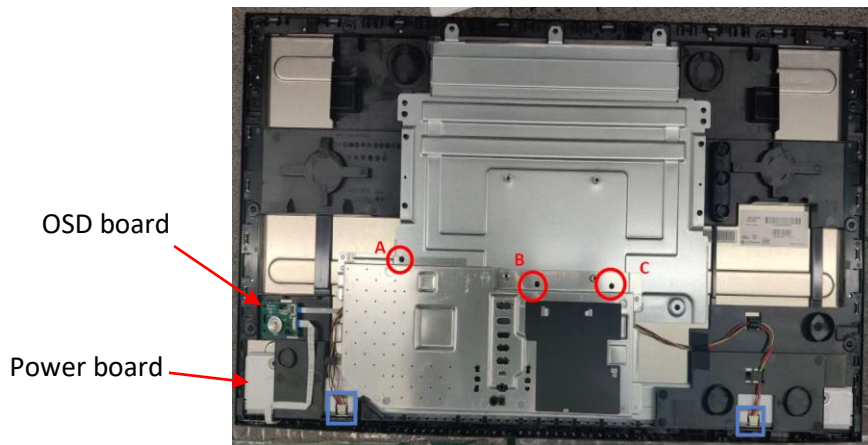
- 1) Remove wall mount screws and rear cover, Take the electric screwdriver and remove the 4 rear cover wall mounted screws (as shown blue circle) and remove rear cover (as shown red arrow path).



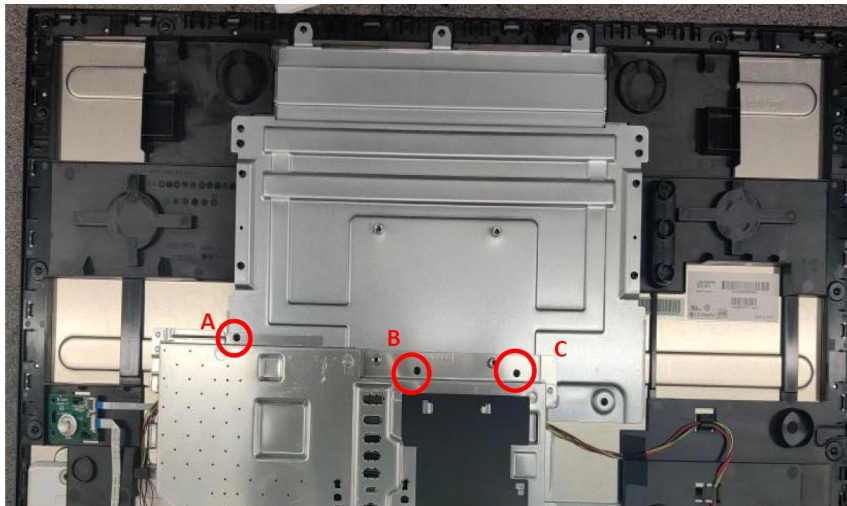
- 2) Remove aluminum tape. Tear off the 3 aluminum tape at the red square and remove black tape as shown in blue square.



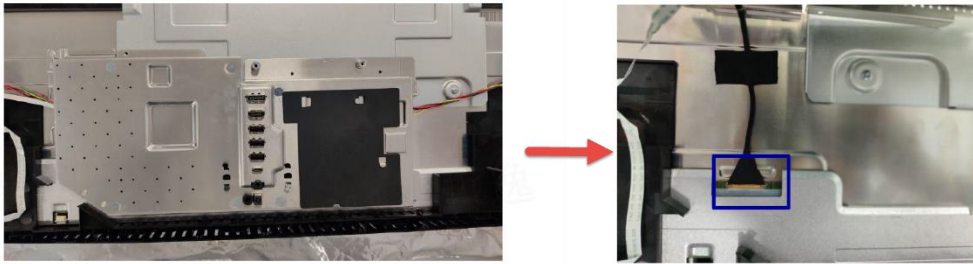
- 3) Remove wire cable and OSD board, Power board. Pull out the backlight wire from the interface (when you take out the backlight wire, hold down the backlight wire connector), and remove the backlight wire from the hook, as shown in the blue square and remove OSD board, power board.



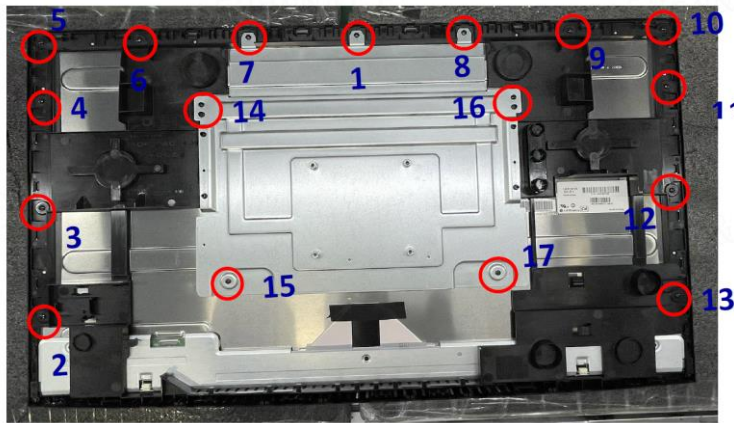
- 4) Remove the screws of the shielding cover. Take the electric screwdriver and remove the three screws (from A->B->C), at the red circle .



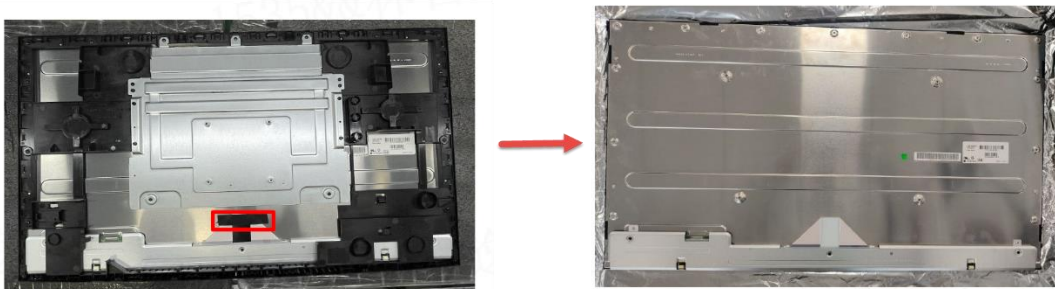
- 5) Remove EDP cable. Lift the shielding cover and pull out the EDP cable as shown in blue square and place the shielding cover aside.



6) Remove the mid bezel fixing screws. Take the electric screwdriver and remove the screw as shown in the red circle.



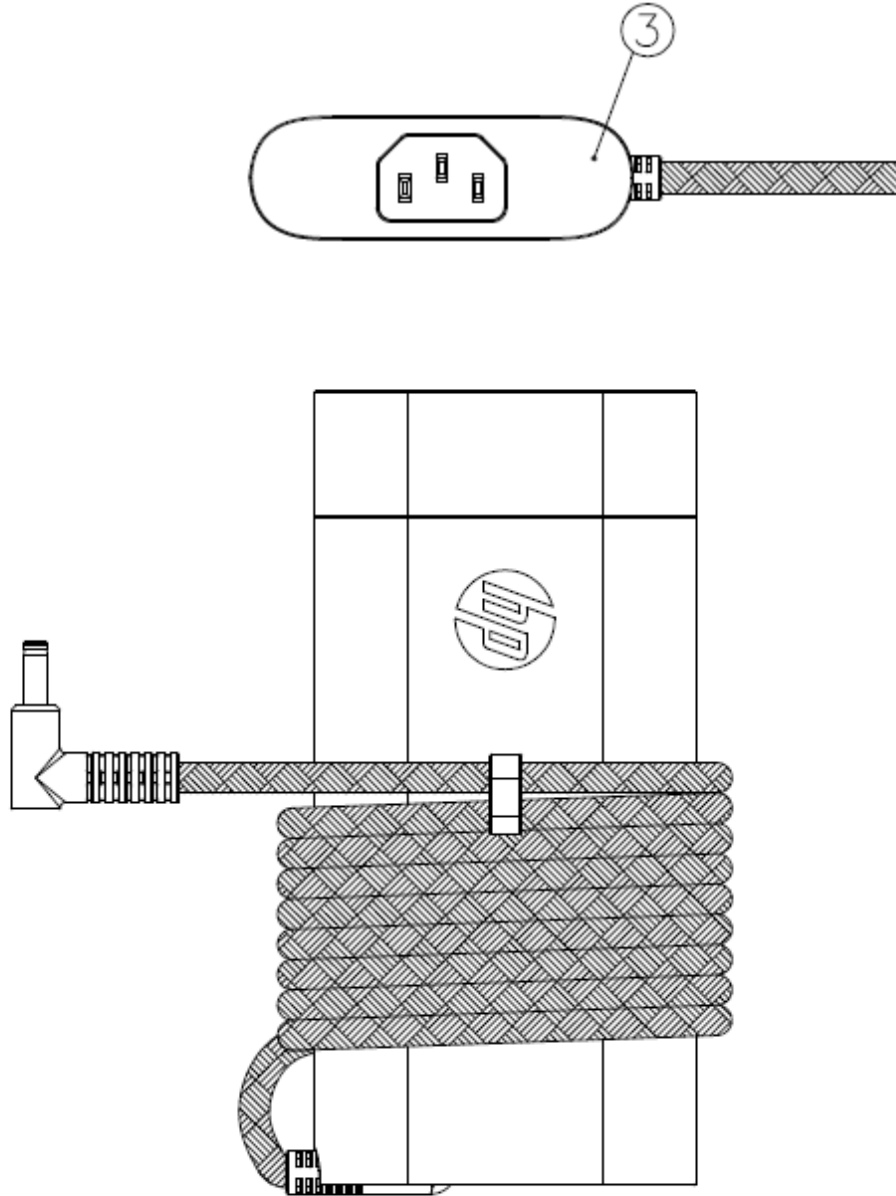
7) Remove the mid bezel and main bracket. Remove the mid bezel , main bracket, tape(red square) as shown in the figure.



Power board (adapter)

The power board part number is 60703-00293.(adapter)

- 1) The HP U32 power board connector position is as follows:



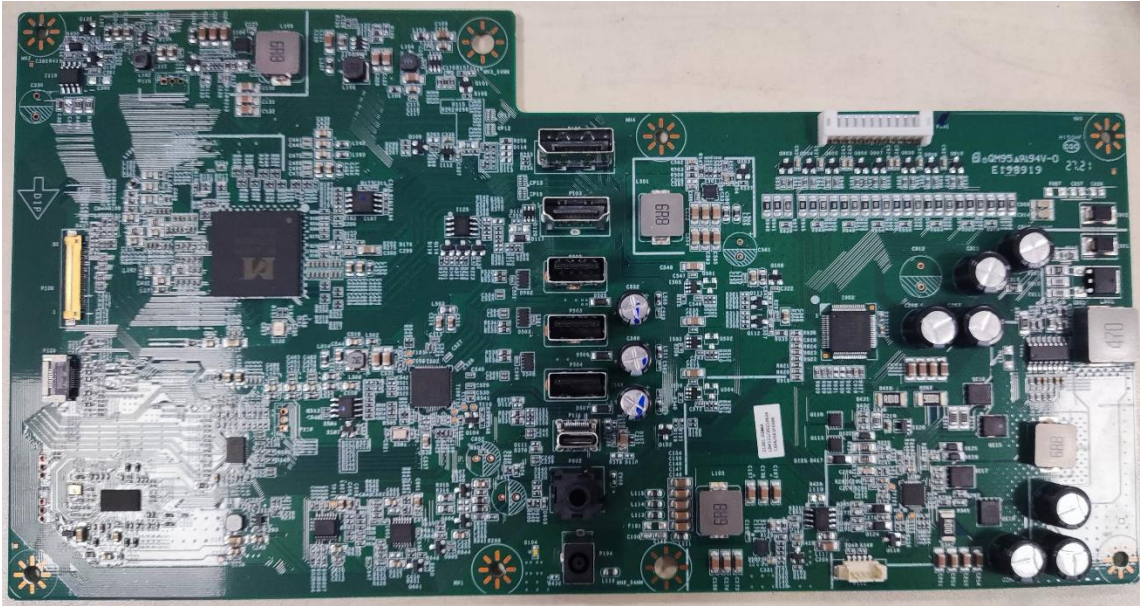
DisplayPort connector location

This procedure includes HDMI, VGA connectors.

The connectors are on the main board (board part number 21201-02864).

The connectors identifiers are as follows:

Connector	Location
HDMI	P103
DP	P105



Before repairing connectors, follow these steps:

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

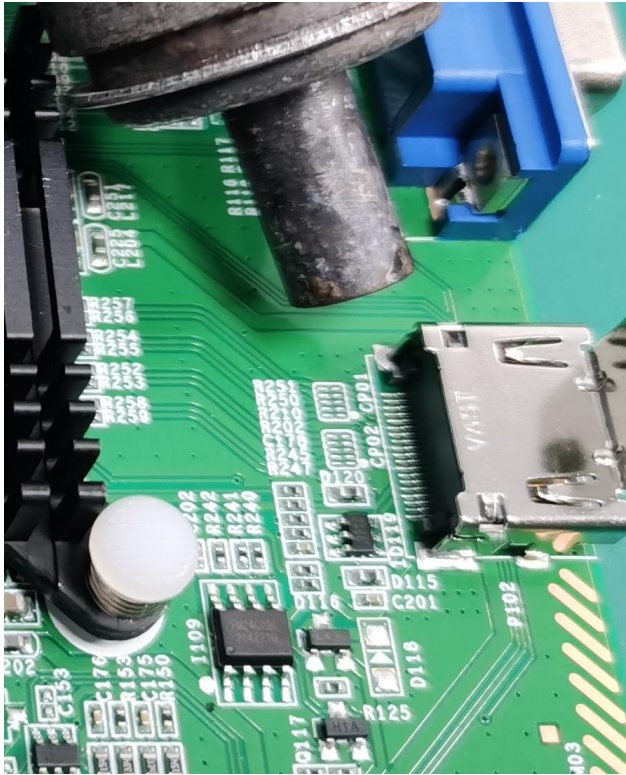
HDMI connector P103

Repair the HDMI connector:

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



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



- 4) Lift the P103 connector from the PCB.
- 5) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 6) 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
VGA test	Confirm whether image displays 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

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 exit Sleep mode.
Image appears blurred, indistinct, or too dark.	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
	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.

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