



Maintenance and Service Guide

HP Series 7 Pro 727pq 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 727pq-MSG-V1

Assembly part number: N56067-001

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

- 68.6 cm (27 in) diagonal viewable screen area with 2560 × 1440 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving the original aspect ratio
- 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
- Five on-screen display (OSD) buttons, including three 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
- HP Eye Ease technology that features an always-on low blue light filter that keeps your eyes comfortable and has zero impact on color accuracy
- Color space presets for Display P3, sRGB, and BT.709
- HP Color Calibration software enables you to easily recalibrate colors on the monitor
- 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
- DisplayPort video output
- High-Definition Multimedia Interface(HDMI) video input
- USB Type-C® port
- USB hub with one USB Type-C port that connects to the computer (upstream) and four USB ports that connect to USB devices (downstream)
- USB Type-C-to-USB Type-A cable, DisplayPort, and HDMI cables provided
- 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, 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 **Setup & User Guides..**

Front components

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

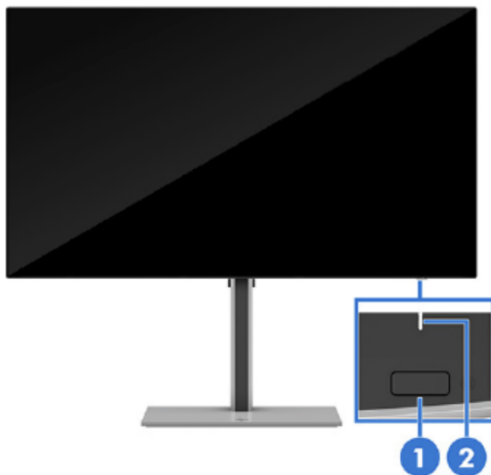


Table 2-1 Front components, camera model and their descriptions

Component	Description
(1) Power button	Turns the monitor on or off.
(2) Power LED	Indicates that the monitor is powered on.

Rear components

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

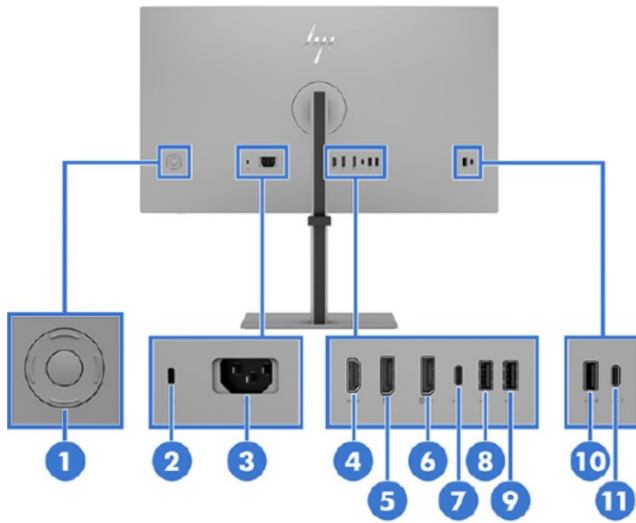
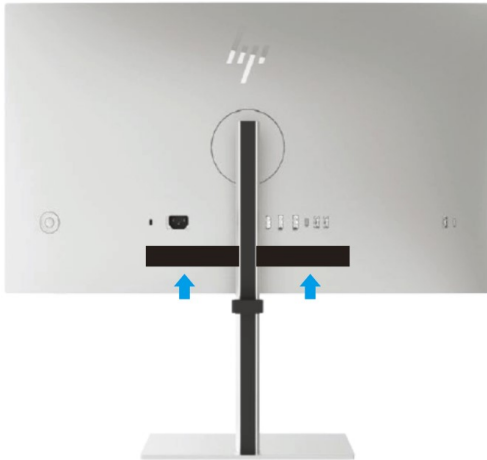


Table 2-2 Rear and side components and their descriptions

Component	Description
(1) Joypad	Press to open the OSD settings.
(2) Security cable slot	Connects an optional security cable.
(3) Power connector	Connects a power cord.
(4) HDMI port	Connects the HDMI cable to a source device such as a computer.
(5) DisplayPort	Connects the DisplayPort cable to a source device such as a computer.
(6) DisplayPort OUT connector	Connects the monitor to a secondary monitor for multi streaming.
(7) USB Type-C port (upstream)	Connects a USB Type-C cable to a source device, such as a computer. Connecting a USB Type-C cable from a source device to this port on the monitor enables USB ports on the monitor.
(8)(9) USB port	Connects a USB device, provides data transfer, and (for select products) charges small devices (such as a smartphone) when the computer is on or in Sleep mode NOTE: Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device.
(10) USB Type-A port with battery fast charging 1.2	Connects a USB device, provides data transfer, and charges small devices (such as a smartphone), even when the power saver mode is in DC OFF and OSD performance mode is on. NOTE: Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device.
(11) USB Type-C port with battery fast charging 1.2 (downstream)	Connects a USB device, provides data transfer, and charges small devices (such as a smartphone), even when the power saver mode is in DC OFF and OSD performance mode is on. NOTE: Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device.

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 / 规定型号 / 規定型號 / 모델명: HSD-0163-W
 型号: HP 727pq Monitor 液晶显示器 / 液晶顯示器 / 모니터 68,6 cm (27 in.)
 Input Rating 电源电压 / 輸入電源 / 交流電壓 / 電壓 입력: 100-240V (伏特) ~ 1,7A (1.7A) 安培 50 / 60 Hz (赫兹)
 제조국: 중국 / Made in China / Fabriqué en Chine / 製造地: 中國 / 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.

에너지之星 ENERGY STAR
 Consumo de energía: 17,73W
 HP REG 23X 15, 08/20
 Barcelona, Spain
 hp23x.com

安全規格
 合格證
 警告: 使用過度恐傷眼力
 R3A304
 RoHS

SAFETY MARK
 73923
 231079-11
 HP Inc. Ltd. Regulatory Engineers
 Entry point: 200 Thomas Indus Park Drive, Reading, RG6 2PT

Product No.: 8JAD8AA
 Serial No. 序号/序號: CN43400D01
 Assembly Part No.: N56067-001
 Spares No.: N64404-001A S5Y N56067-700
 Rev.: XXXXXXX
 Manufactured 製造/製造日期/
 製造日期: August 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 9pt
 The rest of var label data font is Arial 5.7pt

3 Illustrated parts catalog

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

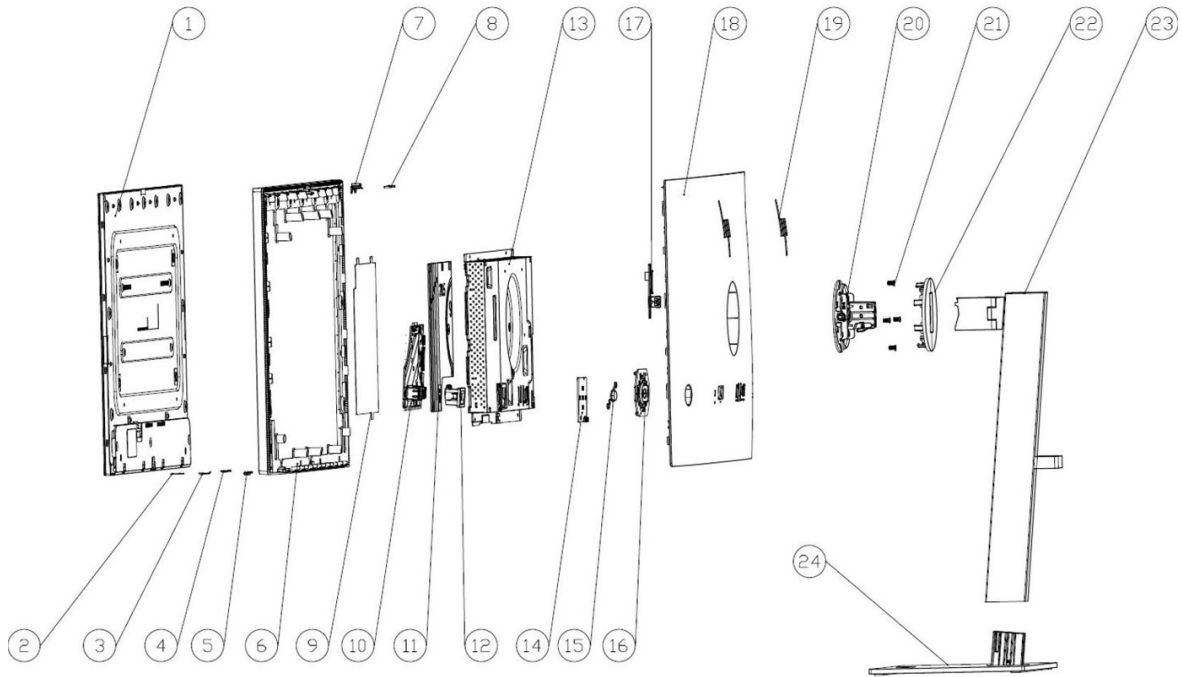


Table 3-1: Monitor major components and their descriptions

Item	Description	Qty
1	#LCD Panel	1
2	#PET_SHADING_LENS_727pq	1
3	# POWER_KEY_LENS_PC_727pq	1
4	# ASSY Power_key_BD	1
5	# POWER_KEY_ABS_JACK BLACK_727pq	1
6	# CVR_MC_ABS_JACK-BLACK_727pq	1
7	# ALS_LENS_PMMA_NEAR BLACK_727pq	1
8	# ALS_lens_BD	1
9	# Safety_mylar_727pq	1
10	# Interface_BD	1
11	# Power_BD	1
12	# AC_inlet	1
13	# Main_BRACKET_727pq	1
14	# OSD_BD	1
15	# OSD_PLASTIC_CENTER_INDIE_ROCK	1
16	# OSD_PLASTIC_CENTER_INDIE_ROCK	1

17	# Side_USB_BD	1
18	# CVR_RC_ABS_Pike_Silver_727pq	1
19	# HP_Logo_70mm	1
20	# SCRW M4*8	4
21	# Hinge_Cover_Pike_Silver_727pq	1
22	# STAND_ARM_LIFT_150_727pq	1
23	# STAND_BASE_Sandblasted_727pq	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 ML27HHC-BQUL(C) 727PQ	N97150-001	755.0AW02.0001
PWR BD ML27HHC-BQUU(C) 727PQ AU0S02	N97151-001	755.0AW02.0002
PWR BD ML27HHC-BQUU(C) 727PQAU0Z1D	N97152-001	755.0AW02.0003

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

- SUSCON: www.suscom-ind.co.uk
- CAPXON: www.capxongroup.com

Connectors by manufacturer

Component description	Location identifier	Component distributor	Distributor part number	Remark
HDMI	HDMI1	CUI Devices	https://www.digikey.com PN: HD12-19-SMT-TR	
DP IN DP OUT	DP1 DP2	Molex	https://www.digikey.com PN: 2041441-1	
USB-C	USBC1	JAE Electronics	https://www.digikey.com PN: DX07S024WJ3R400	
USB-A	USB1 USB2	Molex	https://www.digikey.com PN: 0484080003	

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/>

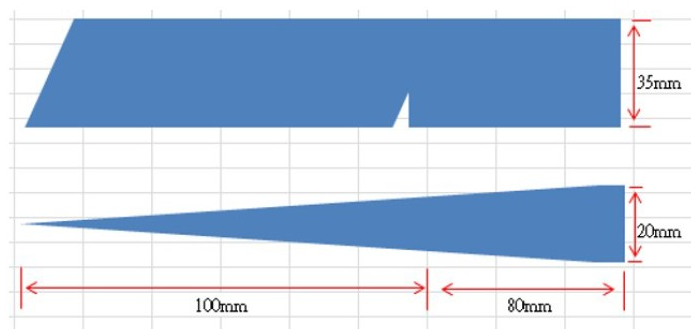
4 Removal and replacement procedures

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:



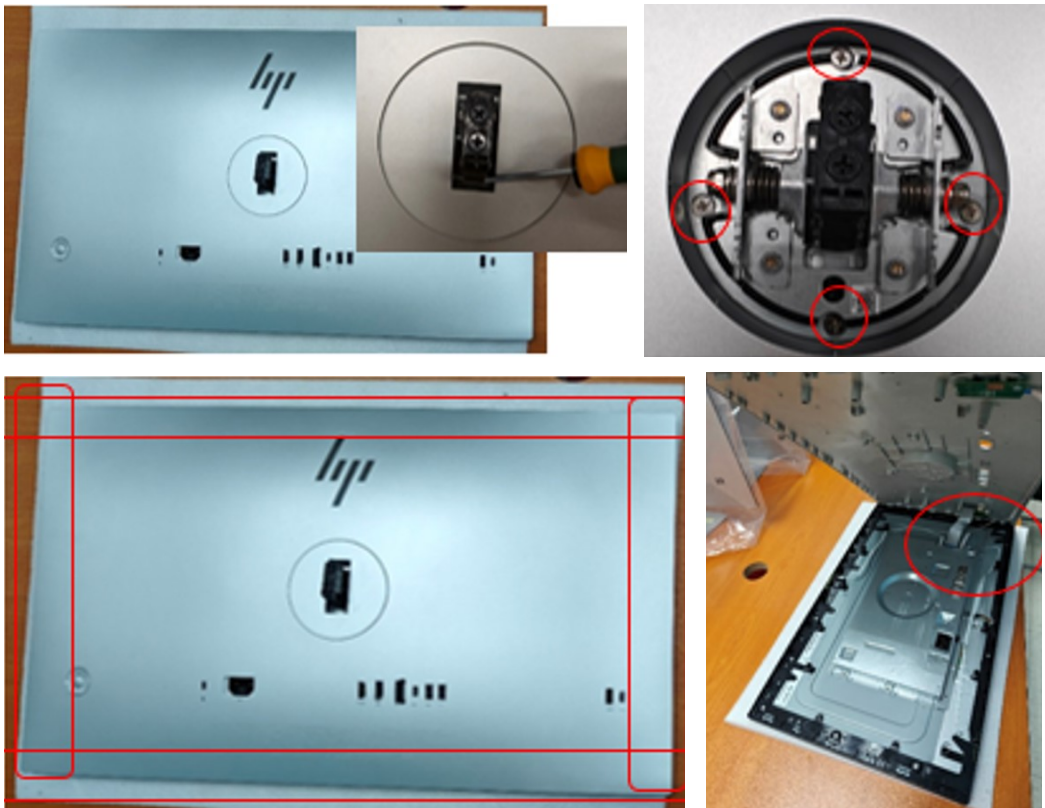
Rear Cover

Before removing the Rear Cover, follow these steps:

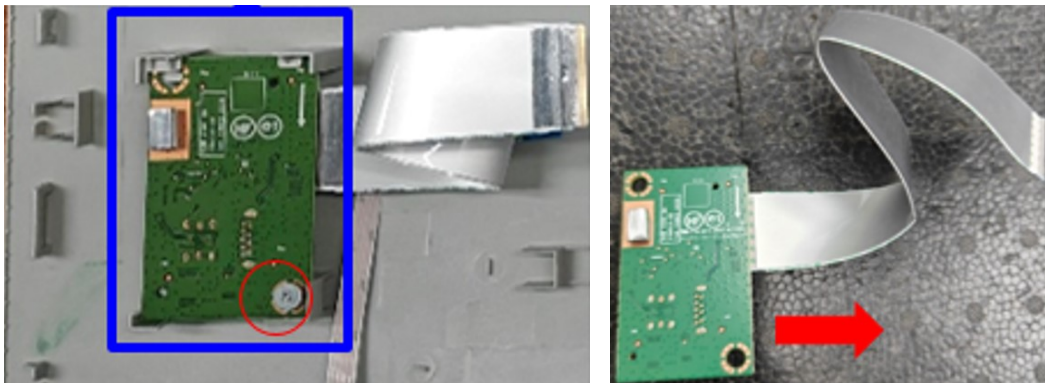
- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 11.
- 1) Pull the release button to remove Stand Base From Display Head



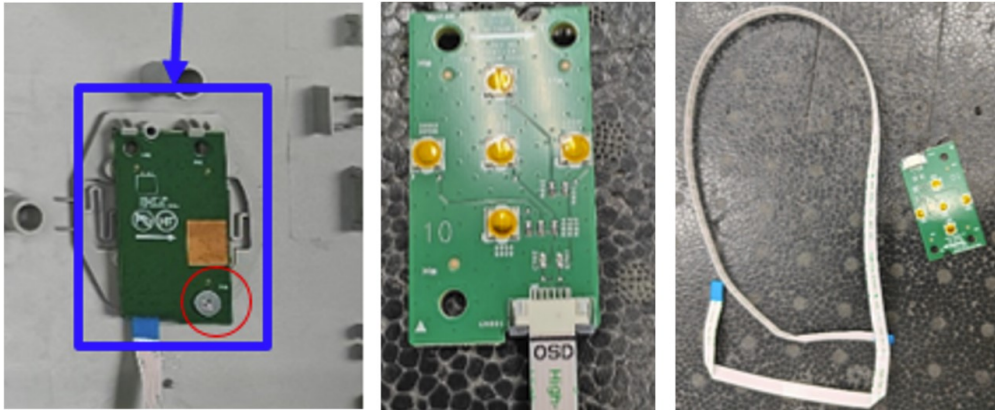
- 2) Remove Rear Cover From Display Head: Use the tool to remove the hinge cover, then release the 4pcs screws from back bracket and remove the hinge, then loose all the hooks by hand for pulling the rear cover and disconnect the USB cable and OSD cable



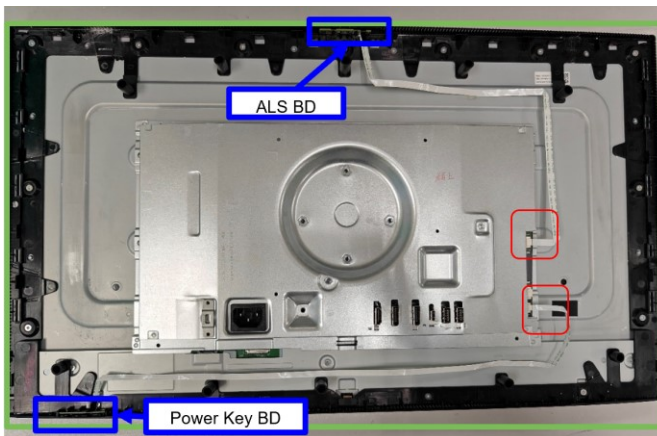
- 3) Remove USB board from the rear cover: Remove 1pcs screw, then remove the EMI gasket and disconnect the cable



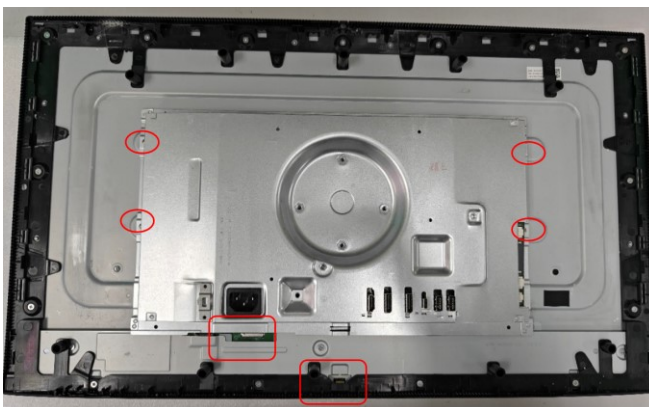
- 4) Release OSD key board from rear cover: remove 1pcs screw and disconnect the key cable



- 5) Remove the ALS board and power key board from the middle frame.



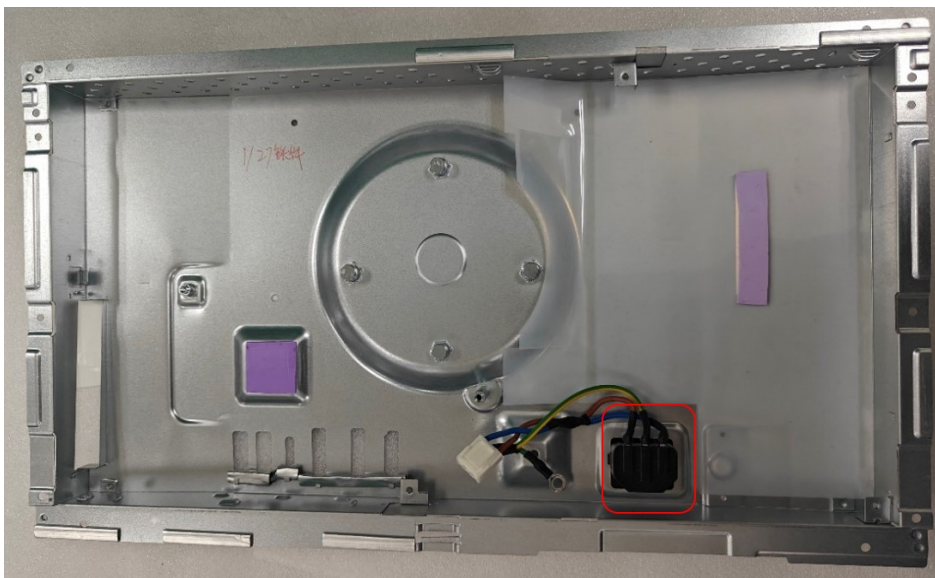
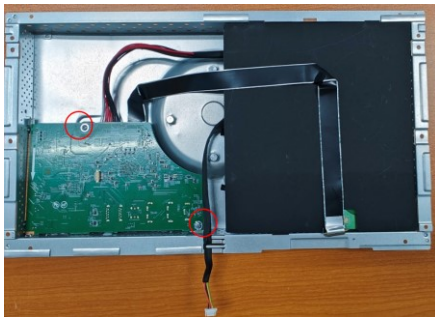
- 6) Remove Bracket Assembly From Display Head: remove all inside cable, then remove the 4pcs screws from the back bracket.



- 7) Remove middle frame from the display head by removing 15pcs screws.



- 8) Disassemble bracket assembly: remove black Mylar, then remove 6pcs screws for releasing the power board and interface board, disconnect all the cables and remove the AC inlet.



Power board

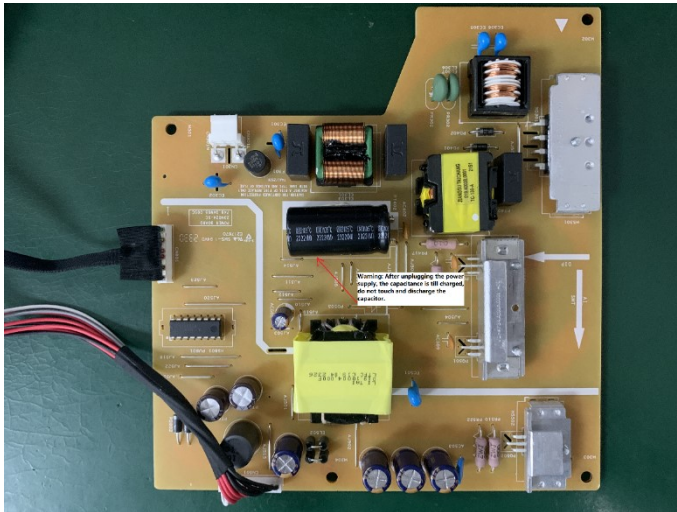
The power board part number is 755. 0AW02.0001, 755. 0AW02.0002, 755. 0AW02.0003.

Before removing the power board, follow these steps:

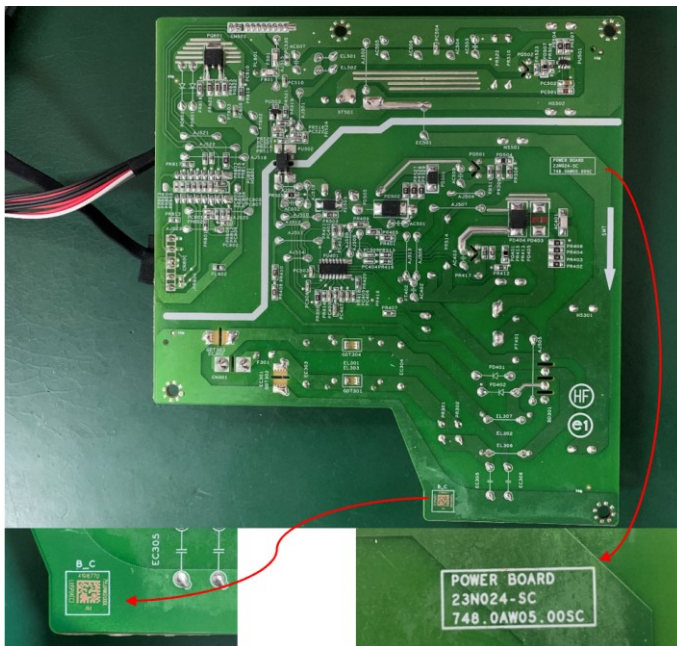
- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 11.

Remove the power board:

- 1) The HP Series 7 Pro 727pq 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.
No

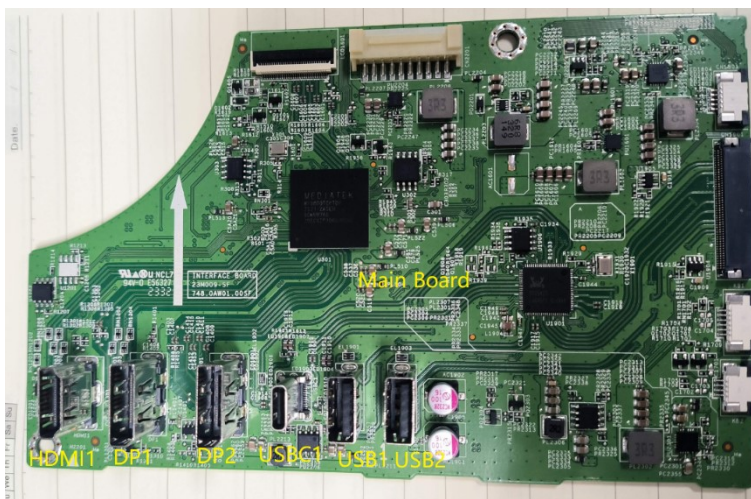
Connector repair

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

The connectors are on the main board (board part number 7ZB.0AW01.0008)..

The connector identifiers are as follows:

Connector	Location
HDMI	HDMI1
DP	DP1
DP OUT	DP2
USB-C	USBC1
USB-A	USB1, USB2



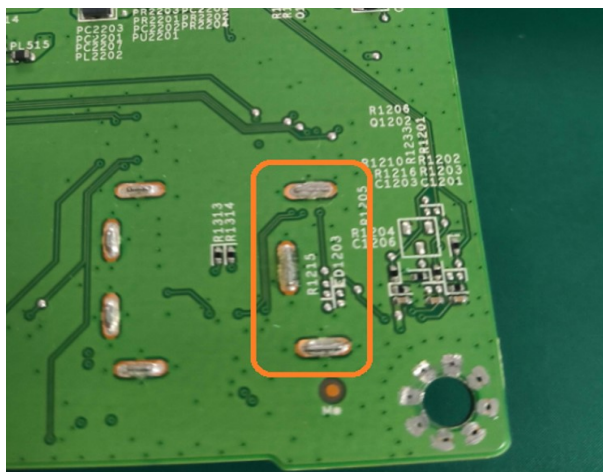
Before repairing connectors, follow these steps:

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

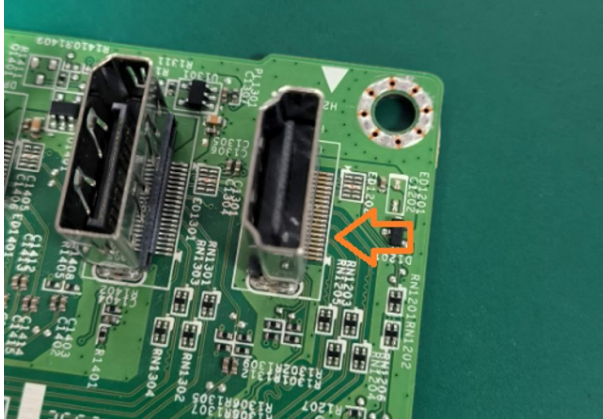
HDMI connector HDMI1

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) Lift the HDMI connector from the PCB.

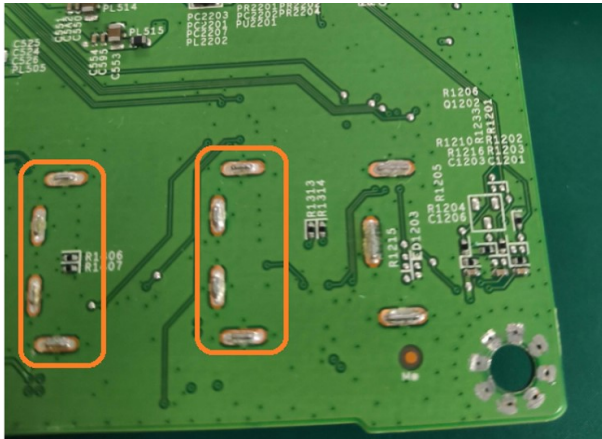


- 3) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 4) Solder the new component.

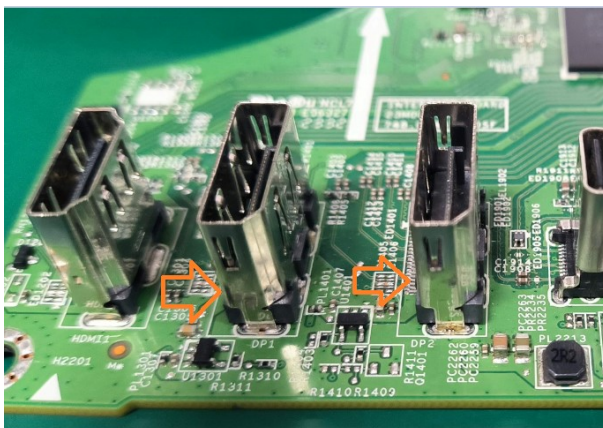
DP connector DP1 DP2

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) Lift the DP connector from the PCB.



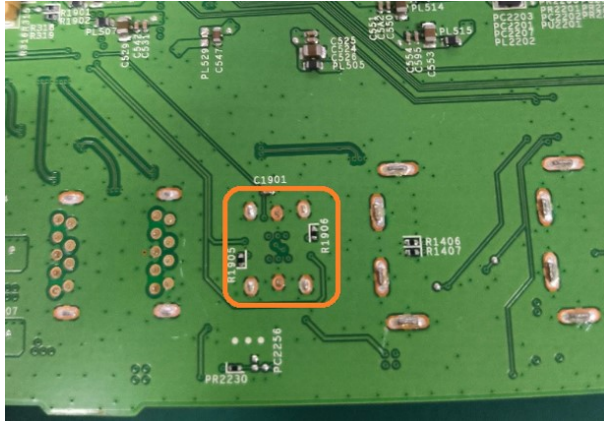
- 3) Place the new component on the PCB. Be sure that it matches the PCB footprint.

- 4) Solder the new component.

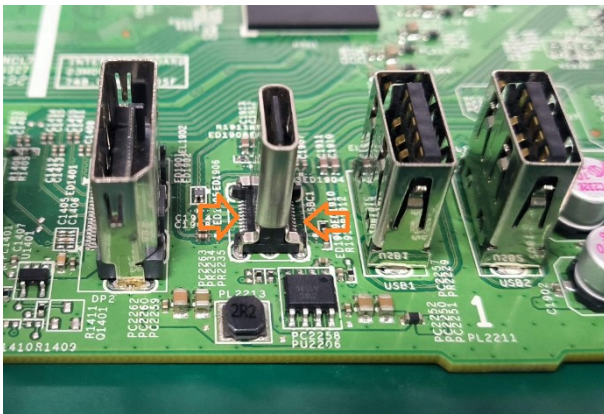
USB-C connector

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) Lift the USB-C connector from the PCB.

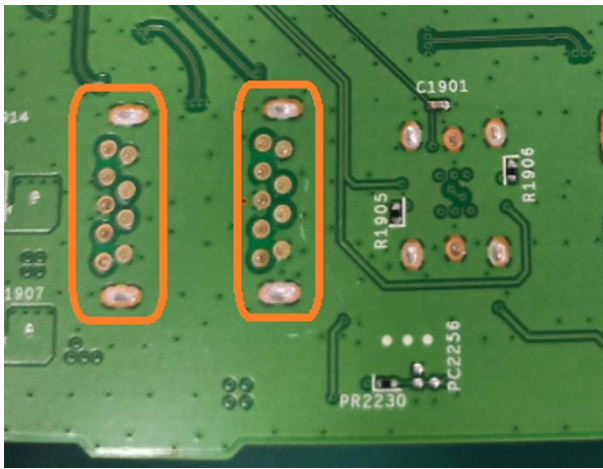


- 3) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 4) Solder the new component

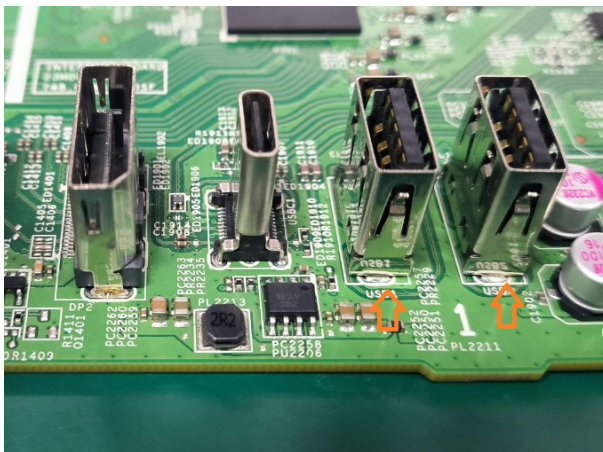
USB-A connector USB1/USB2

Repair the USB-A 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 USB-A connector out of the through holes.



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 and sound plays correctly on the monitor	Computer or DVD player
DP1/DP2 test	Confirm whether image displays and sound plays correctly on the monitor	Computer or DVD player
USB-C test	Confirm the PC whether can identify the USB 3.0	Computer or Notebook
USB-A test	Confirm Charging/USB device working normally.	Computer or Notebook

USB Hub test	Confirm USB function of 3-USB Type-A and 1-USB Type-C 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 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 does not enter into a low-power sleep state.	The monitor's power saving control is disabled.	Open the OSD menu and select Power , select Auto-Sleep Mode and set auto-sleep to On .
"OSD Lockout" is displayed.	The monitor's OSD lock function is enabled.	Press and hold the Menu button to disable the OSD lockout function.
"Power Button Lockout" 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.

Slow performance from USB	The monitor has a two-lane default for USB-C. On selected products, you can press the Joypad button to open the OSD menu, navigate to the USB Type-C configuration, and then select USB-C Video + USB 3.0 for data transfer prioritization.
Lower refresh rate or color bits	Select USB-C Video + USB 2.0 for refresh rate/color bits prioritization.

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