



Maintenance and Service Guide

HP Series 7 Pro 727pk 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:

Display features

- 68.6 cm (27 in) diagonal viewable screen area with 3840 × 2160 resolution (UHD), 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) Monitor Technology
- Wide color gamut to provide coverage of sRGB, Display P3, and BT.709 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
- Dual Picture-in-Picture (PiP) and Picture-by-Picture (PbP) functionality to enable the USB Type C® Thunderbolt™, DisplayPort™, or HDMI inputs to be viewed where one image is overlaid onto another (PiP) or where one image is positioned adjacent to another (PbP)
- 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
- Color space presets for display P3
- Pantone Validated
- Plug and Play capability, if supported by your operating system
- 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/output (cable included)
- High-Definition Multimedia Interface (HDMI) video input (cable included for select products only)
- USB Type-C® Thunderbolt™ port with HP Sleep and Charge (cable included for select products only)
- USB Type-C Thunderbolt output
- USB hub with one USB Type-C port that connects to the computer (upstream) and six USB ports that connect to USB devices (downstream) (USB Type-C-to-USB Type-A cable included for select products only)
- RJ-45 (network) jack

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
- 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.

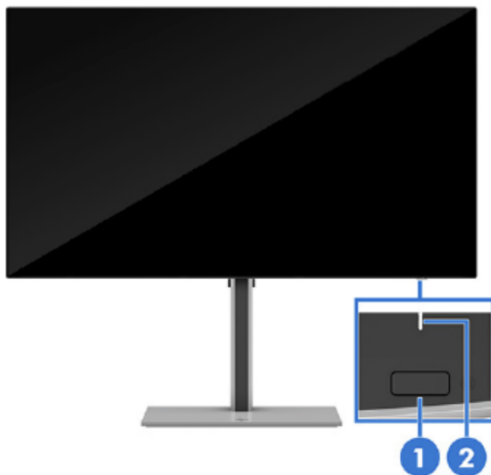


Table 2-1 Front components, camera model and their descriptions

Component	Description
(1) Power button	Turns the monitor on or off. NOTE: When applicable HP products are connected to the USB Type-C port, pressing the power button on the display turns on/off your notebook, or puts it to sleep based on your power setting. (Performance mode)
(2) Power LED	Indicates that the monitor is powered on or off.

Rear components

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

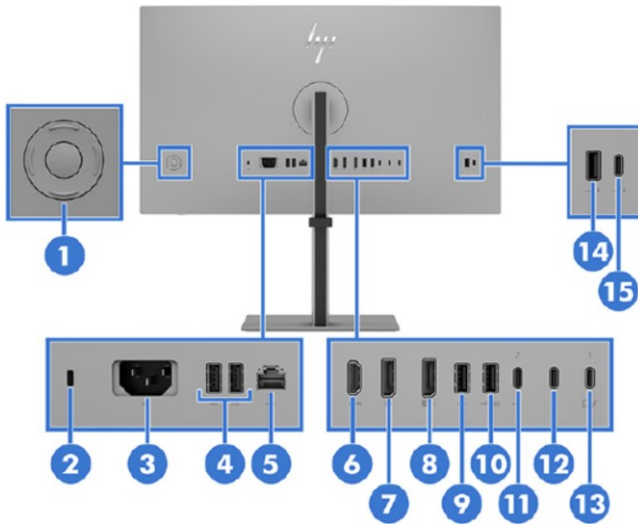


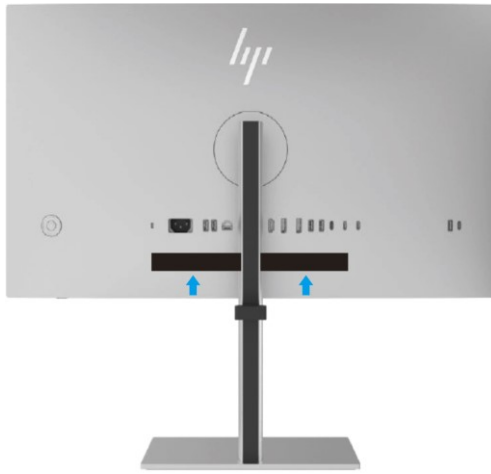
Table 2-2 Rear and side components and their descriptions

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) USB Type-A ports (2)	Connect a USB cable to a peripheral device, such as a keyboard, mouse, or USB hard drive.
(5) RJ-45 (network) jack	<p>Network (RJ-45) data rate via USB Type-C max speed is 1000 Mbps</p> <ul style="list-style-type: none"> ● Green (left): The network is connected ● Amber (right): Activity is occurring on the network. <p>NOTE: Supports Wake on Lan (WOL) Out-of-band, Mac Address Passthrough (MAPT) Out-of-band (HP models only), and PXE boot. The functionality may vary with PC settings.</p> <p>NOTE: This network port is fully energy efficient according to IEEE standards (IEEE 802.3az-2010), as long as all connected devices support this feature.</p>
(6) HDMI port	Connects the HDMI cable to a source device such as a computer.
(7) DisplayPort	Connects a DisplayPort cable to a source device such as a computer.
(8) DisplayPort OUT connector	<p>Connects the monitor to a secondary monitor for multi streaming.</p> <p>NOTE: If you need to remove the DisplayPort cable the from DisplayPort OUT connector, you should remove the cables in the following order:</p> <ol style="list-style-type: none"> 1. HDMI cable (if connected) 2. DisplayPort cable from the DisplayPort OUT port 3. DisplayPort cable from the DisplayPort IN port (if connected)
(9) USB Type-A port	Connects a USB cable to a peripheral device, such as a keyboard, mouse, or USB hard drive.
(10) USB Type-A port (includes KVM connection)	Connects a USB cable to a peripheral device, such as a keyboard, mouse, or USB hard drive, and charges peripheral devices. This is the dedicated USB

		Type-A port for KVM functions. It supports the KVM hot-key function on a keyboard that is connected to this port.
(11)	USB Type-C port 2 (upstream)	<p>Connect 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.</p> <p>NOTE: Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device.</p> <p>This port also enables the USB Type-A ports to perform their functions.</p>
(12)	USB Type-C Thunderbolt port	Connects the monitor to another monitor for multi-streaming.
(13)	USB Type-C Thunderbolt port 1 (upstream)	<p>Connects a Thunderbolt or USB Type-C cable to a source device such as a computer or game console. This Thunderbolt port can function as a DisplayPort input or as a USB 3.0 connection. It can also be used to deliver up to 100 W of power to a device. Power outputs are 5 V/ 9 V/ 12 V/ 15 V/ 20 V to achieve a 65 W (max: 100 W) output.</p> <p>This port also enables the USB Type-A ports to perform their functions.</p>
(14)	USB Type-A port	Connects a USB cable to a peripheral device, such as a keyboard, mouse, or USB hard drive.
(15)	USB Type-C port (downstream)	Connects a USB cable to a peripheral device, such as a keyboard, mouse, or USB hard drive.

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



Product No.: 83023
 Serial No. 序号/序號: CN4340001
 Assembly Part No.: N56073-001
 Spare No.: N64405-001/ASSY N56073-701
 Rev: Xxxxxxx
 Manufactured 製造/製造日期/
 製造日期: October, 2023

Service label is 45x15mm, R=2mm
 QR code size is 11.75mm X11.75mm
 QR code just include Serial Number, eg CNC0450001
 Serial No. Font is Arial Bold 6pt
 The rest of variate data font is Arial 5.7pt

3 Illustrated parts catalog

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

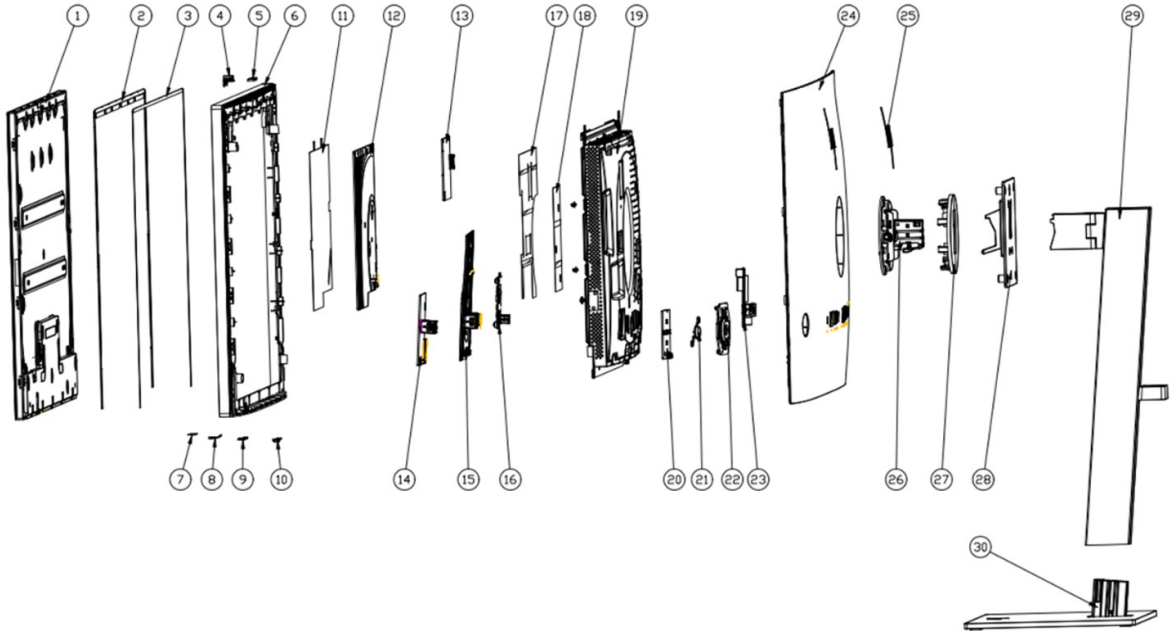


Table 3-1: Monitor major components and their descriptions

Item	Description	Qty
1	#Panel 727pk	1
2	#Bracket MC SGCC	1
3	#Adhesive VHB	1
4	#ALS Lens PMMA	1
5	#ALS BD	1
6	#CVR_MC_ABS_JACK_BLACK	1
7	#PET_SHIELDING LENS	1
8	#LENS_POWER_KEY_PC	1
9	#POWER_KEY_BD	1
10	#POWER_KEY	1
11	#MYLAR_SAFETY	1
12	#POWER_BD	1
13	#DRIVER BD	1
14	#RJ45 BD	1
15	#INTERFACE BD	1
16	#TBT4 BD	1
17	#Hit-pot MYLAR 1	1

18	# Hit-pot MYLAR 2	1
19	#Main Bracket	1
20	#OSD BD	1
21	#CVR_OSD_CENTER_ABS	1
22	#CVR_OSD_AROUND_ABS	1
23	#SIDE_USB_BD	1
24	#CVR_RC_ABS_PIKE SLIVER	1
25	#HP LOGO(7121-8973)	1
26	#HINGE_TILT_5-20_PIVOT_45	1
27	#HINGE_COVER_PIKE_SLIVER	1
28	#ASSY_VESA_BRACKET	1
29	#STAND_ARM_LIFT_150	1
30	#STAND_BASE_SANDBLASTED	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 MK27HHC-CHDL(C) 727pk DIP	N97154-001	755.0AS08.0001

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

- SU-SCON: www.su-scon.com
- CAPXON: www.capxongroup.com

Capacitors by distributor

Component description	Location	Component distributor	Distributor part number
CAP EL 470U 35V M P5 10*16 HX SUSCON	AC714, AC717, AC718, AC719, AC720	SUSCON	HX035M471G16T014P50R
CAP EL 470U 35V M P5 10*16 ZH CAPXON		CAPXON	ZH471M035G160ETABHR

Connectors by manufacturer

Component description	Location identifier	Component distributor	Distributor part number	Remark
HDMI	HDMI1	Switchcraft Inc.	https://www.digikey.com PN: HD03-19-P-FR	

DP	DP1 DP2	Molex	https://www.digikey.com PN: 2041441-1	
USB-C	USBC1 USBC2 USBC3 USBC4	Molex	https://www.digikey.com PN: 900-2171840001DKR-ND	
USB-A	USB1 USB2 USB3 USB4 USB5	Amphenol ICC Commercial Products)	https://www.digikey.com PN: WM10413TR-ND	
RJ45	LAN1	Würth Elektronik	https://www.digikey.com PN: 732-3170-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/>

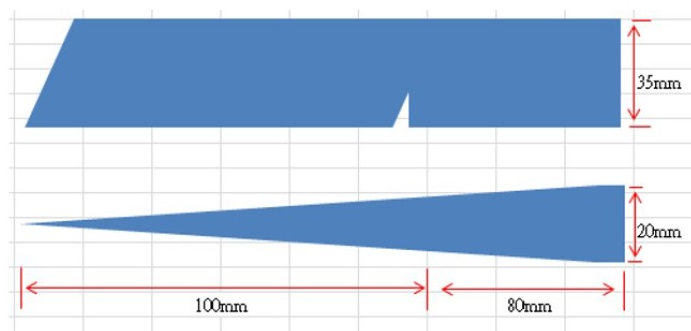
4 Removal and replacement procedures

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.

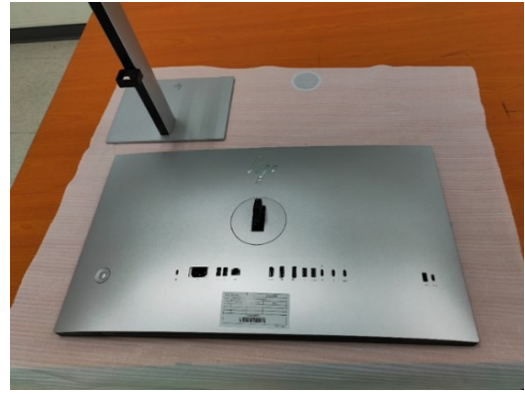
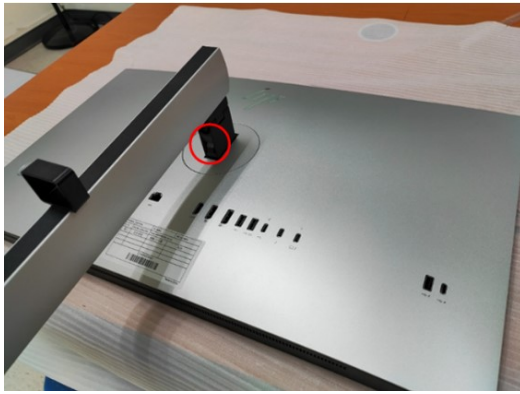
- 1) Read the “Important safety information” and “Important service information and precautions” sections in the “Getting started” chapter of this guide.
- 2) Clean the room for disassembly.
- 3) Identify the disassembly area.
- 4) Check the position that the monitors are to be placed along with the 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:



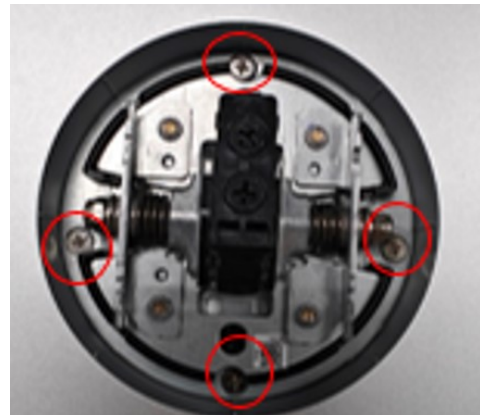
Rear Cover

Before removing the Rear Cover, follow these steps:

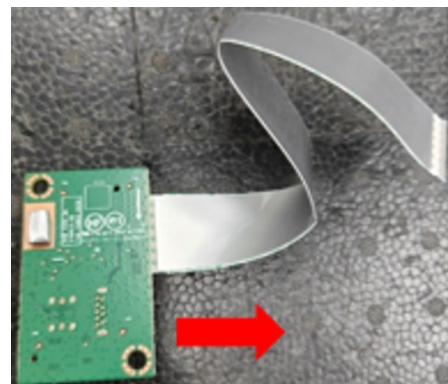
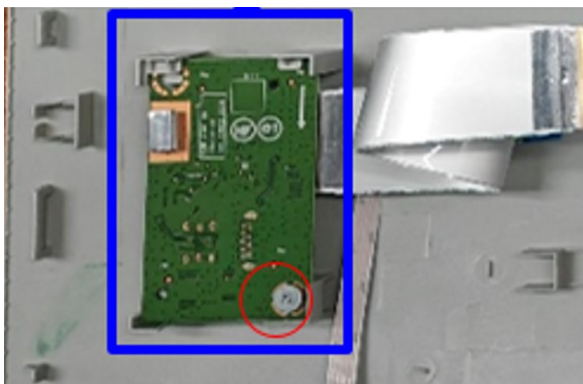
- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 12.
- 1) Pull the release button to remove stand base from display head



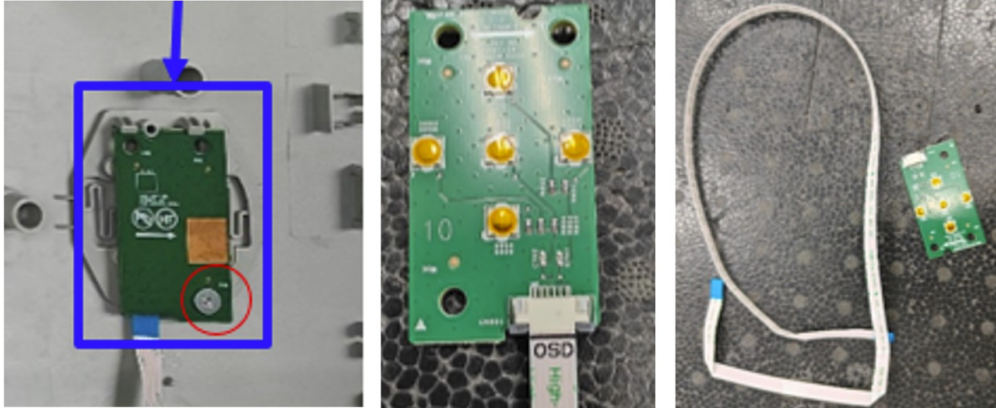
- 2) Remove Rear Cover From Display Head: Use the tool to remove the hinge cover, then remove the 4pcs screws to remove the hinge, then loose all the hooks by hand for pulling the rear cover and disconnect the USB cable and OSD cable



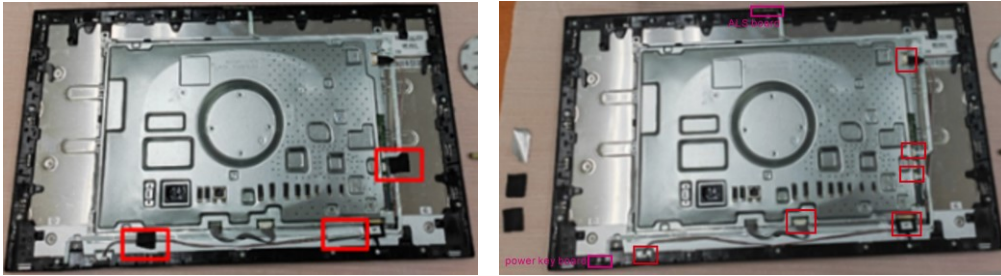
- 3) Remove USB Board From Rear Cover: Remove 1pcs screw, then remove the EMI gasket and disconnect the cable



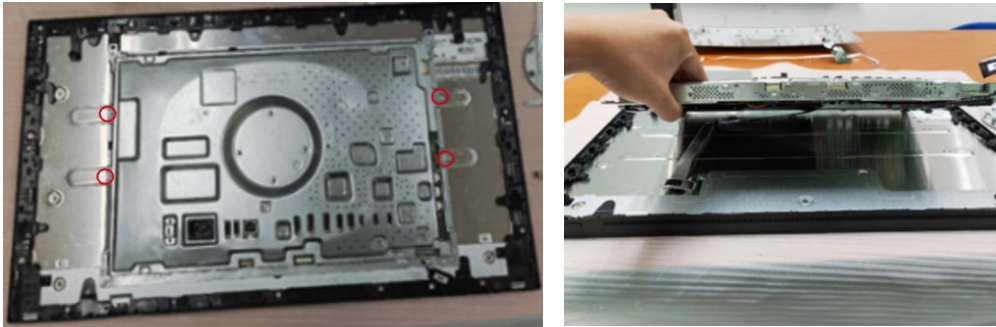
- 4) Release OSD Key Board From Rear Cover: remove 1pcs screw and disconnect the key cable



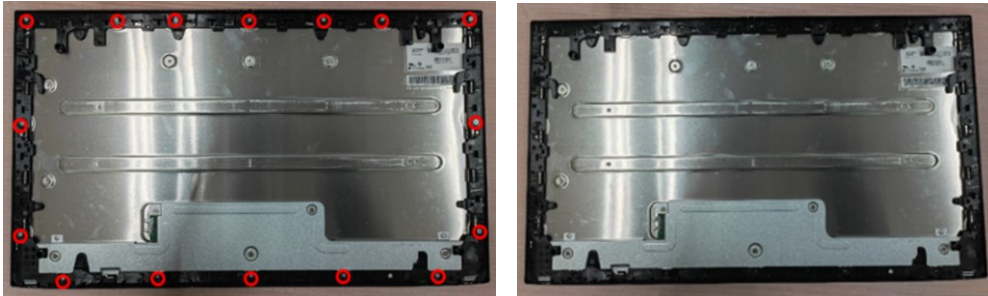
- 5) Remove all acetate tape and aluminum foil, then disconnect all the cables. Remove ALS board and power key board.



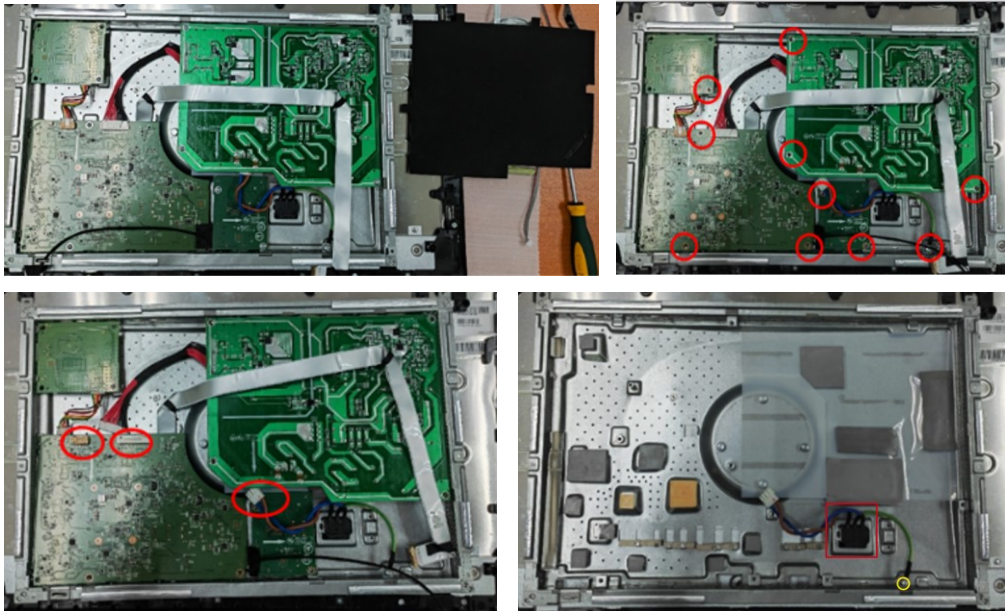
- 6) Remove Bracket Assembly From Display Head: remove the 4pcs screws from the back bracket.



- 7) Remove Middle Frame from the display head: remove 16pcs screws of middle frame.



- 8) Disassemble Bracket Assembly: remove black Mylar sheet, then remove 10pcs screws for releasing all circuit board, disconnect all the cables and remove the AC inlet from the bracket.



Power board

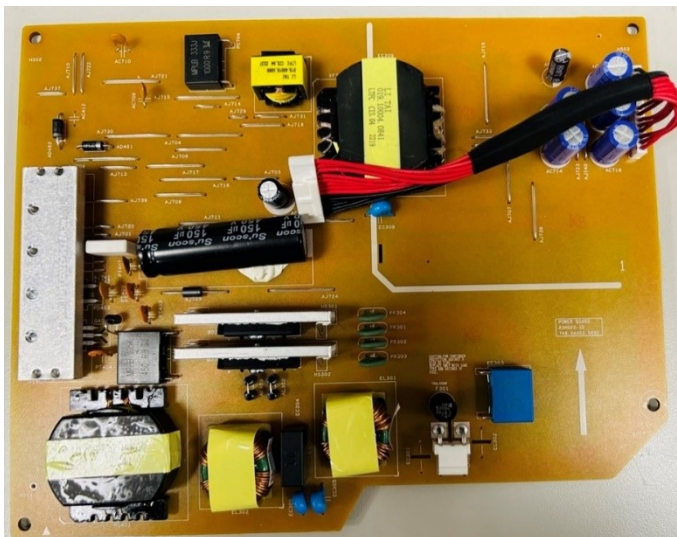
The power board part number is 755.0AS08.0001

Before removing the power board, follow these steps:

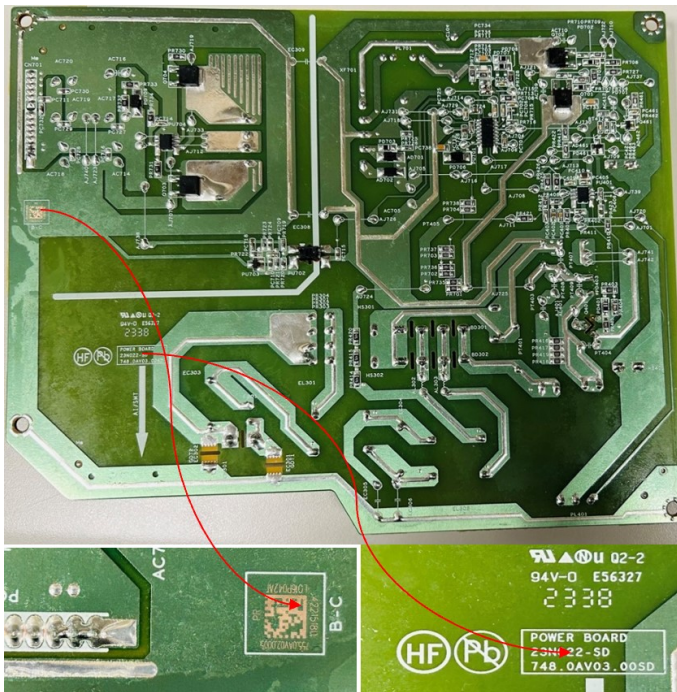
- ▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 12.

Remove the power board:

- 1) The HP Series 7 Pro 727pk power board connector position is as follows:



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



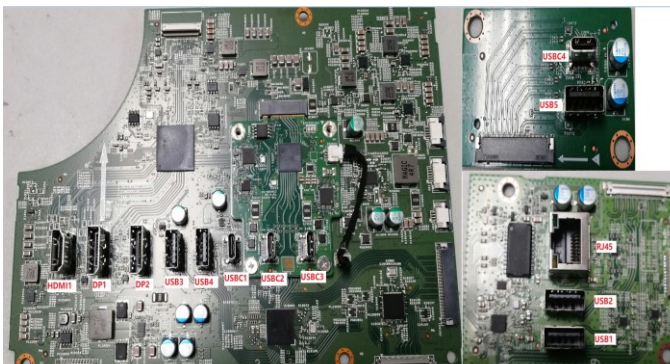
- 3) Pin solder with soldering iron and absorber.
NA
- 4) Lift the connector up and away from the PCB.
No

Connector repair

This procedure includes HDMI, Display Port, Mini Display Port, USB-C, USB-A and Phone Jack connectors. The connectors are on the main board (board part number 7ZB.A2401.A008).

The connector identifiers are as follows:

Connector	Location
HDMI	HDMI1
DP	DP1 DP2
USB-C	USBC1, USBC2, USBC3, USBC4
USB-A	USB1, USB2, USB3, USB4, USB5
RJ45	LAN1



Before repairing connectors, follow these steps:

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

HDMI connector HDMI1

Repair the HDMI connector:



- 1) Use a hot air gun to melt the solder on the pins from bottom side..
- 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 USBC1/USBC2/USBC3/USBC4

Repair the USB-C connector:



- 1) Use a hot air gun to melt the solder on the pins.
- 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/USB3/USB4/USB5

Repair the USB-A connector:



- 1) Use a hot air gun to melt the solder on the pins from the bottom side.
- 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.

RJ45 connector LAN1

Repair the RJ45 connector:



- 1) Use a hot air gun to melt the solder on the pins from the bottom side.
- 2) Lift the RJ45 connector from the PCB.
- 3) Place the new component on the PCB. Be sure that it matches the PCB footprint.
- 4) Solder the new component.

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 Alt-Mode	Confirm whether image displays correctly on the monitor	Computer or Notebook
USB-C PD Test	Confirm PDO/Charging working normally.	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 off.	Power the monitor 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 Auto-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.
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 .
"On-Screen Menus are Locked" is displayed.	The monitor's OSD lock function is enabled.	Press and hold the Left button for 10 seconds to disable the OSD Lockout function.

<p>“Power Button is Locked” is displayed.</p>	<p>The monitor's Power Button Lockout feature is enabled.</p>	<p>Press and hold the Power button for 10 seconds to unlock the power button function.</p>
<p>Monitor has trouble waking from Sleep mode</p>		<p>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.</p>
<p>Slow performance from USB</p>		<p>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 3.2 for data transfer prioritization.</p>
<p>Lower refresh rate or color bits</p>		<p>Select USB-C Video + USB 2.0 for refresh rate/color bits prioritization.</p>
<p>LAN connection drop</p>		<p>Check if the LAN driver version on the host PC is up to date</p>

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