



Maintenance and Service Guide

Engage 14/14t model

SUMMARY

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

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M23195-Engage 14/14t-MSG-V1
Assembly part number: M23195

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:

- 35.56 cm (14 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 Advanced Hyper-Viewing Angle (AHVA)
- Nonglare panel with an LED backlight
- Wide viewing angle to allow viewing from a sitting or standing position, or moving from side to side
- Four on-screen display (OSD) buttons, 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
- Energy saver feature to meet requirements for reduced power consumption
- Wide viewing angle to allow viewing from a sitting or standing position, or moving from side to side
- Four on-screen display (OSD) buttons, 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
- Energy saver feature to meet requirements for reduced power consumption

Connectors

- USB Type-C® port with power delivery IN - minimum PD power ≥ 18 W

Monitor stand

- Removable stand for flexible monitor head mounting solutions
- VESA® mounting bracket for attaching the monitor head to a wall-mount device or swing arm (select models)
- VESA mounting capability (100 × 100 mm) for attaching the monitor to a swing arm mount

NOTE: For safety and regulatory information, see the Product Notices provided in your documentation kit. To access the latest user guide, 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.

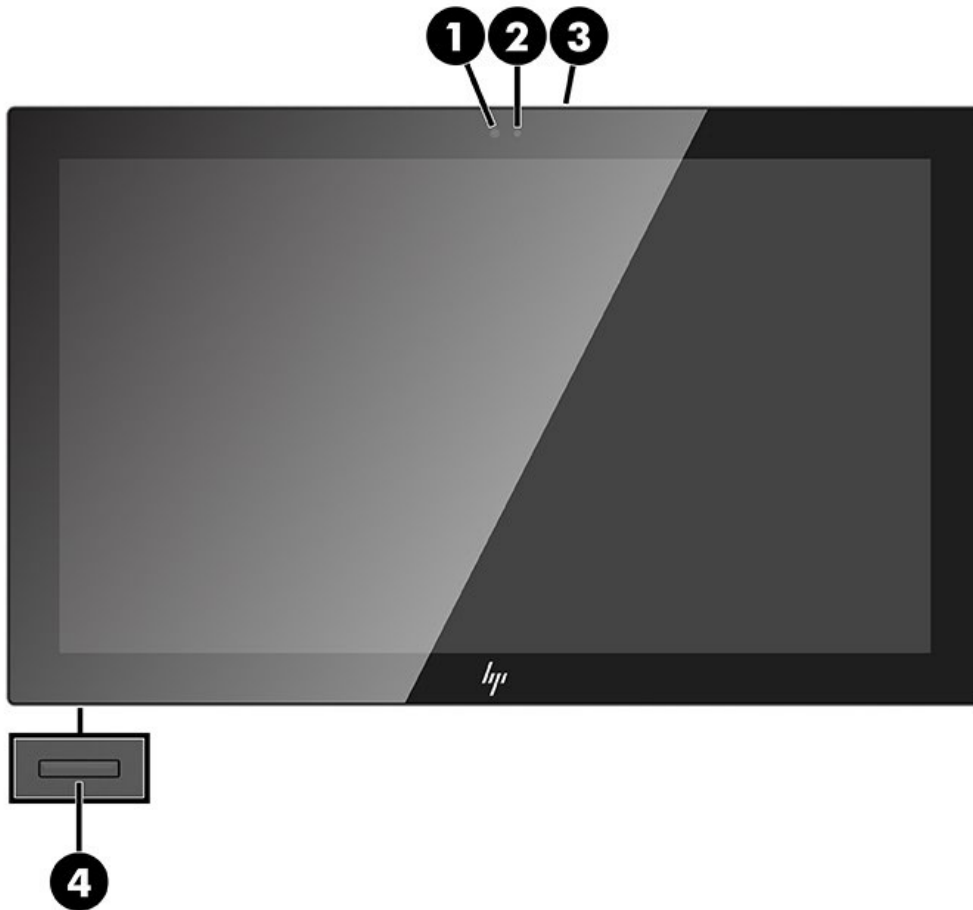


Table 1-1: Front components and their descriptions

Component	Description
(1) Webcam light	On: The camera is in use.
(2) Webcam	Transmits your image in a video conference.
(3) Microphones	Record sound.
(4) Power button	Turns the monitor on or off.

Rear components

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

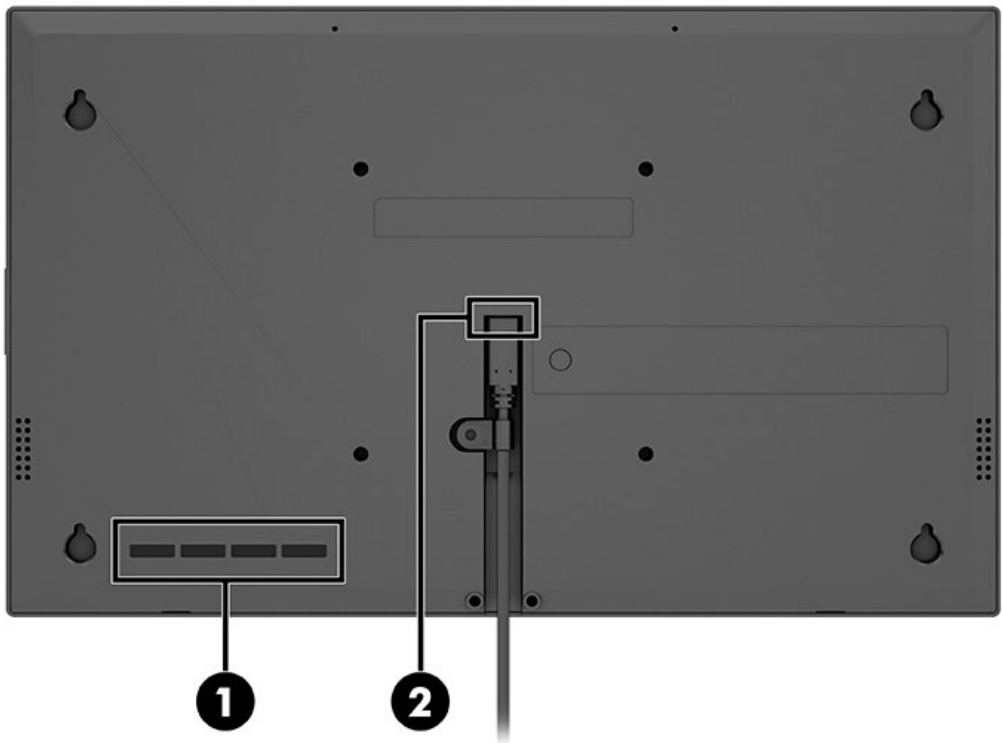
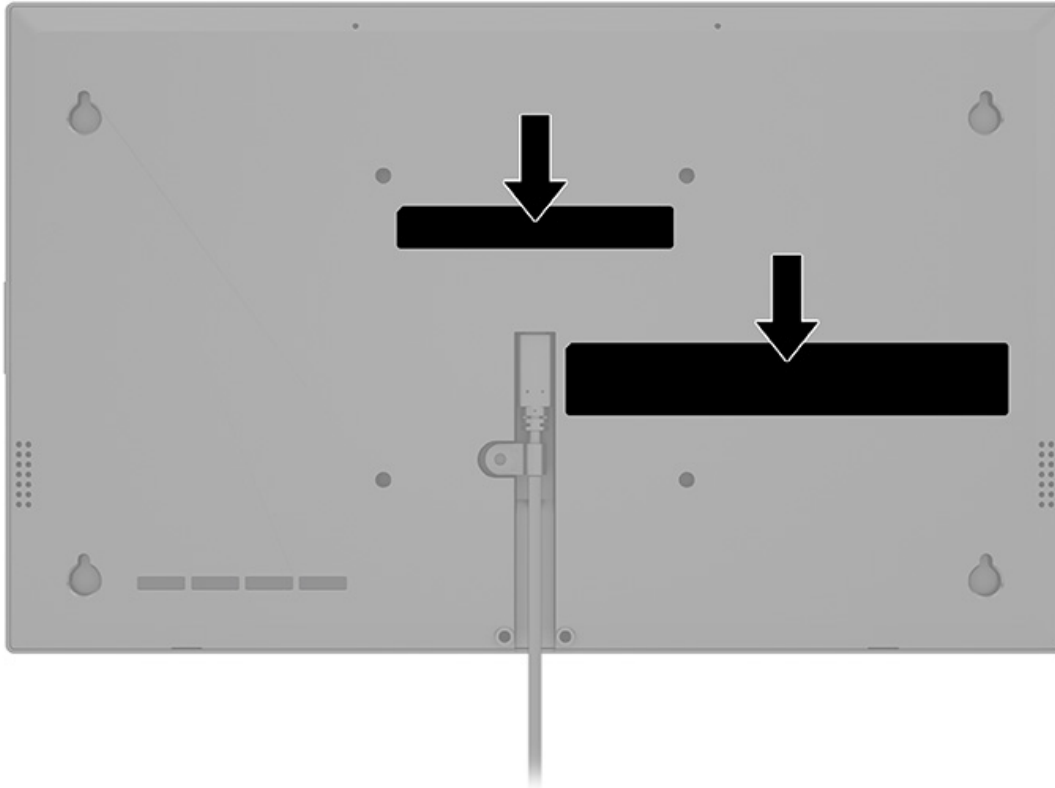


Table 1-2: Rear components and their descriptions

Component	Function
(1) OSD control buttons	Open the OSD menu and make adjustments to monitor settings.
(2) USB Type-C connector	Connects USB Type-C cable to provide signal and power to the monitor.

Locating the serial number and product number

The serial number and product number are located on labels on the rear of the monitor. You might need these numbers when contacting HP for support.



Spec label
Engage14

hp 型号/型號/모니터: HP Engage 14 Monitor
 Regulatory Model No./規定型号/型號/모델명: HSD-0085-Q
 Made in China/中國製造/中國製造/제조국: 중국
 名称/名稱: 液晶显示器/液晶顯示器
 Electrical Ratings/輸入电压电流/輸入電壓電流/정격입력
 Input Rating: 9V=3.0 A

CAN ICES-3(B)/NMB-3(B)
 Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan
 Apparatet må tilkoples jordat stikkontakt
 Apparaten skall anslutas till jordat uttag
 Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikroppsens jord.

Manufacturer: Qisda Optronics(Suzhou)Co.,Ltd.
 A/S Number: 1588-3003
 R-R-hpi-HSD-0085-Q

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.

警語: 使用過度恐傷害視力
 警語: 使用過度恐傷害視力

HP Inc. 76720
 HP HQ-TRE, 71025 Boeblingen, Germany
 HP Inc UK Ltd, Regulatory Enquiries, Earley West, 300 Thames Valley Park Drive, Reading, RG6 1PT 163009

Engage14t

hp 型号/型號/모니터: HP Engage 14t Monitor
 Regulatory Model No./規定型号/型號/모델명: HSD-0085-Q
 Made in China/中國製造/中國製造/제조국: 중국
 名称/名稱: 液晶显示器/液晶顯示器
 Electrical Ratings/輸入电压电流/輸入電壓電流/정격입력
 Input Rating: 9V=3.0 A

CAN ICES-3(B)/NMB-3(B)
 Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan
 Apparatet må tilkoples jordat stikkontakt
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警語: 使用過度恐傷害視力
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HP Inc. 76720
 HP HQ-TRE, 71025 Boeblingen, Germany
 HP Inc UK Ltd, Regulatory Enquiries, Earley West, 300 Thames Valley Park Drive, Reading, RG6 1PT 163009

Barcode label
Engage14

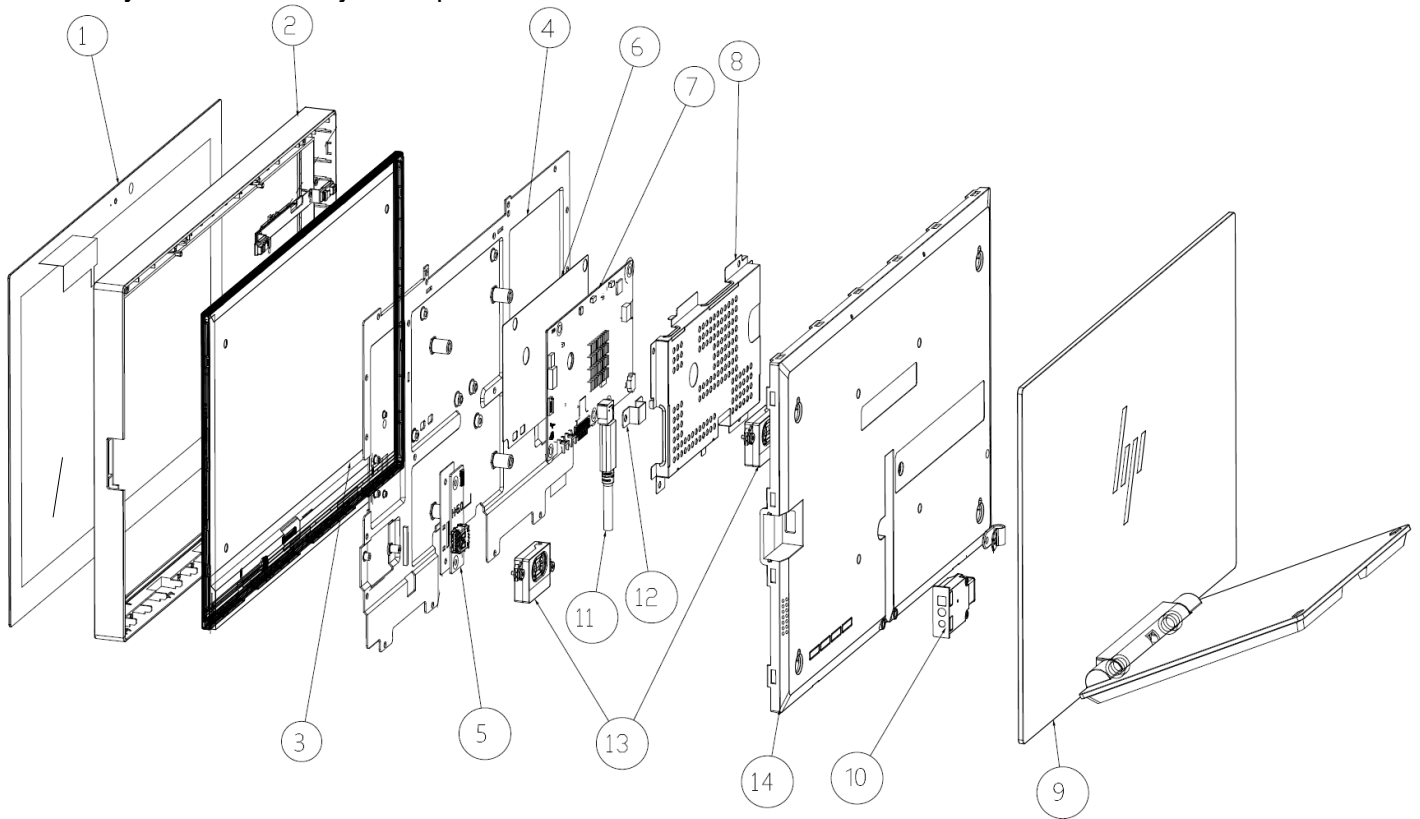
	型号/型號: HP Engage 14 Monitor	Serial No.	
	Product No./제품명칭: <input type="text" value="Product No(SPEC)"/>	<input type="text" value="S/N"/> <input type="text" value="F"/>	
	Assembly Part No.: <input type="text" value="Assembly Part No"/> Rev.: <input type="text" value="REV"/>		
	Spares No.: <input type="text" value="Spare No"/>		
	Manufactured/制造日期/製造日期/제조년월: <input type="text" value="Month Year"/>		

Engage14t

	型号/型號: HP Engage 14t Monitor	Serial No.	
	Product No./제품명칭: <input type="text" value="Product No(SPEC)"/>	<input type="text" value="S/N"/> <input type="text" value="F"/>	
	Assembly Part No.: <input type="text" value="Assembly Part No"/> Rev.: <input type="text" value="REV"/>		
	Spares No.: <input type="text" value="Spare No"/>		
	Manufactured/制造日期/製造日期/제조년월: <input type="text" value="Month Year"/>		

3 Illustrated parts catalog

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



Item	Description	Qty
1	TOUCH	1
2	BEZEL	1
3	PANEL	1
4	MAIN FRAME	1
5	TANSFER BD	1
6	MAIN BD MYLAR	1
7	MAIN BD	1
8	MAIN BD BRACKET	2
9	STAND	1
10	COVER BENTO	1
11	CABLE TYPE C	1
12	PLATE TYPE C	1
13	SPEAKER	2
14	CASE REAR	1

How to order parts

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

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

- Farnell: [Farnell UK - Electronic Components Distributor](#)
- RS Component: [Capacitors | RS Components \(rs-online.com\)](#)

Connectors by distributor

Component description	Location identifier	Component distributor	Distributor part number
USB 3.0 Type C	J6	Call HP Service	Call HP Service

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/>

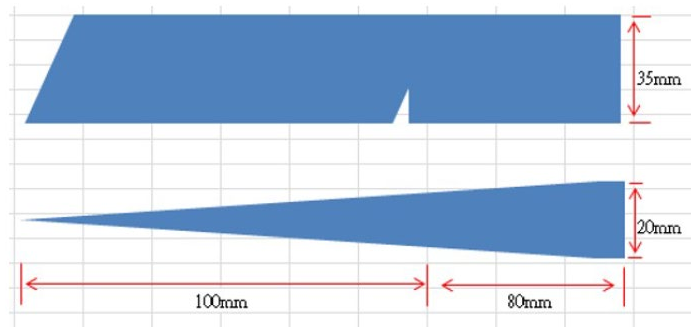
4 Removal and replacement procedures

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.

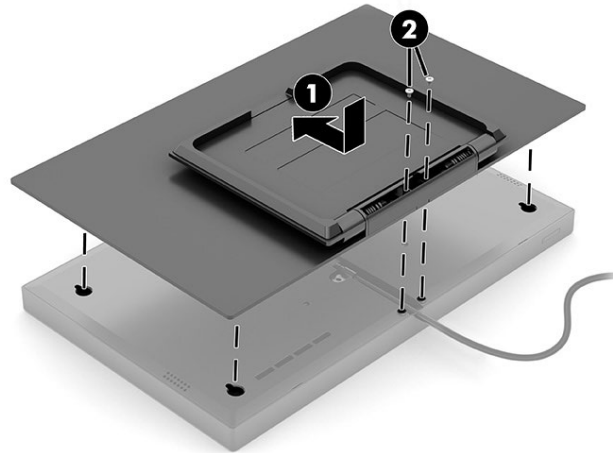
- 1) Read the “Important safety information” and “Important service information and precautions” sections in the “Getting started” chapter of this guide.
- 2) Clean the room for disassembly.
- 3) Identify the disassembly area.
- 4) Check the position that the monitors are to be placed along with the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

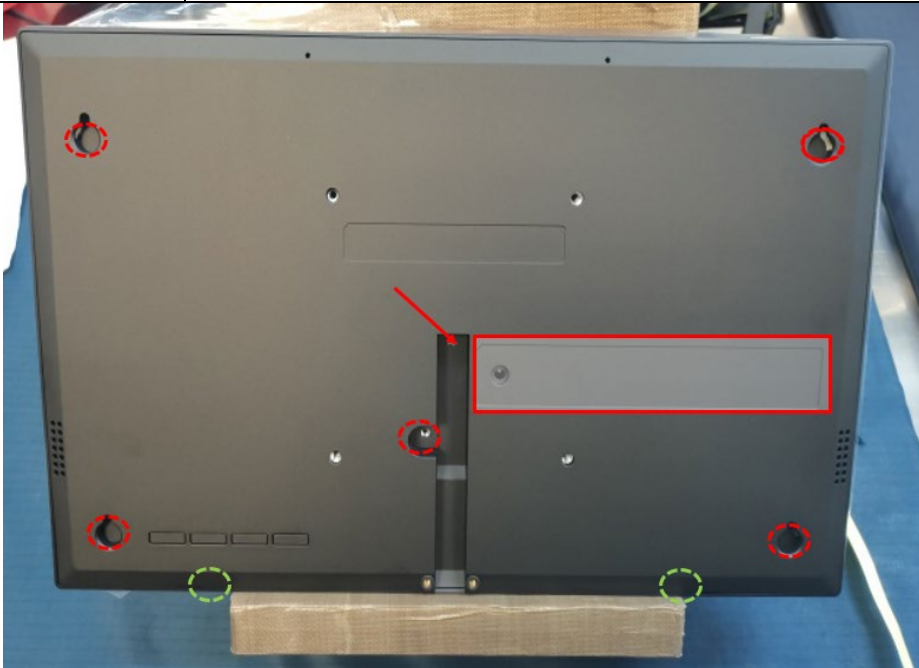
S1



Release screws on monitor, then separate the stand from monitor head





S2

Release screws, label, type C cable.



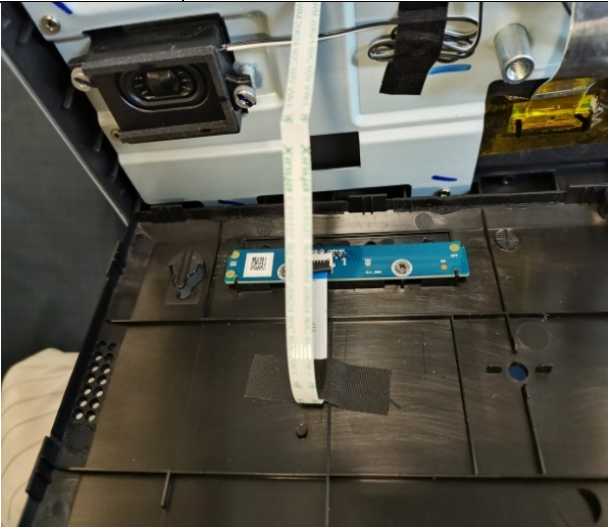
 = remove label then remove screw  = quick release hole location

 = remove screw

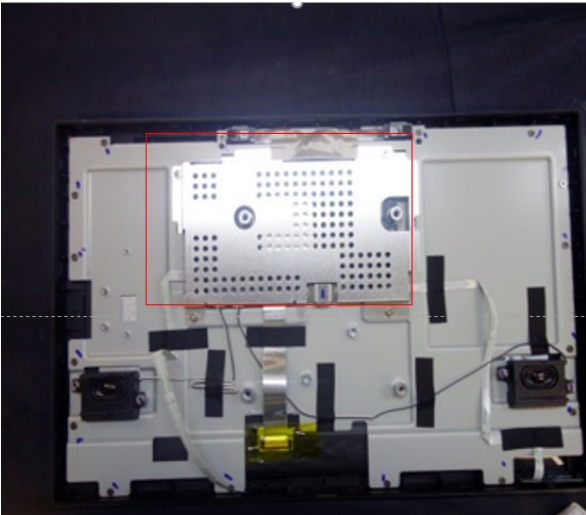
 = remove type C cable



S3 Then remove cover-rear, tape, FFC. PCBA



S4 Remove screw, bracket, FFC, wire, PCBA. Speaker



S5

Take off MAIN BD

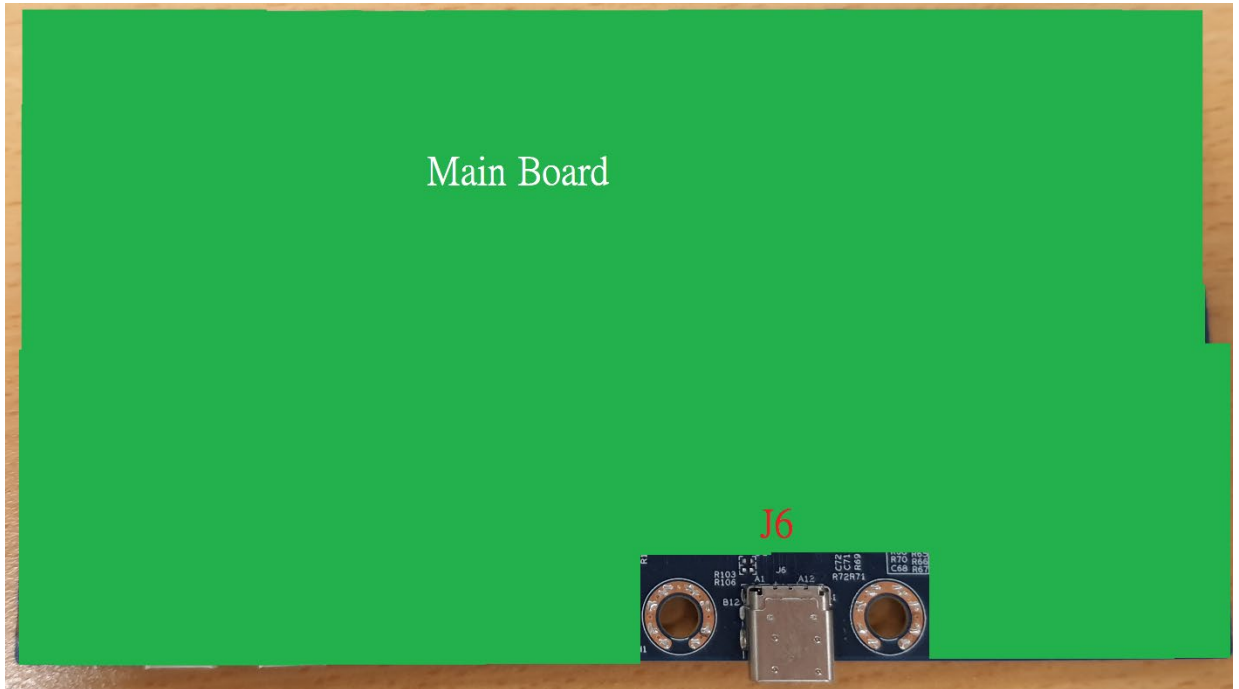


Connector repair

This procedure includes VGA, HDMI, Display port, USB3.0, USB A connectors. The connectors are on the main board (board part number 5E.4QW01.00*).

The connectors identifiers are as follows:

Connector	Location
Type-C	J6

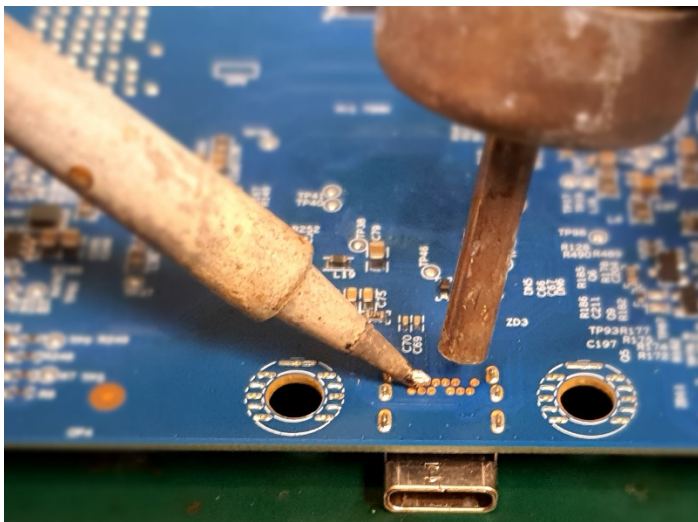
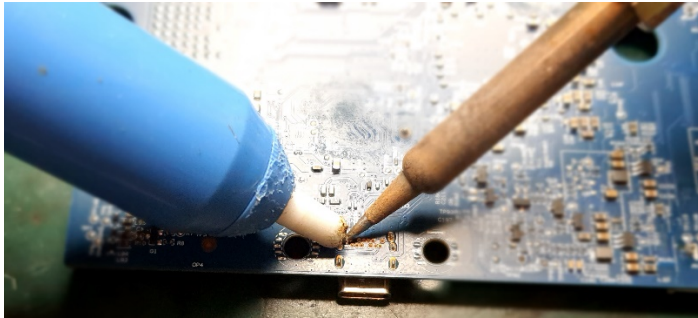


Before repairing connectors, follow these steps:

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

Type-C Connector repair- J6

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



- 2) Lift connector from the PCB
- 3) Place new component on the location, and must check it can match PCB footprint
- 4) Soldering the new component by solder iron

Function test

After repair, be sure to confirm that all functions are working.

Table 4-1: Function test

Test item	Operating description	Tool used
Type C	Check the Type-C device whether works normally	Type-C device

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	Problem	Problem
Screen is blank or video is blinking.	Power cord is disconnected.	Connect the power cord.
	Monitor is off.	Press the monitor power button. NOTE: If pressing the power button has no effect, press and hold the power button for 10 sec 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 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 setting is too low.	Open the OSD menu, and select Brightness+ to adjust the brightness scale as needed.
"Check Video Cable" is displayed on the 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 connecting the video cable.
"Input Signal Out of Range" is displayed on screen.	Video resolution and/or refresh rate are set higher than 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 then set auto-sleep to On .
"OSD Lockout" is displayed.	The monitor's OSD Lockout function is enabled.	Press and hold the Menu button for 10 seconds to disable the OSD Lockout function.
"Power Button Lockout" is displayed.	The monitor's Power Button Lockout feature is enabled.	Press and hold the Power button for 10 seconds to unlock the power button function.

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