

ThinkCentre M60q Chromebox / ThinkCentre
M60q Chromebox Enterprise
User Guide

ThinkCentre



Lenovo

Read this first

Before using this documentation and the product it supports, ensure that you read and understand the following:

- *Safety and Warranty Guide*
- *Generic Safety and Compliance Notices*
- *Setup Guide*

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Discover your Lenovo Chromebox

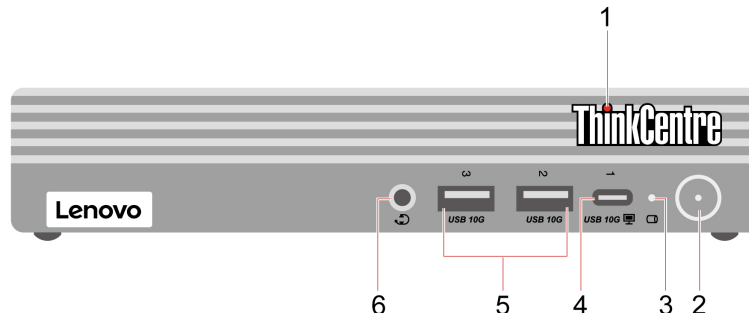
Thank you for choosing a Lenovo® Chromebox! We are dedicated to delivering the best solution to you.

Before starting your tour, read the following information:

- Illustrations in this documentation might look different from your product.
- Depending on the model, some optional accessories, features, software programs, and user interface instructions might not be applicable to your Chromebox.
- Documentation content is subject to change without notice. To get the latest documentation, go to <https://pcsupport.lenovo.com>.

Chapter 1. Meet your Chromebox

Front



Item	Description	Item	Description
1	ThinkCentre® LED	2	Power button with power indicator
3	Storage drive activity indicator	4	USB-C® (3.2 Gen 2) monitor connector
5	USB-A 3.2 Gen 2 connectors	6	Headset connector

* for selected models

Statement on USB transfer rate

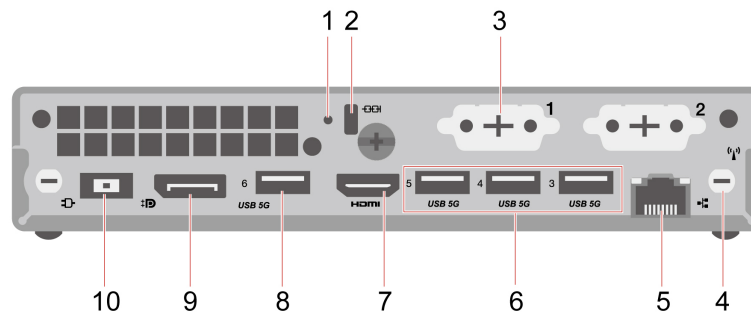
Depending on many factors such as the processing capability of the host and peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and will be slower than the data rate listed below for each corresponding device.

USB device	Data rate (Gbit/s)
3.2 Gen 1	5
3.2 Gen 2	10
3.2 Gen 2 × 2	20
Thunderbolt 3	40
Thunderbolt 4	40

Related topics

“USB specifications” on page 3.

Rear



Item	Description	Item	Description
1	Emergency reset hole	2	Security-lock slot
3	Optional connector*	4	Wi-Fi® antenna slot
5	Ethernet connector	6	USB-A 3.2 Gen 1 connectors
7	HDMI™ out connector	8	USB-A 3.2 Gen 1 connector
9	DisplayPort™ out connector	10	Power adapter connector

* for selected models

Optional connector

Depending on the Chromebox model, the connector might be a DisplayPort out connector, a USB-C connector, or an HDMI™ out connector.

Related topics

- “Lock your Chromebox” on page 6.
- “Connect an external display” on page 5.
- “USB specifications” on page 3.

Features and specifications

For detailed specifications of your Chromebox, go to <https://psref.lenovo.com>.

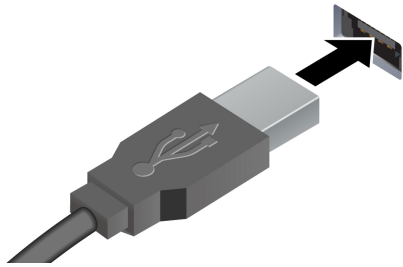
Specification	Description
Dimensions	<ul style="list-style-type: none">• Width: 179.0 mm (7.0 inches)• Height: 36.5 mm (1.4 inches)• Depth: 182.9 mm (7.2 inches)
Weight (without packaging)	Maximum configuration as shipped: 1.07 kg (2.35 lb)
Power supply	<ul style="list-style-type: none">• 65-watt automatic voltage-sensing power supply• 90-watt automatic voltage-sensing power supply
Electrical input	<ul style="list-style-type: none">• Input voltage: From 100 V ac to 240 V ac• Input frequency: 50/60 Hz
Memory	Double data rate 4(DDR4) small outline dual in-line memory module (SODIMM) Maximum memory capacity: 32 GB
Storage device	M.2 solid-state drive*
Video features	The integrated graphics card supports the following: <ul style="list-style-type: none">• DisplayPort out connector• HDMI out connector• USB-C (3.2 Gen 2) monitor connector
Expansion	<ul style="list-style-type: none">• Memory slots• M.2 solid-state drive slot*
Network features	<ul style="list-style-type: none">• Bluetooth• Ethernet LAN• Wireless LAN

* for selected models

USB specifications

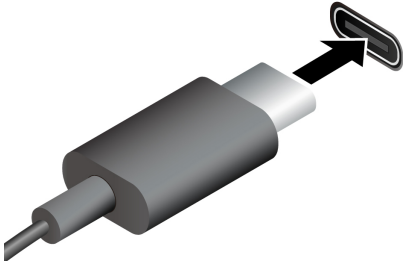
Note: Depending on the model, some USB connectors might not be available on your Chromebox.

Connector name	Description
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Connect USB-A compatible devices, such as a USB-A keyboard, USB-A mouse, USB-A storage device, or USB-A printer.

- **USB 5G** USB-A 3.2 Gen 1 connector
- **USB 10G** USB-A 3.2 Gen 2 connector



- Charge USB-C compatible devices with the output voltage and current of 5 V and 3 A.
- Connect to USB-C accessories to help expand your Chromebox functionality. To purchase USB-C accessories, go to <https://www.lenovo.com/accessories>.

- **USB 10G** USB-C (3.2 Gen 2) connector

Chapter 2. Explore your Chromebox

Connect an external display











Connect a projector or a monitor to your Chromebox to give presentations or expand your workspace.

Change display settings

1. Click the setting icon in the system tray, and then click **Device → Displays**.
2. Follow the on-screen instructions to change the display settings as you prefer.






Use the keyboard shortcuts

The function keys on the keyboard help you work more easily and effectively.

Function key	Function
	Refresh your current page.
	Make the current window full screen.
	Open the task view to see all your open windows.
	Darken the display.
	Brighten the display.
	Mute the speakers.
	Decrease the speaker volume.
	Increase the speaker volume.
 *	Lock the screen.
 *	Turn on the Chromebox, put it to sleep mode, or wake it up.

* for selected models

Your Chromebox also supports some key combinations.

Shortcut key	Function
alt + 	Go to the previous page.
alt + 	Go to the next page.
ctrl + 	Take a screenshot.
alt + 	Switch the letter case between the upper case and lower case.
l + 	Lock the screen.
ctrl + alt + ?	View all keyboard shortcuts.

To change the keyboard settings:

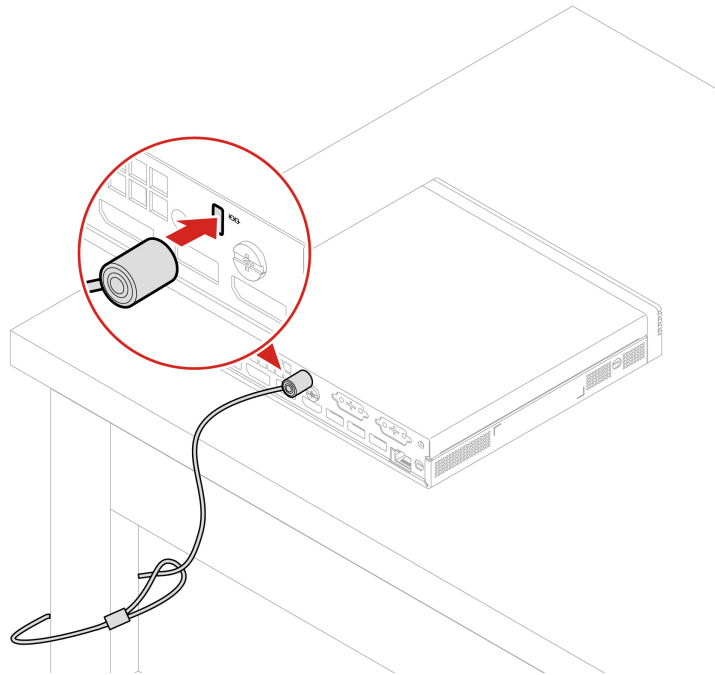
1. Click the setting icon in the system tray, and then click **Device → Keyboard**.
2. Follow the on-screen instructions to change the settings as you prefer.

Lock your Chromebox

Note: Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. You can purchase the device from Lenovo.

Kensington-style cable lock

Lock your Chromebox to a desk, table, or other fixtures through a Kensington-style cable lock.



Set the power plan

For ENERGY STAR® compliant Chromebox, the following power plan takes effect when your Chromebox has been idle for a specified duration:

- Turn off the display: After seven minutes and thirty seconds
- Put the Chromebox to sleep: After eight minutes and thirty seconds

To awaken the Chromebox from Sleep mode, press any key on your keyboard.

To reset the power plan:

1. Click the setting icon in the system tray, and then click **Device → Power**.
2. Follow the on-screen instructions to change the settings as you prefer.


Purchase accessories

Lenovo has a number of hardware accessories and upgrades to help expand the capabilities of your Chromebox. Options include memory modules, storage devices, network cards, power adapters, keyboards, mice, and more.

To shop at Lenovo, go to <https://www.lenovo.com/accessories>.

Shut down your Chromebox

When you finish working with your Chromebox, shut it down to save power.

- Click  in the system tray.
- Press the power button.

Chapter 3. Help and support

Frequently asked questions

What do I do if my Chromebox stops responding?	<ol style="list-style-type: none">1. Press and hold the power button until the Chromebox turns off. Then, restart the Chromebox.2. If step 1 does not work:<ul style="list-style-type: none">• Insert a straightened paper clip into the emergency reset hole to cut off power supply temporarily. Then, restart the Chromebox with ac power connected.
What do I do if I spill liquid on the Chromebox?	<ol style="list-style-type: none">1. Carefully unplug the ac power adapter and turn off the Chromebox immediately. The more quickly you stop the current from passing through the Chromebox the more likely you will reduce damage from short circuits. Attention: Although you might lose some data or work by turning off the Chromebox immediately, leaving the Chromebox on might make your Chromebox unusable.2. Do not try to drain out the liquid by turning over the Chromebox. If your Chromebox has keyboard drainage holes on the bottom, the liquid will be drained out through the holes.3. Wait until you are certain that all the liquid is dry before turning on your Chromebox.
How do I disinfect my Chromebox?	<ol style="list-style-type: none">1. Squeeze out excess liquid from wipe or disinfecting cloth before using. Recommended wipes are hydrogen peroxide wipes and alcohol based wipes. Do not use wipes containing sodium hypochlorite (bleach).2. Gently wipe the Chromebox thoroughly, being careful to ensure no liquid drips into the Chromebox. Do not wipe on connector pins.3. After disinfecting, follow the cleaning procedure from the wipe supplier to minimize chemical buildup of disinfectant residue.4. Always allow the Chromebox to completely dry prior to any use. <p>For more information about cleaning and disinfecting, go to https://support.lenovo.com/in/en/solutions/ht035676.</p>
How do I find accessibility information?	https://www.lenovo.com/accessibility
What app works on a Chromebox?	Chromeboxes use apps from the Google Play Store and on the Web page, instead of traditional apps. There are apps to be productive, get creative, enjoy movies and shows, play games and more.
How do I get more apps?	Download Chromebox apps from the Google Play Store app. Find the app by clicking the Launcher icon and searching Play Store.
Can I use Microsoft Office software?	Chromeboxes work with Microsoft® Word, Excel®, and PowerPoint®. You can download the apps from the Google Play Store or use them on the Web page. Additional functionality available with a Microsoft 365 subscription.
Where can I find my files?	All your files are stored in the Files app. Find the app by clicking the Launcher icon and searching Files.
How do I transfer my local files?	Transfer your local files using a compatible storage device. Your Chromebox works with most external storage devices ,such as a USB key or removable hard disk drive.

Why does my Chromebox need my Google Account information?	You will use your Google Account to sign in to your Chromebox. It is the same account you use for Google services such as Gmail and Drive. Your Chromebox uses your account information to sign you into apps and services automatically.
How do I set up this Chromebox for my child?	If you want to set up parental controls for your child, it is important that you sign in using your child's personal Google Account. If they do not have one yet, you can create one during the sign-in process on your Chromebox.

Get help from Google

After signing in to your Chromebox, start Get Help from the app Launcher. The Get Help app provides comprehensive instructions on using your Chromebox.

In addition, if you are interested in visiting the Chromebox Help Center and Community, go to <http://google.com/support/chromebook>.

Note: The instructions concerning Chrome OS is applicable to those of your Chromebox.

Call Lenovo

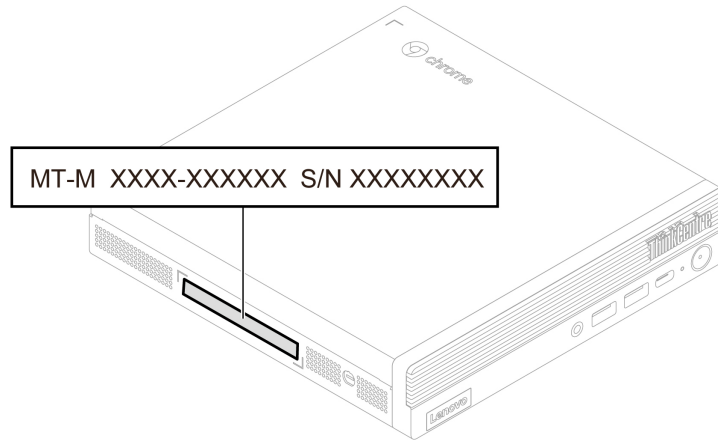
If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

Before you contact Lenovo

Prepare the following before you contact Lenovo:

1. Record the problem symptoms and details:
 - What is the problem? Is it continuous or intermittent?
 - Any error message or error code?
 - What operating system are you using? Which version?
 - Which software applications were running at the time of the problem?
 - Can the problem be reproduced? If so, how?
2. Record the system information:
 - Product name
 - Machine type and serial number

The following illustration shows where to find the machine type and serial number of your Chromebox.



Lenovo Customer Support Center

During the warranty period, you can call Lenovo Customer Support Center for help.

Telephone numbers

For a list of the Lenovo Support phone numbers for your country or region, go to:

<https://pcsupport.lenovo.com/supportphonenumberlist>

Note: Phone numbers are subject to change without notice. If the number for your country or region is not provided, contact your Lenovo reseller or Lenovo marketing representative.

Services available during the warranty period

- Problem determination - Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair - If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.
- Engineering change management - Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) that apply to your hardware available.

Services not covered

- Replacement or use of parts not manufactured for or by Lenovo or nonwarranted parts
- Identification of software problem sources
- Configuration of UEFI BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of programs

For the terms and conditions of the Lenovo Limited Warranty that apply to your Lenovo hardware product, see *Safety and Warranty Guide* that comes with your Chromebox.

Chapter 4. CRU replacement

Customer Replaceable Units (CRUs) are parts that can be upgraded or replaced by the customer. Lenovo Chromeboxes contain the following types of CRUs:

- **Self-service CRUs:** Refer to parts that can be installed or replaced easily by customer themselves or by trained service technicians at an additional cost.
- **Optional-service CRUs:** Refer to parts that can be installed or replaced by customers with a greater skill level. Trained service technicians can also provide service to install or replace the parts under the type of warranty designated for the customer's machine.

If you intend on installing the CRU, Lenovo will ship the CRU to you. CRU information and replacement instructions are shipped with your product and are available from Lenovo at any time upon request. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the Lenovo Limited Warranty documentation at:

https://www.lenovo.com/warranty/llw_02

CRU list

The following is the CRU list of your Chromebox.

Self-service CRUs

- Bottom cover
- External adapter cage*
- External antenna*
- Front cover
- Keyboard*
- Memory module
- Mouse*
- Power adapter
- Power cord
- Vertical stand*
- VESA mount bracket kit*

Optional-service CRUs

- Board-to-Board module*
- M.2 solid-state drive*
- Reset board kit
- System fan and heat sink
- ThinkCentre LED cable

* for selected models

Remove or replace a CRU

This section provides instructions on how to remove or replace a CRU.

Power adapter and power cord

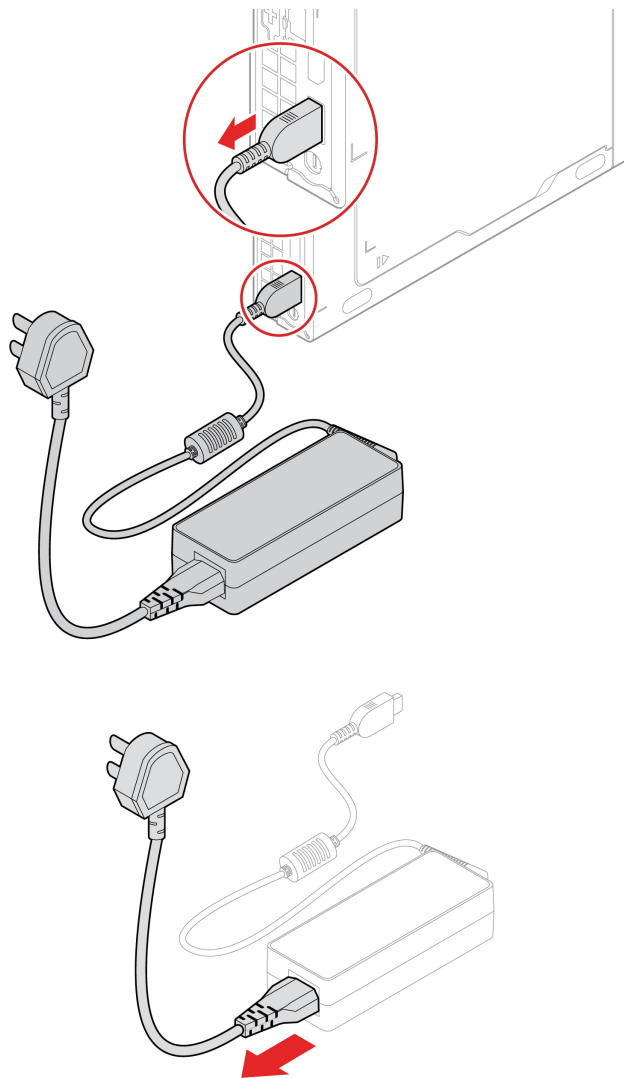
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Turn off the Chromebox and remove all connected devices and cables.
2. Disconnect the Chromebox from ac power and all connected cables.

Removal steps



Power adapter bracket

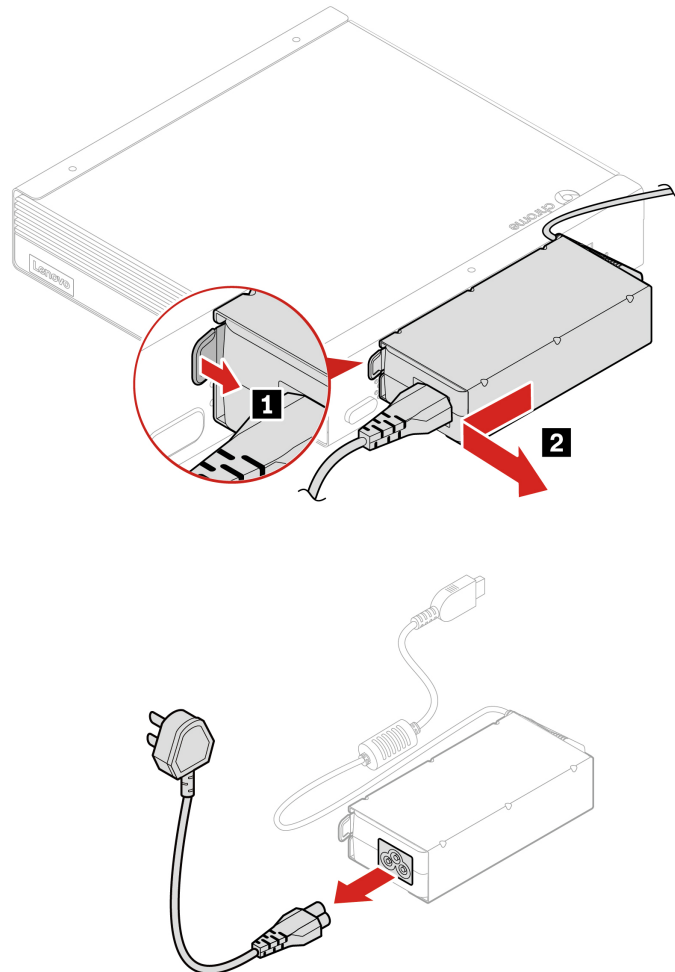
Prerequisite

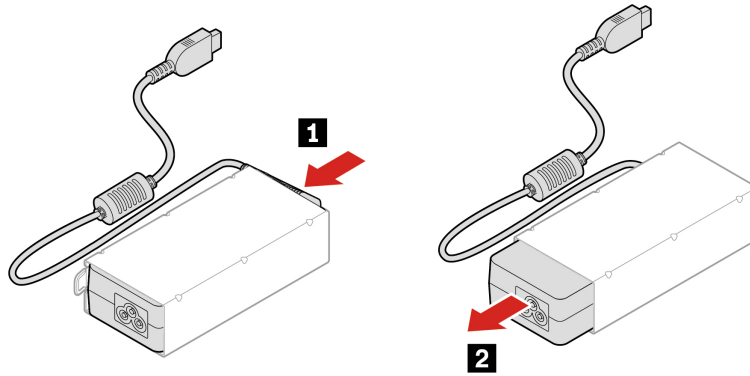
Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Turn off the Chromebox and remove all connected devices and cables.
2. Disconnect the Chromebox from ac power and all connected cables.

Removal steps





VESA mount bracket

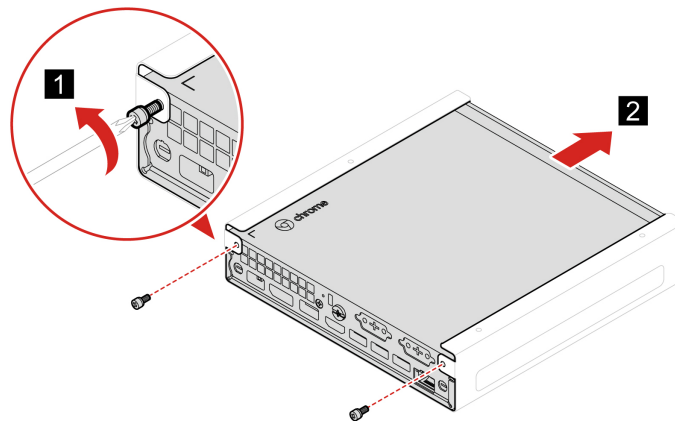
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Turn off the Chromebox and remove all connected devices and cables.
2. Disconnect the Chromebox from ac power and all connected cables.

Removal steps



Vertical stand

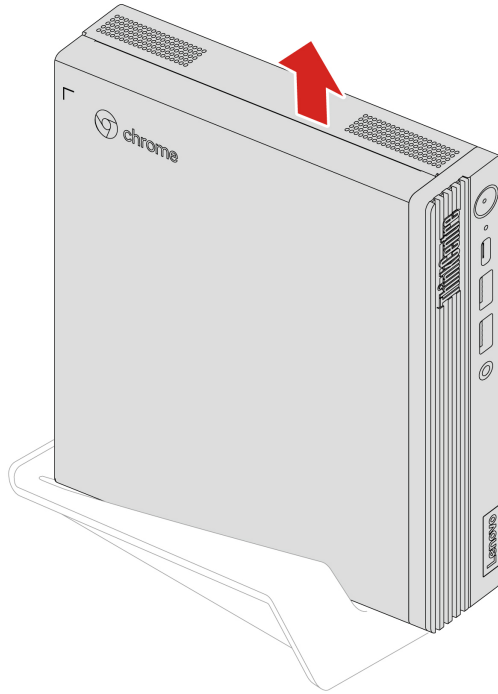
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Turn off the Chromebox and remove all connected devices and cables.
2. Disconnect the Chromebox from ac power and all connected cables.

Removal step



External Wi-Fi antenna

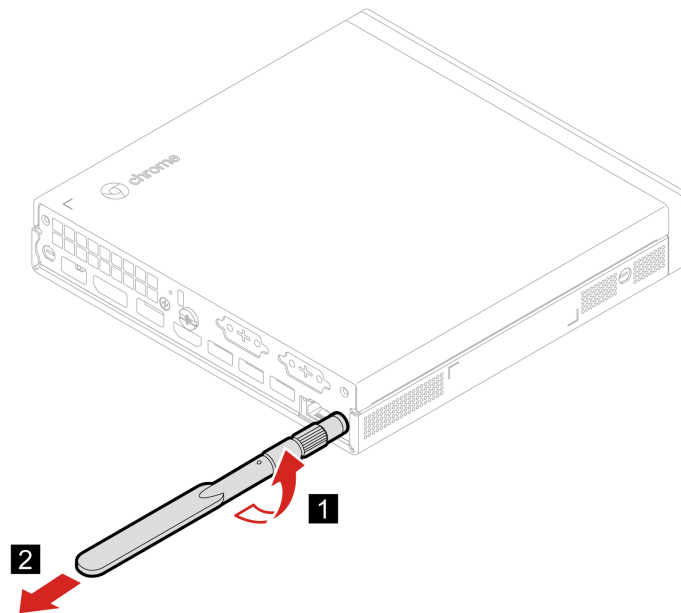
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Turn off the Chromebox and remove all connected devices and cables.
2. Disconnect the Chromebox from ac power and all connected cables.

Removal steps



Front cover

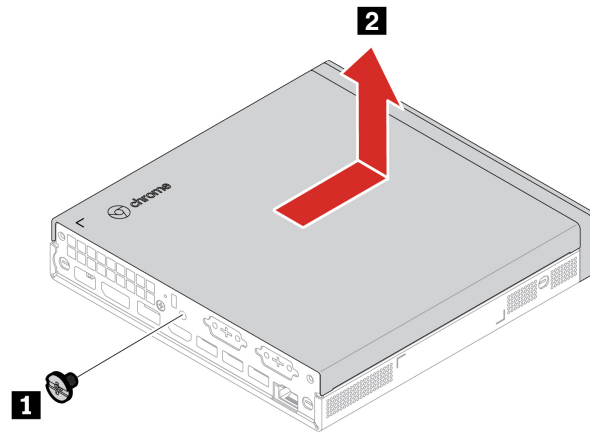
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Turn off the Chromebox and remove all connected devices and cables.
2. Disconnect the Chromebox from ac power and all connected cables.
3. Unlock any locking device that secures the front cover.
4. Remove these parts, if any:
 - “Power adapter bracket” on page 15
 - “VESA mount bracket” on page 16
 - “Vertical stand” on page 16
 - “External Wi-Fi antenna” on page 17

Removal steps



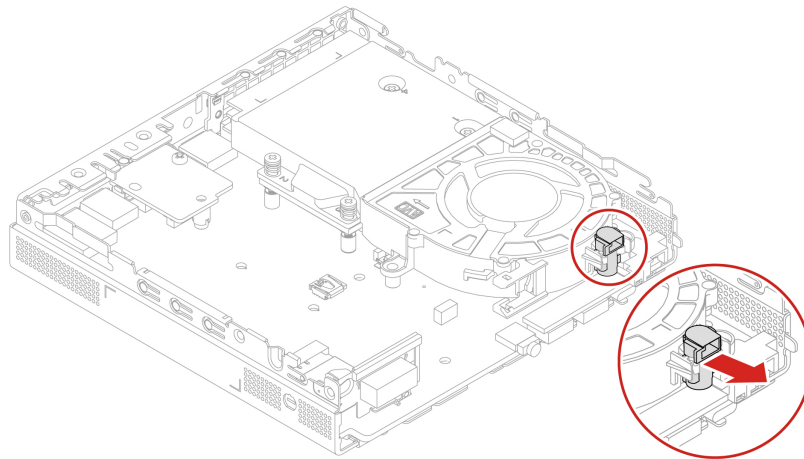
System fan and heat sink

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

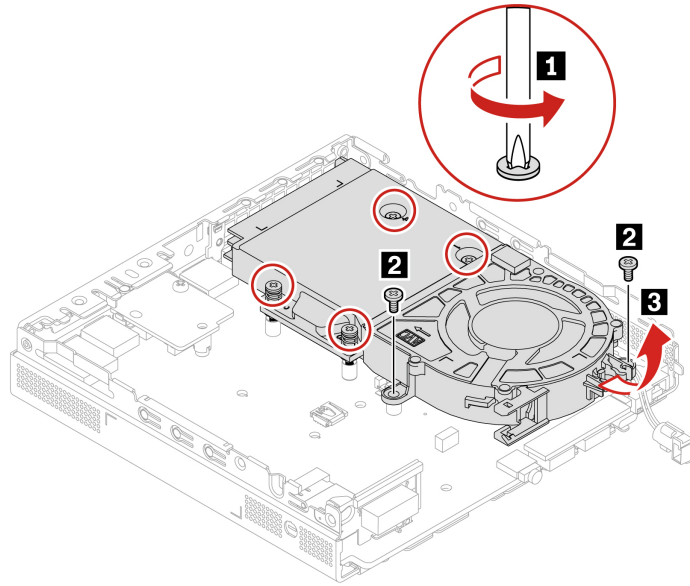
For access, do the following:

1. Remove the front cover. See “Front cover” on page 18.
2. Remove the ThinkCentre LED cable off the LED bracket.



3. Disconnect the system fan cable from the system fan connector on the system board.

Removal steps



ThinkCentre LED cable

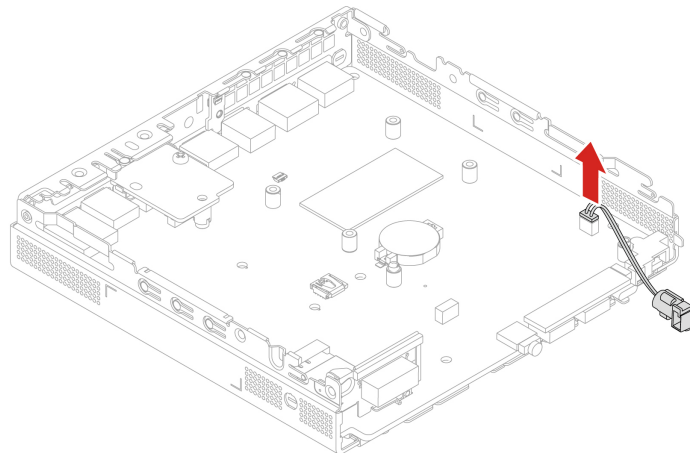
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Remove the front cover. See “Front cover” on page 18.
2. Remove the system fan and heat sink. See “System fan and heat sink” on page 19.

Removal step



Reset board kit

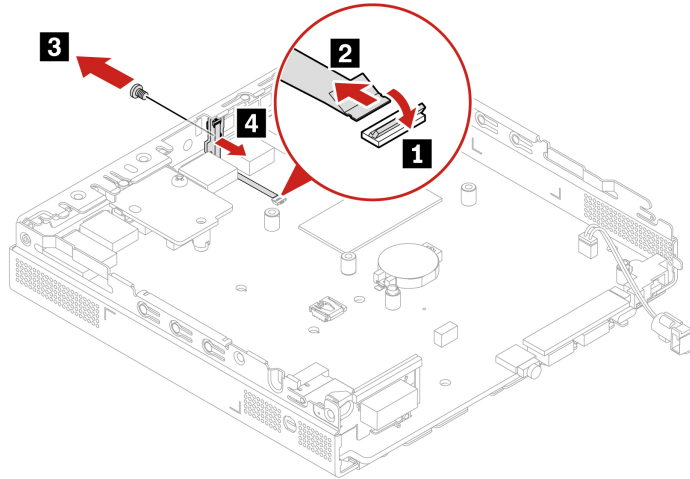
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Remove the front cover. See “Front cover” on page 18.
2. Remove the system fan and heat sink. See “System fan and heat sink” on page 19.
3. Disconnect the reset board cable from the system board.

Removal steps



Board-to-Board module

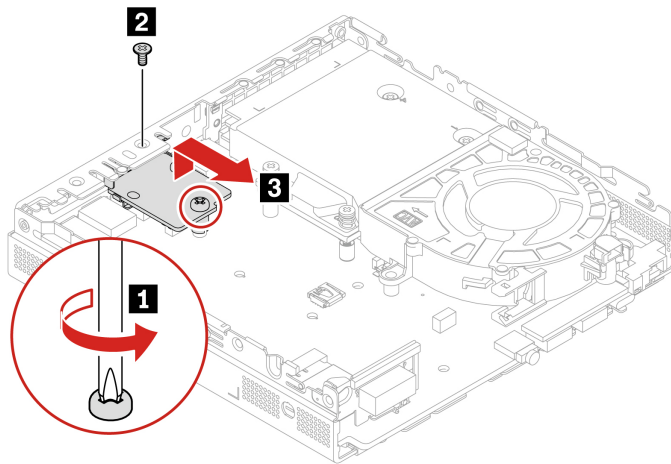
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Remove the front cover. See “Front cover” on page 18.

Removal steps



Bottom cover

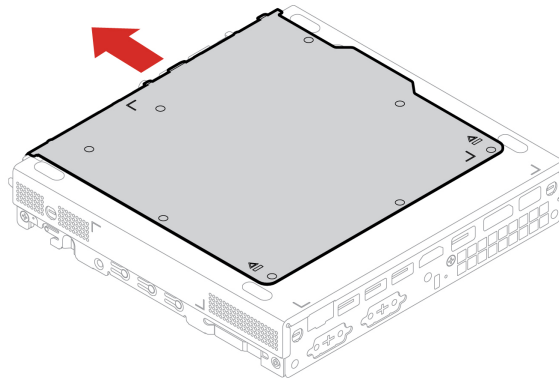
Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

- Remove the front cover. See “Front cover” on page 18.
- Turn over the Chromebox so that the bottom cover is facing up.

Removal step



M.2 solid-state drive

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

Attention: The M.2 solid-state drive is sensitive. Inappropriate handling might cause damage and permanent loss of data. When handling the M.2 solid-state drive, observe the following guidelines:

- Replace the M.2 solid-state drive only for upgrade or repair. The M.2 solid-state drive is not designed for frequent changes or replacement.
- Before replacing the M.2 solid-state drive, make a backup copy of all the data that you want to keep.
- Do not touch the contact edge of the M.2 solid-state drive. Otherwise, the M.2 solid-state drive might get damaged.
- Do not apply pressure to the M.2 solid-state drive.
- Do not make the M.2 solid-state drive subject to physical shocks or vibration. Put the M.2 solid-state drive on a soft material, such as cloth, to absorb physical shocks.

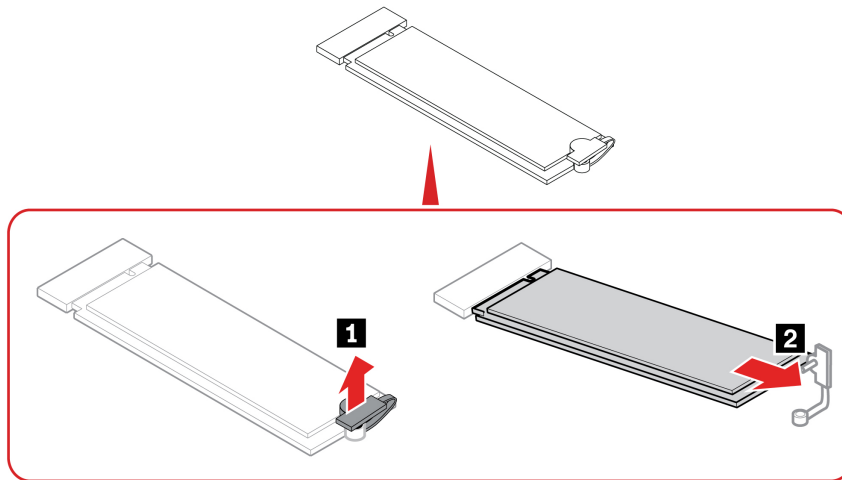
For access, remove the following parts in order:

- Remove the front cover. See “Front cover” on page 18.
- Remove the bottom cover. See “Bottom cover” on page 22.

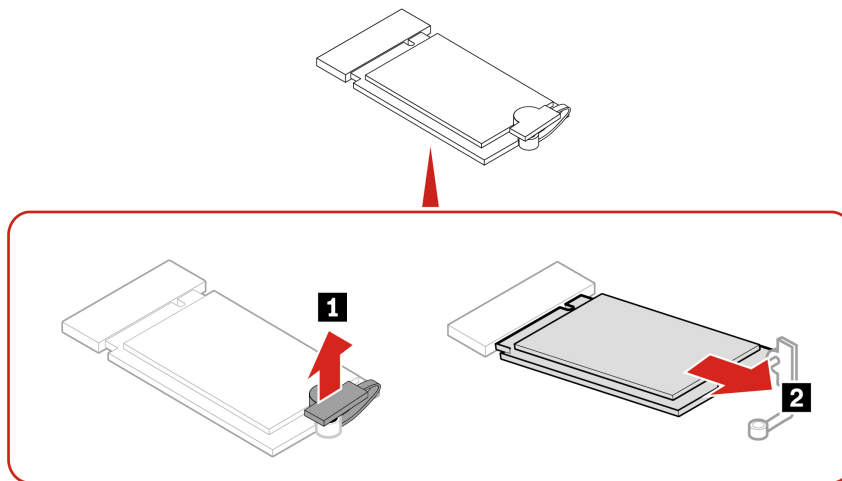
Removal steps

Note: Remove the M.2 solid state drive and the thermal pad depending on the Chromebox model.

- Type 1:



- Type 2:

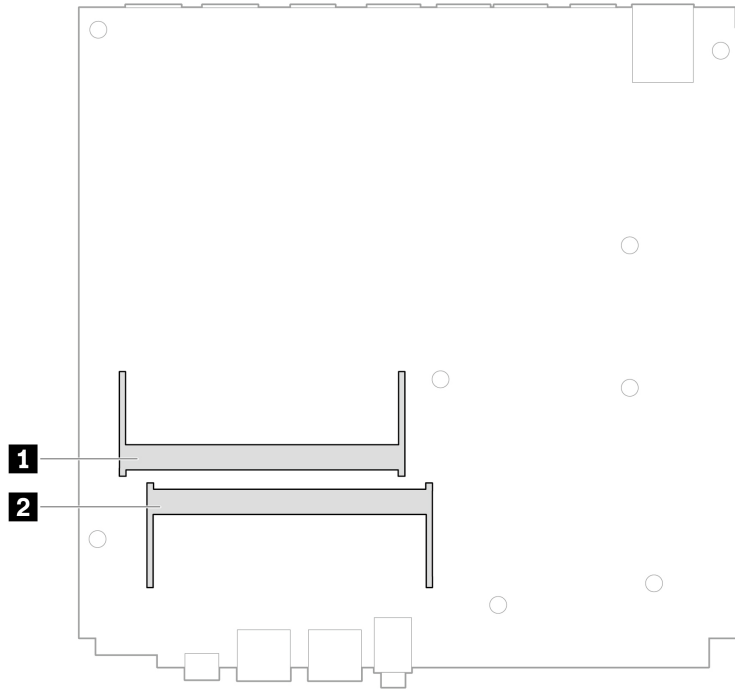


Memory module

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

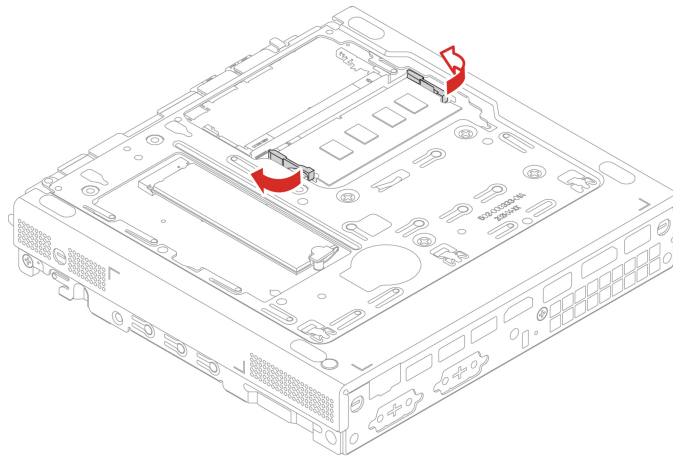
Ensure that you follow the installation order for memory modules shown in the following illustration.

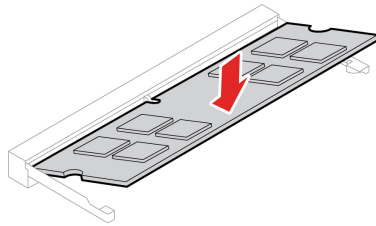
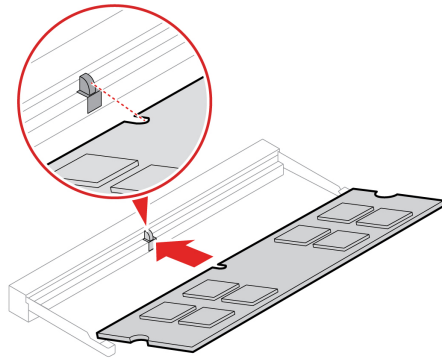
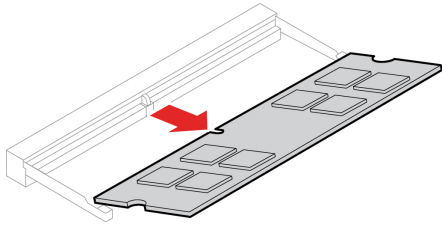


For access, remove the following parts in order:

- Remove the front cover. See “Front cover” on page 18.
- Remove the bottom cover. See “Bottom cover” on page 22.

Replacement procedure





Appendix A. Compliance information

For more compliance information, refer to *Regulatory Notice* at <https://pcsupport.lenovo.com> and *Generic Safety and Compliance Notices* at https://pcsupport.lenovo.com/docs/generic_notices.

Certification-related information

Product name: ThinkCentre M60q CR Gen 3

Machine types: 12C6, 12C7, 12C8, 12C9, 12D4, 12D5, 12D6, 12D7, 12JK, and 12JL.

Further compliance information related to your product is available at <https://www.lenovo.com/compliance>.

Safety instructions for teachers, parents and adult supervisors

This Chromebox is intended for use as a child development tool primarily by children, 6 years of age or above. There must be supervision by an adult. It is a must to have a thorough explanation to children on safe and proper handling of the computer, battery pack, and ac power adapter.

- For ITE with power supplies not intended to be handled by children: As with all electrical products, precautions should be observed handling and use to prevent electric shock. The ac power adapter should not be handled by children.
- The computer should not be placed on the bare skin (lap) of the child for long periods. The computer should be placed on a flat surface, like desktop, if your child intends to use it for more than a few minutes.
- The computer (including the ac power adapter and the battery pack, as applicable) should not be left in the rain or subjected to exposure to water. If cleaning is necessary do not immerse it in water; wipe clean with damp cloth.
- The computer (including the ac power adapter and the battery pack, as applicable) should not be dropped, crushed (stepped on) or otherwise abused.
- An adult should caution his or her child about the potential trip hazard as posed by the cable between a power source and the computer. An adult should inspect the computer (including the ac power adapter and the battery pack, as applicable) periodically for damage. Similarly, if a child notices damaged/broken parts, this should be reported to the teacher/parents/adult supervisors immediately. Damaged parts may be replaced through service provided by Lenovo.



ELECTRICALLY OPERATED PRODUCT. Not recommended for children under 3 years of age (or other intended age range). As with all electrical products, precautions should be observed during handling and use of electrical products to reduce the risk of electric shock.

Location for the FCC ID and IC ID

If you purchased your computer in the United States or Canada and the computer includes factory-preinstalled wireless modules, a piece of text containing identification strings for these modules (FCC ID and IC ID) is visible on the computer's bottom cover. The text may either be laser etched on the bottom cover or on a physical label affixed to it. To obtain the FCC ID or IC ID for the factory-preinstalled wireless module, check the bottom cover for strings directly after "FCC ID" or "IC ID".

Operating environment

Maximum altitude (without pressurization)

- Operating: From 0 m (0 ft) to 3048 m (10 000 ft)
- Storage: From 0 m (0 ft) to 12192 m (40 000 ft)

Temperature

- Operating: From 5°C (41°F) to 35°C (95°F)
- Storage:
 - For common desktop computers: From -40°C (-40°F) to 60°C (140°F)
 - For all-in-one desktop computers: From -20°C (-4°F) to 60°C (140°F)

Relative humidity

- Operating: 20%-80% (non-condensing)
- Storage: 10%–90% (non-condensing)

Open source information

Your Chromebox may include software made publicly available by Google and other third parties, including software licensed under the General Public License and/or the Lesser General Public License (the “open source software”).

You may obtain a copy of the corresponding source code for any such open source software licensed under the General Public License and/or the Lesser General Public License (or any other license requiring us to make a written offer to provide corresponding source code to you) from Lenovo for a period of three years without charge except for the cost of media, shipping, and handling, upon written request to Lenovo. This offer is valid to anyone in receipt of this device. You may send your request in writing to the address below accompanied by a check or money order for \$5 to:

*Lenovo Legal Department
Attn: Open Source Team / Source Code Requests
8001 Development Dr.
Morrisville, NC 27560*

As part of your request, please include a “UNAME” and a “CHROME VERSION” of this device available by typing: “Chrome://system” in a Chrome Browser’s address bar. Be sure to provide a return address.

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To view additional information regarding licenses, acknowledgments and required copyright notices for the open source software used in your device, type: “Chrome://credits” in the Chrome Browser’s address bar.

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Appendix B. Notices and trademarks

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