



Acer Chromebook™ Spin CP713-2W-5874 powered by an Intel® Core™ i5-10210U processor†Δ



HP Chromebook x360 14c-ca0053dx powered by an Intel Core i5-10110U processor†Δ

Intel Core processor-powered Chromebooks support your business

Two Chromebooks powered by Intel Core processors completed work-related tasks during video calls in less time than two Chromebooks powered by MediaTek Helio and AMD A6 processors

At Principled Technologies, we assessed the responsiveness of four Chromebooks:

- Acer Chromebook Spin 713 powered by an Intel Core i5-10210U processor
- HP Chromebook x360 14c powered by an Intel Core i3-10110U processor
- HP Chromebook 14A G5 powered by an AMD A6-9220C processor
- Lenovo Chromebook Duet powered by a MediaTek Helio P60T processor

We measured the time required for these Chromebooks to complete four different task sequences while connected to a four-way Google Meet™ call. In our tests, the Intel Core processor-powered Chromebooks saved time compared to the Chromebooks powered by AMD A6 and MediaTek Helio processors.



Up to **75% less time** editing photos*†Δ



Up to **42% less time** working with documents and spreadsheets*†Δ



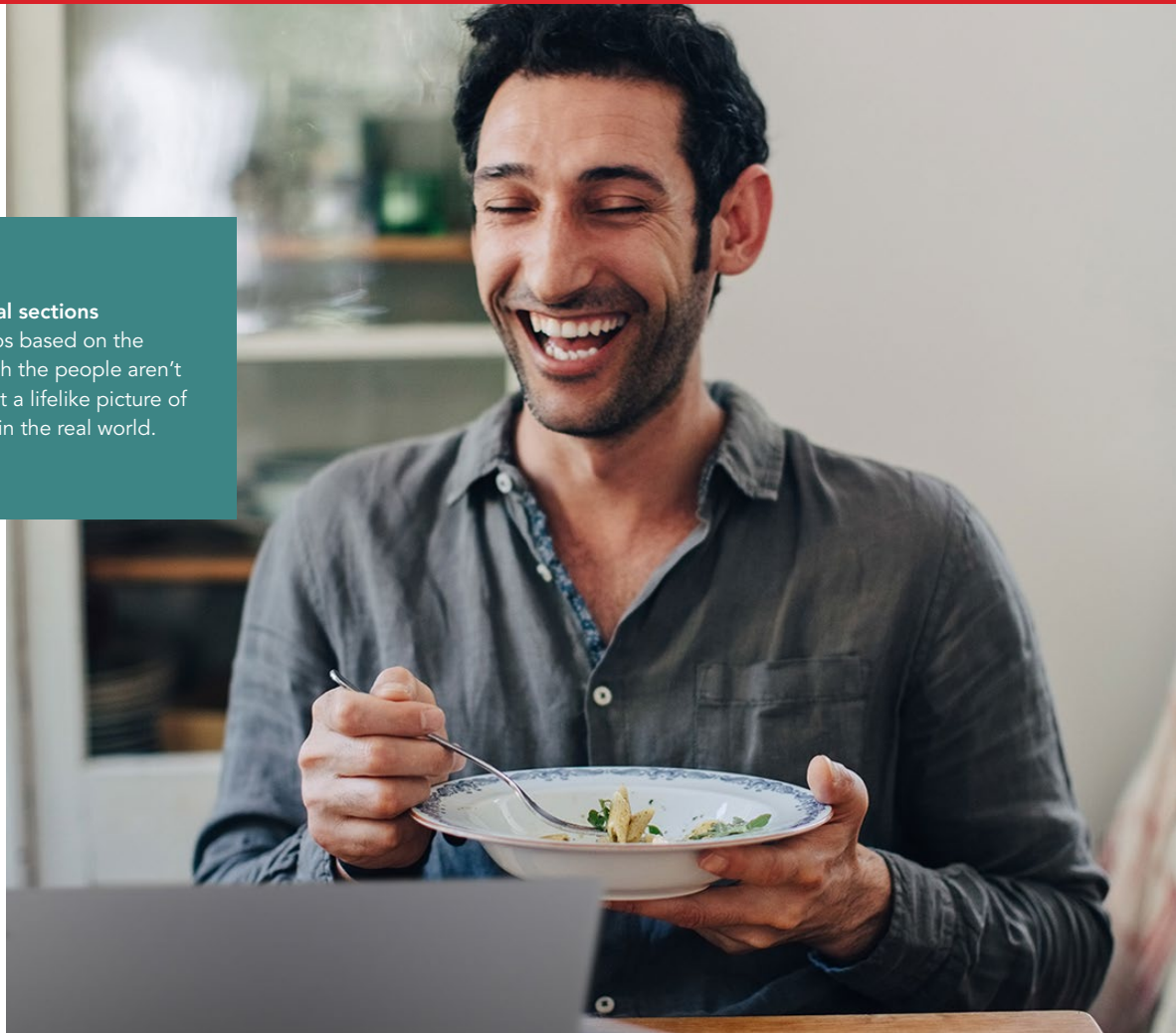
Up to **56% less time** collaborating on presentations*†Δ

* While connected to a four-way Google Meet call

† Acer Spin CP713-2W-5874 powered by an Intel Core i5-10210U processor and a HP Chromebook x360 14c-ca0053dx powered by an Intel Core i5-10110U processor compared to a HP 14A G5 TPM-Q216 with an AMD A6-9220C processor and a Lenovo Duet CT-X636F with MediaTek P60T processor

Δ See [the science behind this report](#) for detailed system configurations and benchmark results.

In this report, text in the **teal sections** represents fictional scenarios based on the results of PT testing. Though the people aren't real, the scenarios represent a lifelike picture of the benefits users may see in the real world.



How we tested

To compare the responsiveness of each Chromebook, we hand-timed four different task sequences in work-related apps. During the tests, each Chromebook was connected to a four-way Google Meet call. This reflects a real-world use case where employees need to work and collaborate while staying connected to their coworkers. Because multitasking is so common in the workplace, it pays to have a Chromebook that can handle the extra load.



[^] See [the science behind this report](#) for detailed system configurations and benchmark results.

Xiamin turns the doorknob to her usual home office space, but stops short of going inside. It feels more like a *living-room office* kind of day—so she sets up her Intel Core i5 processor-powered Chromebook on the living room coffee table and steals a bit of morning sunlight from her houseplants.

Energized and ready to take on the day, Xiamin uses her Chromebook to quickly join her team on Google Meet.



Complete daily tasks in less time while multitasking

The Chromebooks powered by Intel Core processors saved time in a variety of document and spreadsheet-based tasks. For example, when opening a Microsoft Excel document in Google Sheets™:

- **The Intel Core i5 CPU-powered Chromebook saved 27.4 seconds** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i5 CPU-powered Chromebook saved 18.2 seconds** vs. the MediaTek Helio P60T CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 23.1 seconds** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 13.9 seconds** vs. the MediaTek Helio P60T CPU-powered Chromebook

Save up to 34.6 seconds working with documents and spreadsheets during a Google Meet call with Google Meet, Google Drive™, and Google Sheets

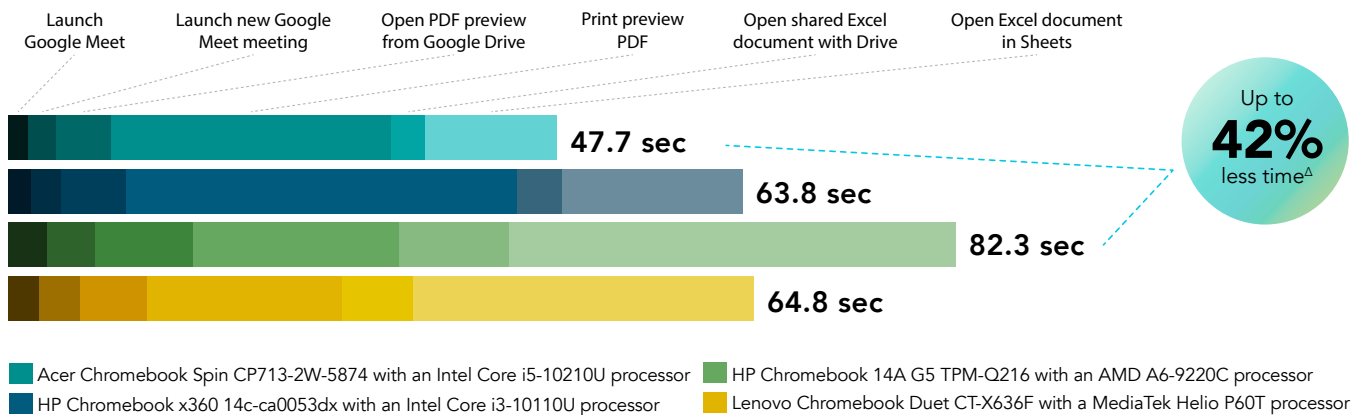


Figure 1: Time (in seconds) to complete a set of document and spreadsheet-related tasks while connected to a four-way Google Meet session. Less time is better. Source: Principled Technologies.

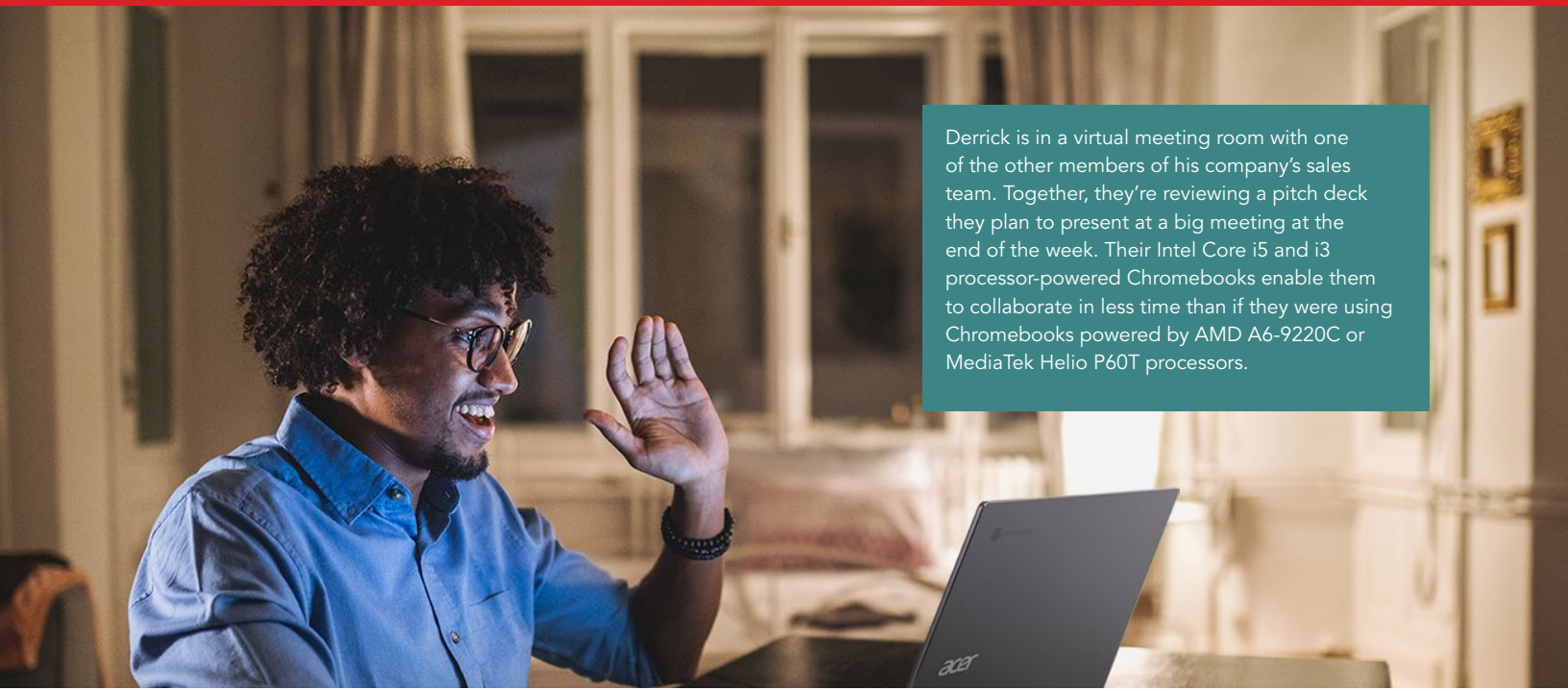
Google Meet

Google has made their premium video conferencing product free and available to the general public. According to Google, the app is used in schools, governments, and companies worldwide.¹

Google Workspaces

In October 2020, Google rebranded its G Suite app offerings as Google Workspace—but you’ll still get the same productivity and collaboration tools you’ve used in the past, including Google Docs™, Google Slides™, Google Meet, Google Drive, and more.²

^A See [the science behind this report](#) for detailed system configurations and benchmark results.



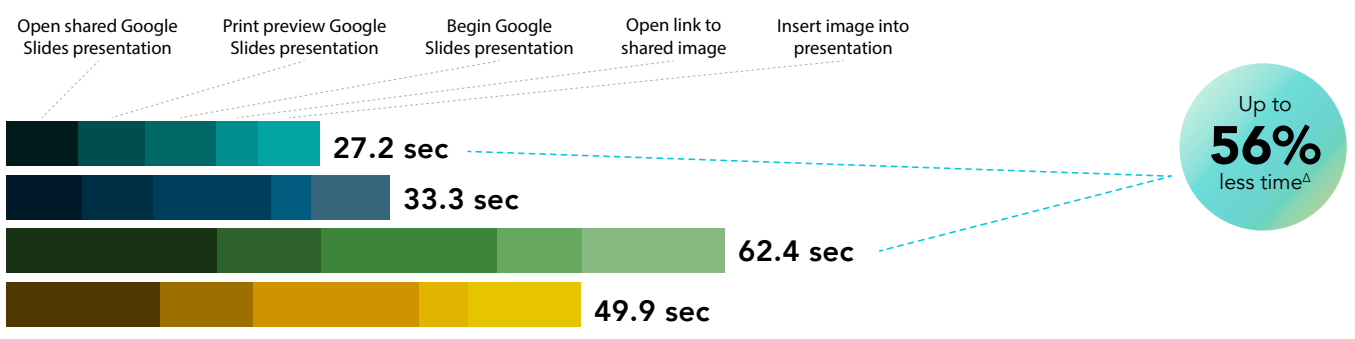
Derrick is in a virtual meeting room with one of the other members of his company's sales team. Together, they're reviewing a pitch deck they plan to present at a big meeting at the end of the week. Their Intel Core i5 and i3 processor-powered Chromebooks enable them to collaborate in less time than if they were using Chromebooks powered by AMD A6-9220C or MediaTek Helio P60T processors.

Collaborate on sales pitches in less time

In our tests, the Chromebooks powered by Intel Core processors saved time when collaborating on a presentation during a meeting. For example, when opening a shared Google Slides presentation:

- **The Intel Core i5 CPU-powered Chromebook saved 12.1 seconds** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i5 CPU-powered Chromebook saved 7.2 seconds** vs. the MediaTek Helio P60T CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 11.7 seconds** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 6.8 seconds** vs. the MediaTek Helio P60T CPU-powered Chromebook

Save up to 34.6 seconds collaborating on presentations during a Google Meet call with Google Slides and Google Drive



■ Acer Chromebook Spin CP713-2W-5874 with an Intel Core i5-10210U processor ■ HP Chromebook 14A G5 TPM-Q216 with an AMD A6-9220C processor
 ■ HP Chromebook x360 14c-ca0053dx with an Intel Core i3-10110U processor ■ Lenovo Chromebook Duet CT-X636F with a MediaTek Helio P60T processor

Figure 2: Time (in seconds) to complete a set of presentation-related tasks while connected to a four-way Google Meet session. Less time is better. Source: Principled Technologies.

[^]See [the science behind this report](#) for detailed system configurations and benchmark results.



Nadia has her hands full lately—she’s in charge of three big projects that all have deadlines coming up soon. She’s not worried, though. Nadia’s Intel Core i5 processor-powered Chromebook helps her keep in touch with all her collaborators and adjust the course of each project accordingly, enabling her to open and review critical documents in less time than it would take with an AMD A6-9220C or MediaTek Helio P60T processor-powered Chromebook.

Manage projects in less time while multitasking

In our tests, Chromebooks powered by Intel Core processors saved time when working with Microsoft Word documents. For example, while opening a Word document in Google Docs:

- **The Intel Core i5 CPU-powered Chromebook saved 8.7 seconds** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i5 CPU-powered Chromebook saved 6.8 seconds** vs. the MediaTek Helio P60T CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 8.3 seconds** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 6.4 seconds** vs. the MediaTek Helio P60T CPU-powered Chromebook

Save up to 15.0 seconds reviewing documents during a Google Meet call with Google Drive

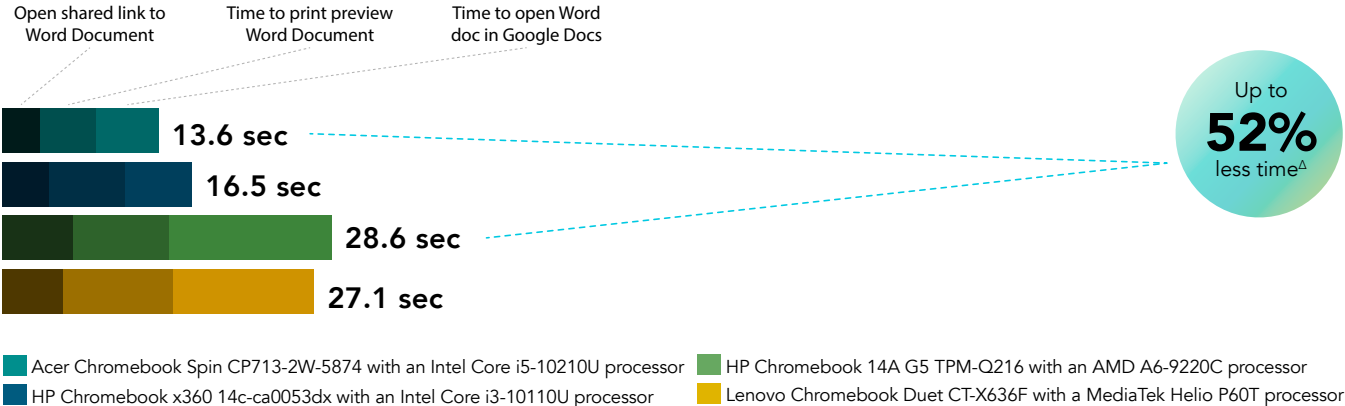


Figure 3: Time (in seconds) to complete a set of document-related tasks while connected to a four-way Google Meet session. Less time is better. Source: Principled Technologies.

^Δ See [the science behind this report](#) for detailed system configurations and benchmark results.

Tommy stares at the Intel Core i5 CPU-powered Chromebook before him, deep in thought, lost in imagination. A blur of colors whiz by as the Chromebook quickly imports dozens of beautiful hi-res images. Tommy wags his tail in anticipation.

"Want to help me with these photos?" His owner, Pierce, asks. "Oh, but how are you gonna do that with those cute little paws?"

Pierce smiles and pets Tommy on the head before realizing his mic is still on. He clears his throat and returns to work.



Create content in less time while multitasking

The two Intel Core CPU-powered Chromebooks we tested saved a significant amount of time in our photo editing scenario. For example, when exporting a set of 140 photos:

- **The Intel Core i5 CPU-powered Chromebook saved 3 min, 44 sec** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 3 min, 36 sec** vs. the AMD A6-9220C CPU-powered Chromebook
- **The Intel Core i5 CPU-powered Chromebook saved 2 min, 14 sec** vs. the MediaTek Helio P60T CPU-powered Chromebook
- **The Intel Core i3 CPU-powered Chromebook saved 2 min, 6 sec** vs. the MediaTek Helio P60T CPU-powered Chromebook

Save up to 8.2 minutes editing photos during a Google Meet call

with Google System, Adobe Lightroom®, Adobe Photoshop® Express, and Google Tour Creator

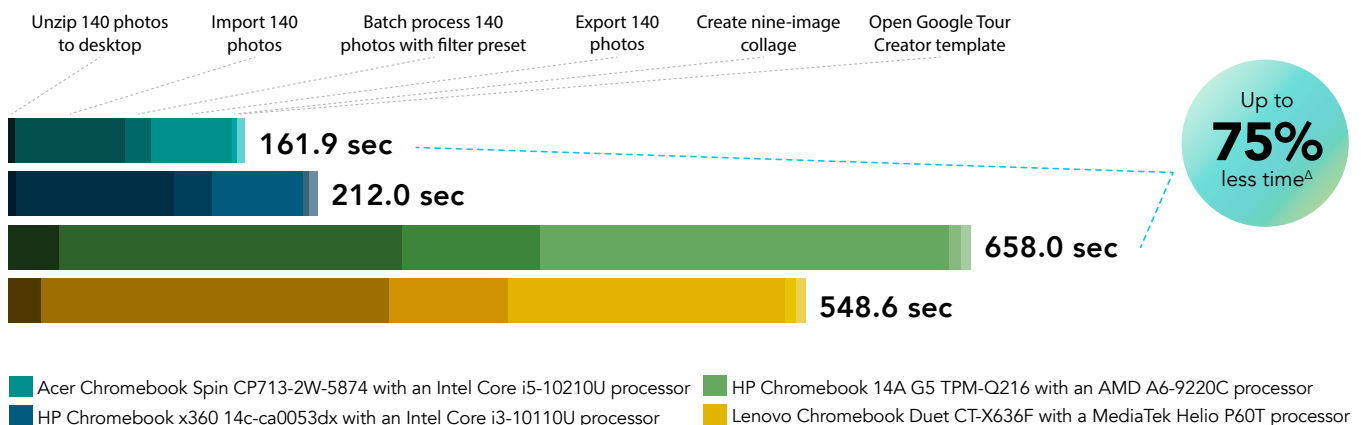


Figure 4: Time (in seconds) to complete a set of photo-related tasks while connected to a four-way Google Meet session. Less time is better. Source: Principled Technologies.

Adobe Lightroom

Adobe Lightroom is a free photo editing and camera app that enables you to use customizable filters and other options to create your next photography project.³

Adobe Photoshop Express

Photoshop Express is a free photo editing app for Android™ devices. The integrations in Photoshop Express enable you to pull photos from Google Photos and other image hosting apps and websites.⁴

^Δ See [the science behind this report](#) for detailed system configurations and benchmark results.

After a long day of editing photos, Pierce looks online for some new toys for Tommy. His Intel Core i5 processor-powered Chromebook loads pages and interactive web tools with ease. Finally, he finds the perfect toy and places an order. With any luck, it'll keep Tommy occupied and off-camera for Pierce's next co-working session.

Better web-based benchmark performance

In addition to the hand-timed multitasking scenarios, we tested each Chromebook with WebXPRT 3, a browser benchmark that uses HTML5 and JavaScript-based scenarios to compare how different devices handle real-world tasks in online apps and webpages. To learn more about WebXPRT 3, visit <https://webxpert.com>.

As Figure 5 shows, the Intel Core i5 and i3 processor-powered Chromebooks each achieved more than twice the score of the AMD A6-9220C and MediaTek Helio P60T processor-powered Chromebooks.

WebXPRT 3 benchmark score

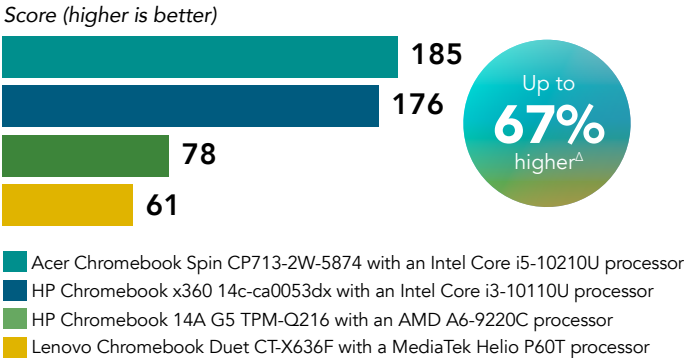


Figure 5: WebXPRT 3 web-based benchmark scores. A higher score is better. Source: Principled Technologies.



[^] See [the science behind this report](#) for detailed system configurations and benchmark results.



Conclusion

If you want your employees to be able to connect and work with each other throughout the day, they'll need Chromebooks capable of running productivity apps and video chat software at the same time. In our tests, Chromebooks powered by Intel Core i5-10210U and Intel Core i3-10110U processors saved time on a variety of tasks while connected to Google Meet sessions compared to Chromebooks powered by AMD A6-9220C and MediaTek Helio P60T processors.

To learn more about Chromebooks like the ones we tested, visit <https://intel.com/Chromebooks>.

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- 1 Javier Soltero, "Google Meet premium video meetings—free for everyone," accessed January 24, 2021, <https://www.blog.google/products/meet/bringing-google-meet-to-more-people/>.
 - 2 "Introducing Google Workspaces and a new set of offerings to better meet your needs," accessed January 24, 2021, <https://workspaceupdates.googleblog.com/2020/10/introducing-google-workspace.html>.
 - 3 "Adobe Lightroom," accessed January 24, 2021, https://play.google.com/store/apps/details?id=com.adobe.lrmobile&hl=en_US.
 - 4 "Adobe Photoshop Express," accessed February 11, 2021, <https://www.adobe.com/products/photoshop-express.html>.

We concluded our hands-on testing on December 15, 2020. During testing, we determined the appropriate hardware and software configurations and applied updates as they became available. The results in this report reflect configurations that we finalized on December 7, 2020 or earlier. Unavoidably, these configurations may not represent the latest versions available when this report appears.

Our results

To learn more about how we have calculated the wins in this report, go to <http://facts.pt/calculating-and-highlighting-wins>. Unless we state otherwise, we have followed the rules and principles we outline in that document.

Table 1: Hand-timed results (in seconds) of our task sequence testing.

Task	Acer Chromebook™ Spin CP713-2W-5874 with an Intel® Core™ i5-10210U processor	HP Chromebook x360 14c-ca0053dx with an Intel Core i3-10110U processor	HP Chromebook 14A G5 TPM-Q216 with an AMD A6-9220C processor	Lenovo Chromebook Duet CT-X636F with a MediaTek Helio P60T processor	Intel processor-powered Chromebook percent less time
Scenario #1					
Median sum of all tasks in Scenario #1	47.7	63.8	82.3	64.8	Up to 42%
Google Meet™					
Launching Google Meet	1.8	2.0	3.4	2.7	Up to 47%
Launching a new Google Meet meeting	2.4	2.6	4.2	3.6	Up to 42%
Google Drive™					
Opening a PDF preview from Google Drive	4.8	5.7	8.5	5.8	Up to 43%
Viewing a PDF print preview	24.3	33.9	17.9	17.0	Up to 28%
Google Sheets™					
Opening a shared Excel document with Google Drive	3.0	3.9	9.5	6.1	Up to 68%
Opening an Excel document in Google Sheets	11.4	15.7	38.8	29.6	Up to 70%
Scenario #2					
Median sum of all tasks in Scenario #2	27.2	33.3	62.4	49.9	Up to 56%
Google Slides					
Opening a shared Google Slides presentation	6.2	6.6	18.3	13.4	Up to 66%
Viewing a Google Slides presentation print preview	5.9	6.2	9.1	8.0	Up to 35%
Beginning a Google Slides presentation	6.1	10.2	15.3	14.5	Up to 60%
Google Drive					
Opening a link to a shared image	3.7	3.5	7.3	4.2	Up to 52%
Google Slides					
Inserting an image into a presentation	5.3	6.8	12.4	9.8	Up to 57%

Task	Acer Chromebook™ Spin CP713-2W-5874 with an Intel® Core™ i5-10210U processor	HP Chromebook x360 14c-ca0053dx with an Intel Core i3-10110U processor	HP Chromebook 14A G5 TPM-Q216 with an AMD A6-9220C processor	Lenovo Chromebook Duet CT-X636F with a MediaTek Helio P60T processor	Intel processor-powered Chromebook percent less time
Scenario #3					
Median sum of all tasks in Scenario #3	13.6	16.5	28.6	27.1	Up to 52%
Google Drive					
Opening a shared link to Word document	3.3	4.1	6.2	5.3	Up to 46%
Viewing a print preview of a Word document	4.9	6.6	8.3	9.6	Up to 49%
Opening a Word document in Google Docs	5.4	5.8	14.1	12.2	Up to 61%
Scenario #4					
Median sum of all tasks in Scenario #4	161.9	212.0	658.0	548.6	Up to 75%
Google System					
Unzipping 140 photos to desktop	5.4	6.2	35.2	22.7	Up to 84%
Adobe Lightroom®					
Importing 140 photos	74.8	107.5	234.1	241.4	Up to 69%
Batch-processing 140 photos with a filter preset	18.3	25.9	94.5	81.5	Up to 80%
Exporting 140 photos	54.8	62.6	279.0	189.2	Up to 80%
Adobe Photoshop® Express					
Creating a nine-image collage	3.2	3.9	8.7	7.2	Up to 63%
Google Tour Creator					
Opening a Google Tour Creator template	5.4	5.9	6.5	6.6	Up to 18%

Table 2: Results of WebXPRT 3 benchmark testing.

	Acer Chromebook Spin CP713-2W-5874 with an Intel Core i5-10210U processor	HP Chromebook x360 14c-ca0053dx with an Intel Core i3-10110U processor	HP Chromebook 14A G5 TPM-Q216 with an AMD A6-9220C processor	Lenovo Chromebook Duet CT-X636F with a MediaTek Helio P60T processor	Intel processor-powered Chromebook percent less time
WebXPRT 3					
Chrome web browser score	185	176	78	61	Up to 67%

System configuration information

Table 3: Detailed information on the systems we tested.

System	Acer Chromebook Spin CP713-2W-5874 with an Intel Core i5-10210U processor	HP Chromebook x360 14c-ca0053dx with an Intel Core i3-10110U processor	HP Chromebook 14A G5 TPM-Q216 with an AMD A6-9220C processor	Lenovo Chromebook Duet CT-X636F with a MediaTek Helio P60T processor
Processor	Intel Core i5-10210U	Intel Core i3-10110U	AMD A6-9220C	MediaTek P60T
Processor frequency (GHz)	1.6	2.1	1.8	2.0
Processor cores	4	2	2	8
Memory (GB)	8	8	8	4
Storage (GB)	128	64	64	64
USB	2 x USB 3.1 Type-C, 1 x USB 3.1 Gen 1	2 x USB 3.1 Type-C	2 x USB 3.1 Type-C, 2 x USB 3.1 Gen 1	1 x USB 3.1 Type-C
Battery type	Lithium ion	Lithium ion	Lithium ion	Lithium ion
Battery capacity (Wh)	48	48	47	38
Display (in.)	13.5	14.0	14.0	10.1
Display resolution	2256 x 1054	1920 x 1080	1366 x 768	1920 x 1200
ChromeOS version	87.0.4280.109	87.0.4280.109	87.0.4280.88	87.0.4280.88
System weight (lbs.)	3.02	3.64	3.48	2.03

How we tested

Creating the background workload

To simulate typical Chromebook use, we ran a combination of news, email, chat, music, document viewing, and social media websites in the background. For websites that required accounts, we created test profiles and logged in the users on each device.

1. From the shelf, open Chromebook settings.
2. Navigate to the On Startup section of the settings.
3. Select Open a specific page or set of pages.
4. Insert the following URLs, and click OK.
 - a. [Forbes.com](https://www.forbes.com)
 - b. [Markets.ft.com/data](https://markets.ft.com/data)
 - c. [Arstechnica.com](https://www.arstechnica.com)
 - d. mail.google.com
 - e. slack.com (logged into Slack chat, #general channel)
 - f. drive.google.com
 - g. docs.google.com (viewing document)
 - h. youtube.com/feed/music
 - i. drive.google.com (viewing document)
 - j. sheets.google.com (viewing spreadsheet)
 - k. twitter.com
 - l. facebook.com
5. Restart the Chromebook. Before testing, navigate through each tab to ensure that both devices have fully loaded the same content.

Application Testing

For each task, we downloaded, installed, and pinned the requisite apps to the Chrome shelf. For applications that required accounts or Google Authentication, we created test profiles and logged in the users on each device. After one run of a given scenario, we reset the Chromebook and performed two additional runs.

PowerDirector

Exporting a video project

1. From the app shelf, launch PowerDirector.
2. Click New Project.
3. Enter a project name, and click the 16:9 aspect ratio.
4. From the media browser, navigate to the test video footage. To insert the video into the timeline, click the + icon.
5. In the top right, click the play icon.
6. Click the export icon.
7. Click Save to Gallery or SD Card.
8. Leave the default resolution. Simultaneously start the timer and click Produce.
9. When the video export completes, stop the timer.

Lexis Audio Editor

Opening an audio file

1. From the app shelf, launch Lexis Audio Editor.
2. Click Open.
3. Navigate to the device's download folder, and select the test audio file.
4. Simultaneously start the timer and click Open.
5. When the audio file has fully loaded, stop the timer.

Exporting an audio file

1. From the app shelf, launch Lexis Audio Editor.
2. Click Open.
3. Navigate to the device's download folder, and select the test audio file.
4. With the test audio file loaded, click Save.
5. From the Save menu, enter a file name.
6. Simultaneously start the timer and click Save.
7. When saving completes, stop the timer.

WebXPRT 3

Running WebXPRT 3

1. Power on the device, and log in.
2. Allow the device to idle for 10 minutes to clear any background startup activity.
3. Open the default web browser, and navigate to <https://www.principledtechnologies.com/benchmarkxpert/webxpert/>.
4. Click Run WebXPRT 3.
5. Click Continue.
6. Click Start.
7. When the test completes, record the score.

Multi-tasking Scenarios

For our multitasking tests, we opened Google Meet in Chrome, and joined a four-participant video meeting. Our Chrome tab contained the background workload we described at the beginning of this section. We tested each task for a given scenario sequentially

Scenario #1

Google Meet

Launching Google Meet

1. Simultaneously start the timer and launch the Meet app from the shelf.
2. When the app fully loads and the webcam preview appears, stop the timer.

Launching a new Google Meet session

1. From the Meet main screen, simultaneously start the timer, and click New meeting.
2. When the meeting invite code appears and the webcam preview refreshes, stop the timer.
3. For the remainder of our timings, we joined a four-way video Meet, and minimized the app.

Google Drive

Opening a PDF preview from Google Drive

1. From the Google Meet chat window, simultaneously start the timer, and click the link to the test PDF.
2. When the PDF preview fully loads in the web browser, stop the timer.

Viewing a print preview of a PDF

1. From the Google Meet chat window, click the link to the test PDF shared via Google Drive.
2. When the PDF loads, simultaneously start the timer and click the Print icon.
3. When the print preview fully loads, stop the timer.

Google Sheets

Opening a shared Excel file with Google Drive

1. From the Google Meet chat window, simultaneously start the timer and click the link to the test .csv file shared via Google Drive.
2. When the document preview fully loads, stop the timer.

Opening a shared Excel file In Google Sheets

1. From the Drive document preview, simultaneously start the timer and click Open in Sheets.
2. When the Google Sheets document fully loads, stop the timer.

Scenario #2

Google Slides

Opening a shared Google Slides presentation

1. From the Google Meet chat window, simultaneously start the timer and click the link to the Google Slides test document via Google Drive.
2. When the presentation fully loads, stop the timer.

Viewing a print preview of a Google Slides presentation

1. From the Google Meet chat window, click the link to the Google Slides test document via Google Drive.
2. When the Slides presentation loads, click the File dropdown menu.
3. Simultaneously start the timer and click Print.
4. When the print preview fully loads, stop the timer.

Beginning a Google Slides presentation

1. From the Google Meet chat window, click the link to the Google Slides test document via Google Drive.
2. Simultaneously start the timer and click the Present button.
3. When the presentation fully loads, stop the timer.

Google Drive

Opening a link to a shared image

1. From the Google Meet chat window, simultaneously start the timer and click the link to the Google Photos test image via Google Drive.
2. When the photo preview fully loads, stop the timer.

Google Slides

Inserting an image into a presentation

1. Navigate back to the Google Slides test presentation.
2. With the first slide selected, click Insert, click Image, and select Upload From Computer.
3. Click to select the test image.
4. Simultaneously start the timer and click Open.
5. When the image fully loads into the document, stop the timer.

Scenario #3

Google Drive

Opening a shared link to a Word document

1. From the Google Meet chat window, simultaneously start the timer and click the link to the test .docx file shared via Google Drive.
2. When the document preview fully loads, stop the timer.

Viewing a print preview of a Word document

1. From the document preview page, simultaneously start the timer and click the print icon.
2. When the print preview fully loads, stop the timer.

Opening a Word document In Google Docs

1. From the document preview page, simultaneously start the timer and click the Open with Google Docs button from the top menu.
2. When the Google Docs editor fully loads, stop the timer.

Scenario #4

Google System

Unzipping 140 photos from the desktop

1. From the Files application, navigate to the test archive location.
2. Double-click to open the test archive using the default system viewer.
3. Select the contents of the test archive, and click and drag the contents to an empty folder.
4. Simultaneously start the timer and unclick the dragged content.
5. When the copying files dialog completes, stop the timer.

Adobe Lightroom

Importing 140 photos

1. From the app shelf, launch Adobe Lightroom from the Chrome.
2. From the Adobe Lightroom home page, click the blue import photos icon.
3. Sort by Device Folders. To select the unarchived test photos, click the checkbox next to the folder name.
4. Simultaneously start the timer and click Add.
5. When the import dialog completes, stop the timer.

Batch-processing 140 photos with a filter preset

1. From the Adobe Lightroom home page, click the collection containing the test photos.
2. Click the first image.
3. Click the Adjustments icon.
4. To apply auto-adjustments, click Auto.
5. Click the menu button in the top right, and select Copy Settings.
6. Leave the default Copy Settings, and click OK.
7. To return to the collection view, click the back arrow.
8. Long-click the first photo to select it.
9. Click the menu button in the top right, and select Select All.
10. Click the menu button in the top right again, and select Paste Settings.
11. Simultaneously start the timer and click Apply.
12. When the processing dialog closes, and "Changes applied to 140 photos" appears, stop the timer.

Exporting 140 photos

1. From the Adobe Lightroom home page, click the collection containing the test photos.
2. Click to select the first image.
3. From the dropdown menu, click to Select All images.
4. With all images selected, click the Share icon.
5. From the Share dialog box, click Export As...
6. Leave the default settings. Simultaneously start the timer and click the checkmark icon.
7. When the export dialog completes, stop the timer.

Adobe Photoshop Express

Creating a nine-image collage

1. From the app shelf, launch Adobe Photoshop Express from the shelf.
2. Click the Collage icon in the bottom right.
3. Click to select the nine test images.
4. Simultaneously start the timer and click the next arrow.
5. When the collage fully loads, stop the timer.

Google Tour Creator

Opening a Google Tour Creator template

1. Open the Chrome Browser window, and navigate to the Google Tour Creator web application at <https://arvr.google.com>.
2. Click Get Started.
3. Click the Templates tab.
4. Simultaneously start the timer and click the New York City template.
5. When the template fully loads, stop the timer.

Intel contributes to the development of benchmarks by participating in, sponsoring, and/or contributing technical support to various benchmarking groups, including the BenchmarkXPRT Development Community administered by Principled Technologies.

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