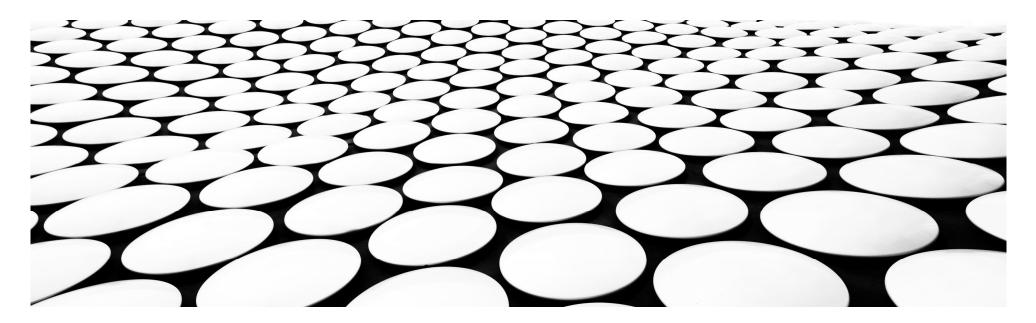
HOW TO BUY A COMPUTER

ROBSON RANCH TECH CLUB - NOVEMBER 11, 2024



INTRODUCTION

- Steve Garvin
 - IT Project Manager
 - Tech Club VP
 - Robson resident since 2022

AGENDA

- What kind of computer do you need?
 - Types of users
 - Desktop or Laptop?
 - Windows or Mac?
 - Support Team
- Common advertisement terms
- Recommended minimum configurations
- Review current advertisements
- Next steps
 - Research
 - When to buy
 - Where to buy
- Q & A

WHAT KIND OF COMPUTER DO YOU NEED?

TYPICAL ACTIVITIES

"Reader/Reviewer" Computer

- Web based e-Mail
- On-line Bills / Banking
- Internet shopping
- Surfing the internet
- Review and manage simple documents (Word, Excel, etc...)
- Zoom / Webex / Facetime

"Creator" Computer

- All the Reader/Reviewer activities <u>PLUS</u>:
- Applications (Quicken, Family Tree, etc...)
- Entertainment Movies/Streaming
- Gaming
- Manage/Edit Photographs/Videos
- Work related activities
- Create complex documents (PhotoShop, Video, etc...)

DESKTOP OR LAPTOP?

Desktop

- Not easy to move around
- Bigger screen
- Better keyboard and mouse
- Best for work extended use
- Minimum Hardware Configuration
 - 16 Gb of RAM
 - 256 Gb of storage
 - 24-inch monitor

Laptop

- Easy to move around
- Smaller screen
- Smaller keyboard and mouse
- Best for occasional use/travel
- Minimum Hardware Configuration
 - 16 Gb of RAM
 - 256 Gb of Storage
 - 15-inch monitor

WINDOWS OR MAC - PART 1

Windows PC

- MANY computer manufacturers
- User Interface (UI) is familiar to most people
- Stable operating system with Windows 11
- Computers may allow you to upgrade memory & storage after purchase
- Vulnerable to Viruses!

Mac

- Only manufacturer is Apple
- Good customer service (only one source, Apple)
- User Interface (UI) is like Windows but different
- Very stable operating system
- Computers are usually difficult to upgrade memory or storage after purchase
- Some claim it is best for media creation/edit
- Vulnerable to Viruses!
 - Macs are not as popular as Windows, so less viruses are created for Macs <u>BUT</u> that doesn't mean you are not vulnerable

WINDOWS OR MAC - PART 2

- Windows PC
 - Usually cheaper
 - Most people are familiar with Windows
 - Generally, more software is available *
 - Easier to upgrade

- Mac
 - High quality hardware and software
 - Integration with other Apple devices
 - iPhone and iPad
 - Calls
 - Photos
 - Messages
 - Mail
 - Calendar
 - FaceTime
 - Notes
 - Apple Watch
 - Apple TV

^{*} SOFTWARE - More software is created for Windows but most popular software is available on both Windows and the Mac

SUPPORT TEAM

- Who is your support team?
 - Self
 - Relatives
 - Neighbors
 - Friends
 - Professionals at a store
- Are they most familiar with Windows or Mac?

COMMON TERMS - HARDWARE

CPU / Processor – A chip that is the Central Processing Unit. The "brain" of a computer.



GPU – Graphics Processing Unit. Used to control the monitor(s). Very important for gaming or video/photo editing.



■ GHz – GigaHertz – Speed of operation for a CPU or GPU. The higher number is better ©

CPU PROCESSORS

- Windows
 - Intel Processors



- Core i3 Good
- Core i5 Better
- Core i7 Even Better
- Core i9 Best
- AMD Processors



- Ryzen 5 7600 Good
- Ryzen 7 5700X Better
- Ryzen 9 9950X Best

The Intel i9 and AMD Ryzen 9 are wonderful processors but should only be purchased if you need a powerful business computer. Most desktops and laptops designed for personal use will operate just fine with an Intel i5 / i7 or an AMD Ryzen 5 / Ryzen 7.

Mac



- Intel Older, do not buy
- M1 Apple's 1st generation processor (2020) Older, do not buy
- M2 Apple's 2nd generation processor (2022) Good
- M3 Apple's 3rd generation processor (2023) Better
- M4 Apple's 4th generation processor (2024) Best

Any Apple computer with an Intel or M1 processor is older and will probably only show up in refurbished computers. These are too old to consider purchasing.

 Part of Intel's 300 row spreadsheet describing their processors



COMMON TERMS – STORAGE

- RAM Volatile memory storage that is cleared when the power is turned OFF
- STORAGE Usually refers to the non-volatile memory storage that is <u>retained</u> when the power is turned off
- HDD Hard Disk Drive. A drive that stores information on spinning magnetic platters
 - Very common. Cheaper, older technology with moving parts and generally the slowest format



- GOOD
- HHD Hybrid Hard Drive. A drive that combines a small SSD and a larget HDD. Not common. HDD provides cheaper storage, and the SSD provides some cached storage to improve performance.
 - Combination of moving and non-moving parts. Better than the HDD, not as good as the SSD. Not very popular or widely used. More expensive than an HDD.
 - BETTER
- SSD Solid State Drive. A drive that does not have any moving parts. More reliable and faster than HHD or HDD.
 - Newer technology. No moving parts provide more reliability, faster performance, and less power requirements. More expensive than an HDD
 - Usually found in a laptop, some desktops
 - BEST

STORAGE NEEDS

- MB, GB, and TB Measurements of the size of the data storage device
 - MB Megabytes BIG One MILLION characters 1,000,000
 - GB Gigabytes BIGGER One BILLION characters or One THOUSAND Megabytes 1,000,000,000
 - TB Terabytes BIGGEST One THOUSAND Gigabytes of characters or one MILLION Megabytes 1,000,000,000
- HOW MUCH DO I NEED?
 - OPERATING SYSTEMS Require at least 64GB
 - APPLICATIONS/DOCUMENTS/MOVIES/GAMES/PHOTOS
 - From Best Buy, "For people who consider themselves hobbyists and enthusiasts who actively capture photos and videos, a storage plan in the range of 50GB to 200GB should cater to your needs."
 - CURRENT USAGE What do you use now?
 - BUY MORE Overkill is underrated!

CLOUD STORAGE

- CLOUD STORAGE Provides an internet-assisted storage option
 - Accessible on your computer, phone, tablet, and on a web browser
 - For the following options, it is SAFE and works on BOTH Windows and Mac
 - Google Drive (Google)
 - 15 GB FREE
 - 100 GB \$19.99/year
 - 2 TB \$99.99/year
 - Microsoft 365 with One Drive Storage space combined with the MS Office Applications
 - 100 GB \$19.99/year Includes WEB and mobile versions of Outlook, Word, Excel, and other software
 - 1 TB \$69.99/year Local versions of Outlook, Word, Excel, and other software
 - Family \$99.99/year The 1 TB plan for you and 5 others
 - iCloud (Apple)
 - 50 GB \$.99/month
 - 200 GB \$2.99/month
 - 2 TB \$10.99/month

COMMON TERMS - MONITORS





- SEVERAL OPTIONS for a high-quality monitor!
- GOOD HD or FHD Monitor High Definition or Full high-definition Monitor. 1920 x 1080 resolution. This is the same as your 1080p TV.
- **BETTER** QHD Monitor Quad Hi-Def Monitor. 2560 x 1440 resolution.
- BEST UHD Display Ultra Hi-Def Monitor. 3840 x 2160 resolution. Same as a 4K TV.



READER/REVIEWER

RECOMMENDED DESKTOP OR LAPTOP MINIMUM CONFIGURATIONS

- Processor
 - An Intel i3 "works", but...
 - Intel i5 or AMD Ryzen 5
- RAM
 - 8 Gb "works", but...
 - 16 Gb of RAM
- Storage
 - 256 Gb of HDD storage
 - Anything less, and you run the risk of not having enough storage space
- Monitor
 - Desktop 24-inch HD monitor
 - Laptop 15-inch monitor



CREATOR

RECOMMENDED DESKTOP OR LAPTOP MINIMUM CONFIGURATIONS

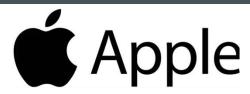
- Processor
 - Intel i5 or AMD Ryzen 5
- RAM
 - 16 Gb is minimum.
- Storage
 - 512 Gb of HDD storage
- Monitor
 - Desktop 24-inch HD monitor
 - Laptop 15-inch monitor
- configuration32 Gb of RAM is better. This can be added later and it is usually not very expensive.
- 1 Tb or more of SDD storage is better.



CREATOR

RECOMMENDED DESKTOP OR LAPTOP "BETTER" CONFIGURATIONS

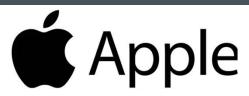
- Processor
 - Intel i7 or AMD Ryzen 7
- RAM
 - **32** Gb
- Storage
 - 1 Tb or more of SDD storage
- Monitor
 - Desktop 34-inch HD monitor
 - Laptop 17-inch monitor
- Desktop RAM and Storage can usually be upgraded later, and it is usually not too expensive.
- Laptop RAM and Storage "may" allow upgrades later.



READER/REVIEWER

RECOMMENDED DESKTOP OR LAPTOP MINIMUM CONFIGURATIONS

- Processor
 - M2 (2022)
- RAM
 - 8 Gb "works", but...
 - 16 Gb of RAM
- Storage
 - 256 Gb of HDD storage
 - Anything less, and you run the risk of not having enough storage space
- Monitor
 - Desktop 24-inch HD monitor
 - Laptop 15-inch monitor



CREATOR

RECOMMENDED DESKTOP OR LAPTOP MINIMUM CONFIGURATIONS

- Processor
 - M2 (2022)
- RAM
 - 16 Gb of RAM
 - 32 Gb is Better, but \$
- Storage
 - 512 Gb of SSD storage
- Monitor
 - Desktop 24-inch monitor
 - Laptop 15-inch monitor



CREATOR

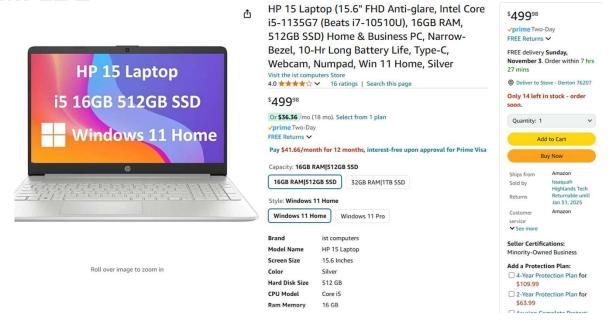
RECOMMENDED DESKTOP OR LAPTOP "BETTER" CONFIGURATIONS

- Processor
 - M4, M4 Max, or M4 Pro (2024)
- RAM
 - 16+ Gb
- Storage
 - 1 Tb Gb of SSD storage
- Monitor
 - Desktop 34-inch monitor
 - Laptop 15 or 16-inch monitor



- 15-inch HD screen GOOD
- Intel i3 Processor ???
- 32 Gb RAM GOOD
- 1TB SSD GOOD

i3 Processor may make this a slow computer. This may be why it is a little cheaper



- 15-inch Full HD screen GOOD
- Intel i5 Processor BETTER
- 16 Gb RAM GOOD
- 512Gb SSD GOOD

Might be a better deal than example 1 for only \$80 more...



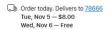
- 13.3-inch screen BAD
- Intel Processor BAD
- 8 Gb RAM BAD
- 128 GB SSD BAD

i3 Processor may make this a slow computer. This may be why it is a little cheaper

- 15-inch screen GOOD
- M3 Processor GOOD
- 16 Gb RAM GOOD
- 512 GB SSD GOOD

Refurbished 15-inch MacBook Air Apple M3 Chip with 8-Core CPU and 10-Core GPU -Starlight

\$1,279.00



Order now. Pick up, in store:
Wed, Nov 6 at Apple Barton Creek



Add to B

Need a moment?

Keep all your selections by saving this device to Your Saves, then come back anytime and pick up right where you left off.

☐ Save for later

Need some help? Contact us >





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Product Information

Overview

Originally released March 2024

15.3-inch (diagonal) LED-backlit display with IPS technology;

2880-by-1864 native resolution at 224 pixels per inch

16GB unified memory

512GB SSD²

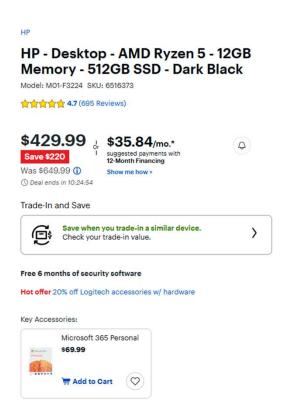
Touch ID

1080p FaceTime HD camera Two Thunderbolt/ USB 4 ports

DESKTOP EXAMPLE 1

- AMD Ryzen 5 GOOD
- 12 Gb RAM BAD
- 512 GB SSD GOOD





DESKTOP EXAMPLE 2

- Intel i5 Processor GOOD
- 16 Gb RAM GOOD
- 1 TB SSD GOOD



HP - Envy Desktop with Windows 11 Pro - Intel Core i5 - 16GB DDR4 Memory - 1TB SSD - Black Model: TE01-5244 SKU: 6577690 ☆☆☆☆ 4.8 (6 Reviews) \$699.99 J \$29.17/mo.* suggested payments w 0 suggested payments with 24-Month Financing. Save \$150 Was \$849.99 ① ① Deal ends in 10:21:10 Trade-In and Save Save when you trade-in a similar device. Check your trade-in value. Free 6 months of security software Hot offer You're going to need Word, Excel, and PowerPoint System Memory (RAM): 16GB

12GB

16GB

OTHER THOUGHTS - DESKTOPS

- CD/DVD Drives Some Desktops or Laptops will not have one.
- Most Desktop computers should include a keyboard and mouse.
- Usually, a Desktop will NOT come with:
 - Webcams A webcam/microphone will allow you to participate in a Zoom/Webex conference call.
 - Speakers Some monitors have speakers that can be utilized.
 You may have to purchase external speakers.
 - WiFi Most Desktops will come with WiFi. Some older models may not include this.
 - Monitor You may be able to use an existing monitor, or you will need to purchase a new monitor.







OTHER THOUGHTS - LAPTOPS

- Weight
 - 16" LG Gram weighs 2.8 pounds
 - 14" M4 Macbook Air weighs 3.4 pounds
- Battery Life
 - Some laptops claim "up to" 24 hour battery life....
- Some accessories a Laptop may need:
 - USB Hub A laptop has a limited number of available connections.
 This allows for the addition of several different connections.
 - Keyboard/Mouse You may desire a larger keyboard or an actual mouse instead of a touchpad.
 - PC and Mac keyboards are different. Same but different!
 - Monitor A larger monitor can be attached to act as the main display or to extend your laptop display.
 - Case A case/backpack should be purchased to protect your laptop while traveling.







MONITORS...



LG 24MP60G-B 24" Full HD (1920 x 1080) IPS Monitor with AMD FreeSync and 1ms MBR Response Time, and 3-Side Virtually Borderless Design - Black

Visit the LG Store 4.6 ★★★★☆ ✓ 1,520 ratings | Search this page

Amazon's Choice

2K+ bought in past month

\$9999

Or \$33.33 /mo (3 mo). Select from 2 plans

√prime

FREE Returns >

Get a \$150 Amazon Gift Card instantly upon approval for Prime Visa. No annual fee

May be available at a lower price from other sellers, potentially without free Prime shipping.

Display Size: 24 Inches

24 Inches \$99.99 \$129.99

Brand

LG

MONITORS...



ViewSonic VA3209M 32 Inch IPS Full HD 1080p Monitor with Frameless Design, 75 Hz, Dual Speakers, HDMI, and VGA Inputs for Home and Office,Black

Visit the ViewSonic Store

4.6 ★★★★☆ ✓ 351 ratings | Search this page

Amazon's Choice

1K+ bought in past month

\$14849

Or \$14.92 /mo (12 mo). Select from 1 plan

✓prime Two-Day

FREE Returns 🗸

Get a \$200 Gift Card: Pay \$0.00 \$148.49 upon approval for Prime Visa. No annual fee.

Only 1 left in stock - order soon.

Brand ViewSonic
Screen Size 32 Inches
Resolution FHD 1080p
Aspect Ratio 16:9

Screen Surface Anti-Glare, Hard Coating (3H)

Description

MONITORS...



LG 49" UltraGear DQHD (5120x1440) Curved Gaming Monitor, 240Hz, 1ms, VESA DisplayHDR 1000, HDMI 2.1, DisplayPort, 4-Pole HP Out DTS HP:X, AMD FreeSync Premium Pro, Tilt/Swivel/Height Stand, Black

Visit the LG Store

4.4 ★★★★★ ✓ 2,649 ratings | Search this page

100+ bought in past month

-10% \$89999

List Price: \$999.99 fb

Or \$53.15 /mo (24 mo). Select from 1 plan

√prime

FREE Returns V

Get a \$150 Gift Card: Pay \$749.99 \$899.99 upon approval for Prime Visa. No annual fee.

May be available at a lower price from other sellers, potentially without free Prime shipping.

Size: 49 Inch



NEXT STEP?

- RESEARCH, RESEARCH, RESEARCH!
 - Helpful websites
 - www.pcmag.com PC Magazine
 - www.consumerreports.org Consumer Reports
 - www.popularmechanics.com Popular Mechanics
 - www.cnet.com Popular technology website
 - www.tomsguide.com Good independent review site
 - www.cultofmac.com Website dedicated to Apple computers
 - www.macrumors.com Website dedicated to Apple computers
- For example, search Google for "2024 Laptop reviews" or "2024 Desktop reviews" and look for the above sites.
- Use Google and YouTube to search for the specific computer you are interested in purchasing. Use the model number (best) or description along with "review". For example, "HP TE01-5244 review".
- Be careful, some websites are less about a review and more about a paid commercial.
- Check with your support team!

WHEN TO BUY?

- Black Friday Friday, November 29, 2024
- Cyber Monday Monday, December 2, 2024
- Search Google "2024 black Friday sales" or "2024 cyber Monday sales"
- "Back to School" sales
- Amazon Prime Days

WHERE TO BUY FROM?

- Ebay NO!
- Facebook NO!
- Amazon Look for something that has "Ships from Amazon".
 - You may want to contact Amazon to ensure it is returnable within 30 days.
- Hard to go wrong with these:
 - Direct from the manufacturer (HP, Dell, Apple, Lenovo, LG, ASUS, etc...)
 - Don't forget to look at their "refurbished" equipment. Usually comes with a manufacturer's warranty.
 - Best Buy www.bestbuy.com
 - Costco www.Costco.com
 - Sam's Club www.samsclub.com
 - New Egg www.newegg.com
 - Micro Center www.microcenter.com
- Should I purchase a protection plan?
 - For Windows, options should be the manufacturer or a major retailer.
 - For Mac, AppleCare should be the only option.

I BOUGHT IT, NOW WHAT?

- Training
 - Contact your support team!
 - Google and YouTube are your friends
 - "How do I _____ on Windows 11" / "Why does my Mac display _____"
- Initial setup
 - May need a Microsoft account or an Apple ID
- Antivirus software selection
- Cloud storage selection
- RR Tech Club! Come to meetings, ask questions, and meet wonderful people!

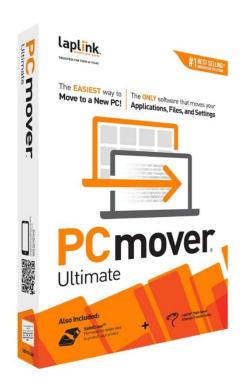
OUT OF SCOPE:

CHROMEBOOKS

TABLETS

MOVING TO A NEW COMPUTER

PCmover Ultimate



Robson Ranch (Denton) Tech Club Security Update For November 2024

Robson Ranch (Denton) Tech Club Security Update For November 2024

- Fradulant Emergency Data Requests
 - Bad Actors Access to Legal and Formal Data
 - Effects Mainly Commercial Business
 - Be Aware

Q&A