

Weekly Deals

Enjoy great savings on select products.
Plus, get FREE shipping storewide.

SHOP

EXPERT SALES HELP: 1-866-625-3906

ORDER STATUS

CUSTOMER SERVICE

DISCOUNT PROGRAMS

MY HP REWARDS

SIGN IN/REGISTER



Explore

Shop

Support

What are you looking for?



HP TECH TAKES /...

Exploring today's technology for tomorrow's possibilities



HOME



Specifications of Personal Computers Over Time

September 28, 2021

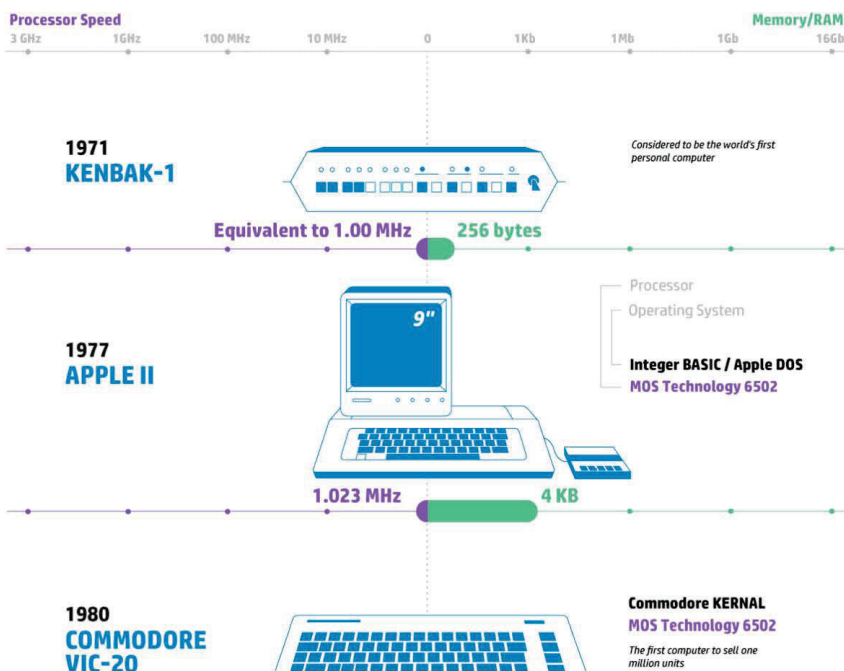
Reading time: 2 minutes

The Kenbak-1 is generally regarded as the world's first personal computer. Only 50 were ever built, and they cost \$750 in 1971 (more than \$5,000 in today's dollars). It had just 256 bytes of RAM, and while there was no true microprocessor as we know it in modern times, its processing speed was the equivalent of 1 megahertz. In comparison, the recent HP Pavilion All-in-One has 16 gigabytes of RAM and 20 gigahertz of processing speed. PC specs have certainly come a long way in the past 50 years!

The HP research team has reviewed some of the most popular personal computers throughout history to see just how computer specs have changed over time.

[Click to view the full-size infographic](#)

SPECIFICATIONS FOR PERSONAL COMPUTERS OVER TIME



SUBSCRIBE TO NEWSLETTER

Popular articles

- > [10 Best Minecraft Seeds for 2024](#)
- > [How to Screenshot on HP Laptop or Desktop Computers](#)
- > [How to Enter BIOS Setup on Windows PCs](#)
- > [How Do I Fix a Laptop that Won't Turn On?](#)
- > [3 Different Ways to Charge a Laptop without a Charger](#)

Related tags

DESKTOPS LAPTOPS SPEED

Search for Articles

Search for articles...



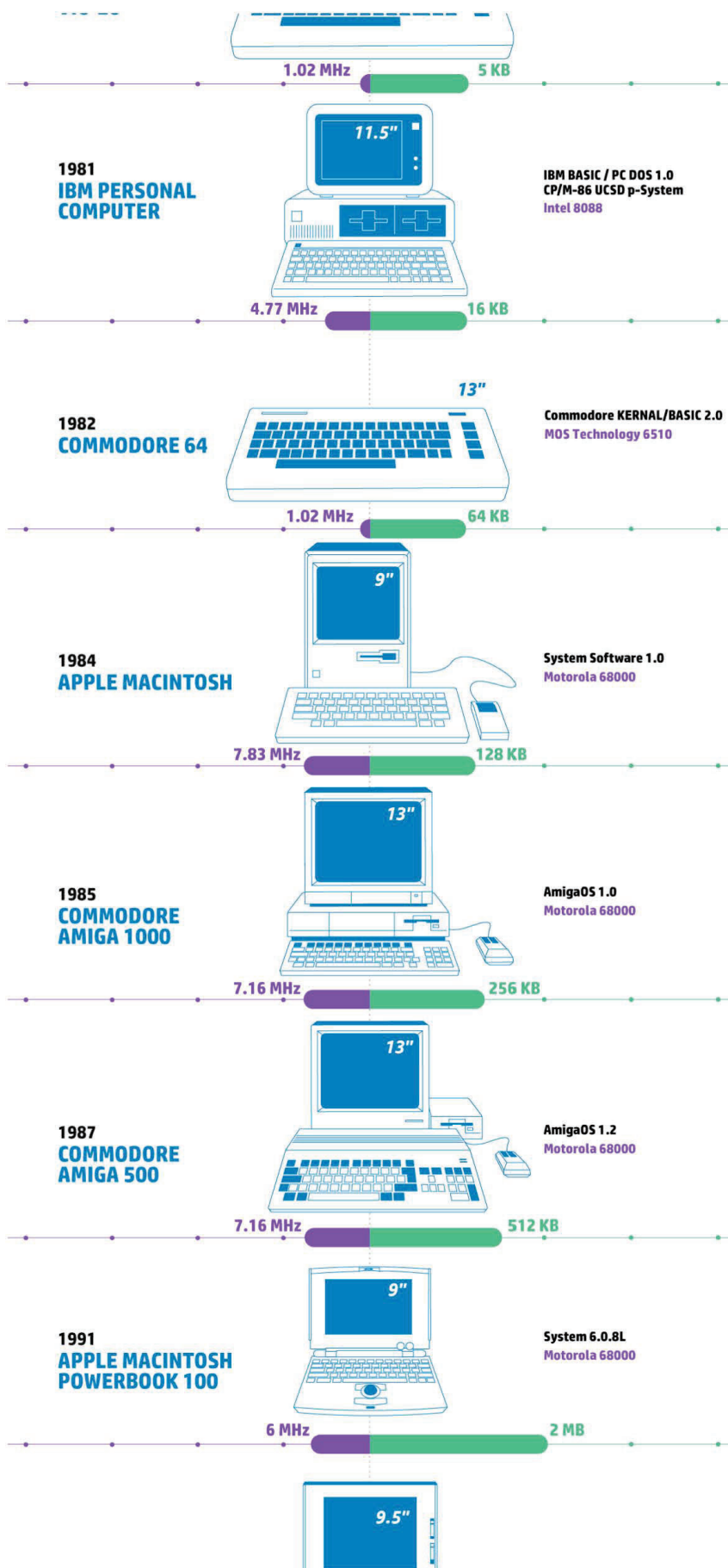
Also visit



Article archives

- > [2023 Articles](#)
- > [2022 Articles](#)
- > [2021 Articles](#)
- > [2020 Articles](#)
- > [2019 Articles](#)
- > [2018 Articles](#)

Presidents' Day Sale

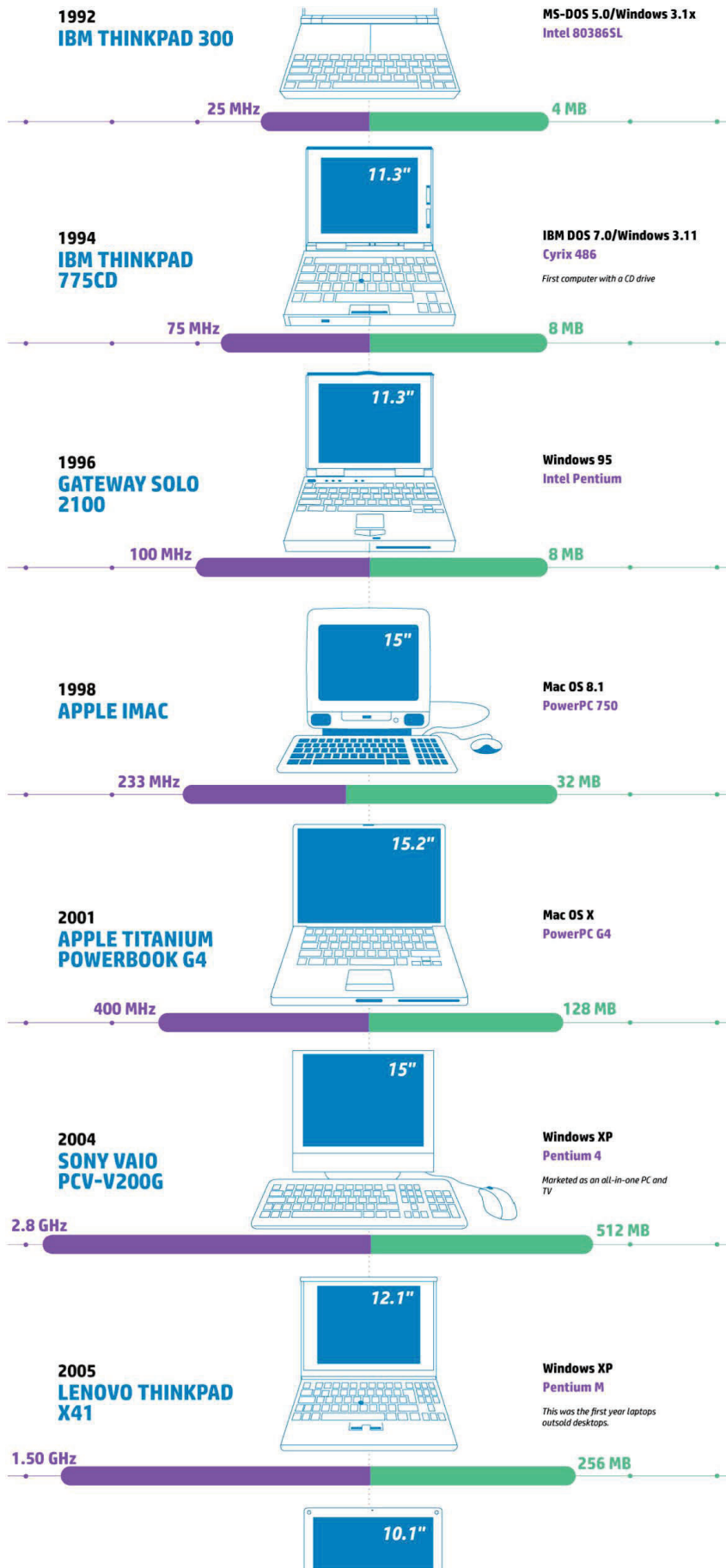


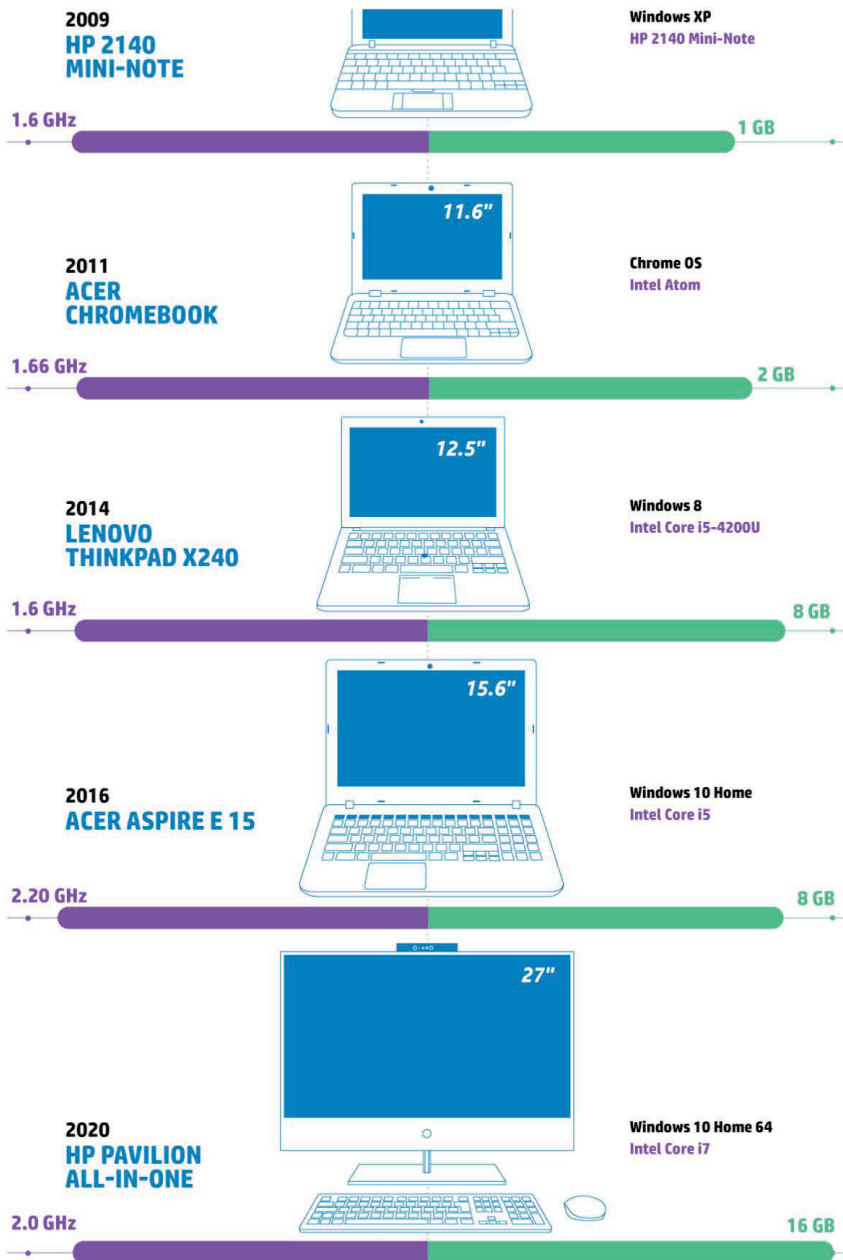
HP Elite Mini 800 G9
Desktop PC
with Intel Core i7
from \$999.00 \$2,415.00

< >

SHOP NOW

Intel CORE i7 hp





SOURCES:
https://en.wikipedia.org/wiki/History_of_personal_computers
<https://www.cnet.com/>



How Computers Specs Have Changed Through the Years

These are some of the most popular early home computers and their modern counterparts along with their processor and memory specifications.

Year	Personal Computer	Processor Speed	Memory
1971	Kenbak-1	1.00 megahertz	256 bytes
1977	Apple II	1.023 megahertz	4 kilobytes
1982	Commodore 64	1.02 megahertz	64 kilobytes
1984	Apple Macintosh	7.83 megahertz	128 kilobytes
1992	IBM ThinkPad 300	25 megahertz	4 megabytes
1998	Apple iMac	233 megahertz	32 megabytes
2004	Sony VAIO PCV-V200G	1.50 gigahertz	256 megabytes
2011	Acer Chromebook	1.66 gigahertz	8 gigabytes
2016	Acer Aspire E 15	2.20 gigahertz	8 gigabytes
2020	HP Pavilion All-in-One	2.0 gigahertz	16 gigabytes

It's easy to see how quickly computer technology has advanced in recent years. In 1998, one of the most common personal computers had just 32 megabytes of RAM and 233

megahertz of processing speed. By 2004, that increased to 256 megabytes of RAM and 150 gigahertz of processing speed.

What Are Good PC Specs?

Personal computer specifications vary greatly depending on what the computer's intended use is. Home computers or computers that will be used in the office generally require less advanced specifications than a [gaming computer](#) or one used for graphic design.

Processor speed is one of the most important specifications when you're looking to purchase a new personal computer. The central processing unit (CPU) is regarded as the "brain" of a computer. Typically measured in gigahertz, processing speed indicates the number of instructions per second a computer is able to execute. Whether a computer's processor is able to process information and instructions quickly or slowly can have a huge impact on a user's experience.

Another important specification to consider when purchasing a computer is its random access memory or RAM. RAM gives software and applications a place to store and access data in the short term so that it can be accessed quickly. A computer's performance is directly related to the amount of RAM installed.

Luckily, if a computer is sluggish or doesn't seem to have enough memory to run needed applications, both processors and RAM on a personal computer can be upgraded. When upgrading RAM or processors, users should verify that the new hardware is compatible with their PC. Some computers have limitations on how much RAM can be added or which processors work with their motherboards.

Engineered for Sustainability

Engineered for Sustainability

Engineered for Sustainability

Get a FREE HyperX Naruto mouse!



HP Chromebook Plus x360 14-inch laptop

HP Chromebook x360 14-inch laptop

HP OMEN Laptop 17-inch gaming laptop

HP ProBook 445 G10 Notebook

HP Laptop 14-inch

14ct-cd000, 14"

cb0097nr, 14", touch screen, Chrome OS™, Intel® Pentium® Silver, 8GB RAM, 128GB eMMC, HD

17t-ck200, 17.3"

PC - Customizable

Starting at \$599.99 **SAVE \$150.00**
\$639.99

\$489.99

Starting at \$1,699.99 **SAVE \$500.00**
\$1,199.99

Starting at \$1,294.99 **SAVE \$645.50**
\$645.50

Starting at
\$674.99

SEE PRODUCT

SEE PRODUCT

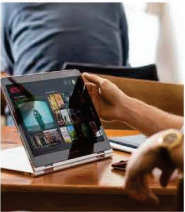
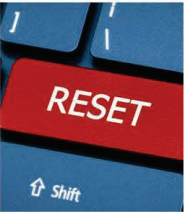
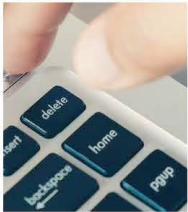
SEE PRODUCT

SEE PRODUCT

SEE PRODUCT

1/8

Recommended articles



How Do I Fix a Laptop that Won't Turn On?

3 Different Ways to Charge a Laptop without a Charger

How to Factory Reset a Windows Laptop

How to Download Netflix on a Laptop and Watch Movies

How to Fix a Laptop That Won't Charge

How to Upgrade Your Laptop

READ MORE

READ MORE

READ MORE

READ MORE

READ MORE

READ MORE

— ○ ○

Laptops HP Fraud Alert SSD Touchscreen Laptops Thin Client Laptop Top Business Laptops Engineering Laptops
Top Rated Laptops Top Ultrabooks Top Workstation Laptops Touchscreen Touch Screen Gaming Laptops
Touch Screen Computer Monitors Touch Screen Workstation Laptop Ultrabook Laptops Ultrabooks HP 512gb SSD Ultrabook 17
Lite Ultrabooks Ultrabooks W/ Dedicated Graphics Ultrabook With Dedicated Graphics

Disclosure: Our site may get a share of revenue from the sale of the products featured on this page.

FREE shipping & Easy returns

Order by Phone 877-203-4758

Student discounts

HP for Business



Need help? Chat with a sales rep Send us an email

FEEDBACK MORE USEFUL LINKS SITE DISCLAIMERS

Country / Region: United States

ABOUT US

Contact HP
Careers
Investor relations
Sustainable impact

WAYS TO BUY

Shop online
Call an HP rep
Find a reseller
Enterprise store

SUPPORT

Download drivers
Support & troubleshooting
Community
Register your product

HP PARTNERS

HP Amplify Partner Program
HP Partner Portal
Developers

STAY CONNECTED



[Diversity, Equity and Inclusion](#)

[Public sector purchasing](#)

[Authorized service providers](#)

[Press center](#)

[Check repair status](#)

[The Garage](#)

[Fraud alert](#)

[HP Store Newsletter](#)

[Security Center](#)

[Recalls](#) | [Product recycling](#) | [Accessibility](#) | [CA Supply Chain Act](#) | [Privacy](#) | [Use of cookies](#) | [Your privacy choices](#) | [Terms of use](#) | [Limited warranty statement](#) | [Terms & conditions of sales & service](#)

© Copyright 2024 HP Development Company, LP.

