



Recommendation Computer for University Student

Class : ITE-G8-Y2-A

Major: Data Communication

By Professor : Chhorn Sylun

Team Members:

1. Heng Vicheka
2. Hout Yleng
3. Seung Sovannary
4. Sok Udomboty
5. Soy Vitou
6. Suon Sopanha
7. Lany Malis

Outline

- Introduction & objective
- Overview specification of laptop
- Recommendation Laptop 1
- Recommendation Laptop 2
- Recommendation Laptop 3
- Finals presentation

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• INTRODUCTION & OBJECTIVE

A laptop is one of the most important tools you can buy at any level of your education. To find a better laptop to fit your requirement is necessary. We found top 3 best laptop . The greatest options from our other guides that are suitable for students have been gathered for this project. The most key aspect of a laptop is its price to performance ratio, which is followed by battery life, weight and size, the keyboard and trackpad, and enough performance.

In this project we will show in detail about:

SPECIFICATION

ADVANTAGES

DISADVANTAGES

DEMO



HOUT YLENG

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• OVERVIEWS SPECIFICATION OF LAPTOP / 1

Types	i. Programming	ii. Graphic design	iii. Gaming
Window	Windows 10/11	Windows 11	Windows 10
CPU	Intel Core i3/5 - 11 / 12 AMD Ryzen 3 - 5	Intel Core i5/7 - 11/12 AMD Ryzen 5 - 5	Intel Core i7/9 - 12 AMD Ryzen 7 - 5
GPU	GTX 1660s / ZOTAC RTX 2060 / EVGA	Geforce RTX 3060 AMD Radeon RX 6600 XT	Geforce RTX 3080 AMD Radeon RX 6650 XT
RAM	8GB of RAM	8 / 16 GB of RAM	16 32 GB of RAM
Storage	256GB(SSD)	1 TB / 2 TB (SSD)	1.5 TB / 4 TB (SSD)

• **OVERVIEWS SPECIFICATION OF LAPTOP / 2**

Types	i. Programming	ii. Graphic design	iii. Gaming
weight	1.5 to 2kg	2 to 2.5kg	2.5 - 3kg
Screen	Small (14-inch)	Medium (16-inch)	Large (17-inch)
Resolution	1366 x 768 pixels 1920 x 1080 pixels	1920 x 1080 pixels 4096 × 2160 pixels	1920 x 1080 pixels 4096 × 2160 pixels
Refresh rate	60Hz Refresh Rate	60 / 100Hz Refresh Rate	144 / 165Hz Refresh Rate
Material	Copper / Aluminum	Copper / Aluminum	Copper / Aluminum

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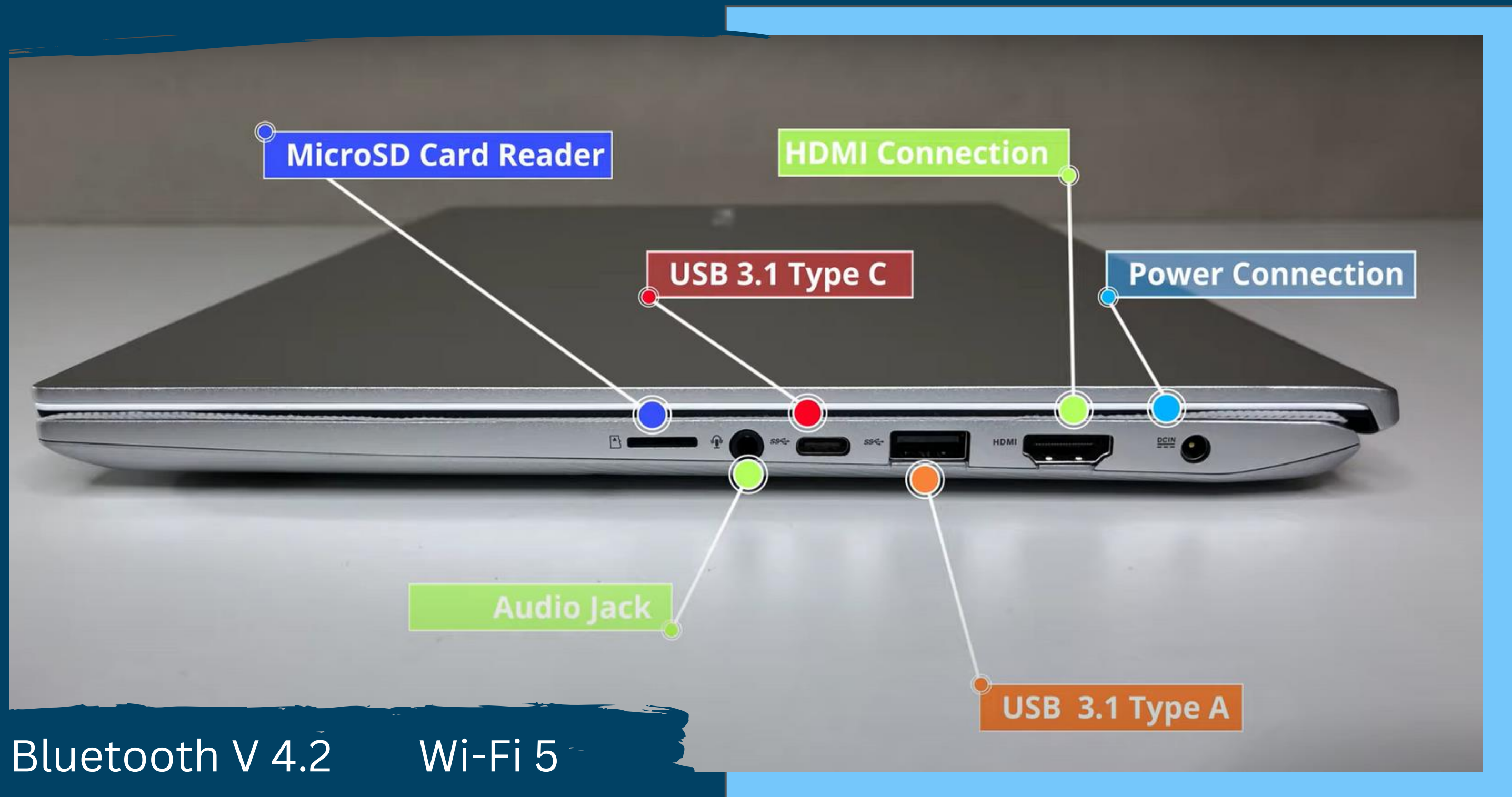
RECOMENDATION & PICK

VIVOBOK S15 S532

- Price : \$998
- Brand: "Asus"
- Series: "Asus vivobook"
- Hard drive: 512 GB (SSD)
- CPU : Intel® Core™ i7-8565U Processor 1.8 GHz (8M Cache, up to 4.6 GHz, 4 cores)
- Ram memory : 8 GB DDR4
- Resolution : 1920x1080 Pixels
- OS : " Windows 10 "
- GPU : "Intel UHD Graphics 620"
- ScreenSize: "15.6 inches"
- weight: 2.64 pounds / 1.8 kg
- model : " S532FA-SB77 "



SOY VITOU





ERGOLIFT
Improve
Typing

ErgoLift hinge with 3° keyboard
tilt



SOY VITOU

Backlight keyboard improvement typing in night



BACKLIT KEYBOARD

Improve
Typing



SOY VITOU

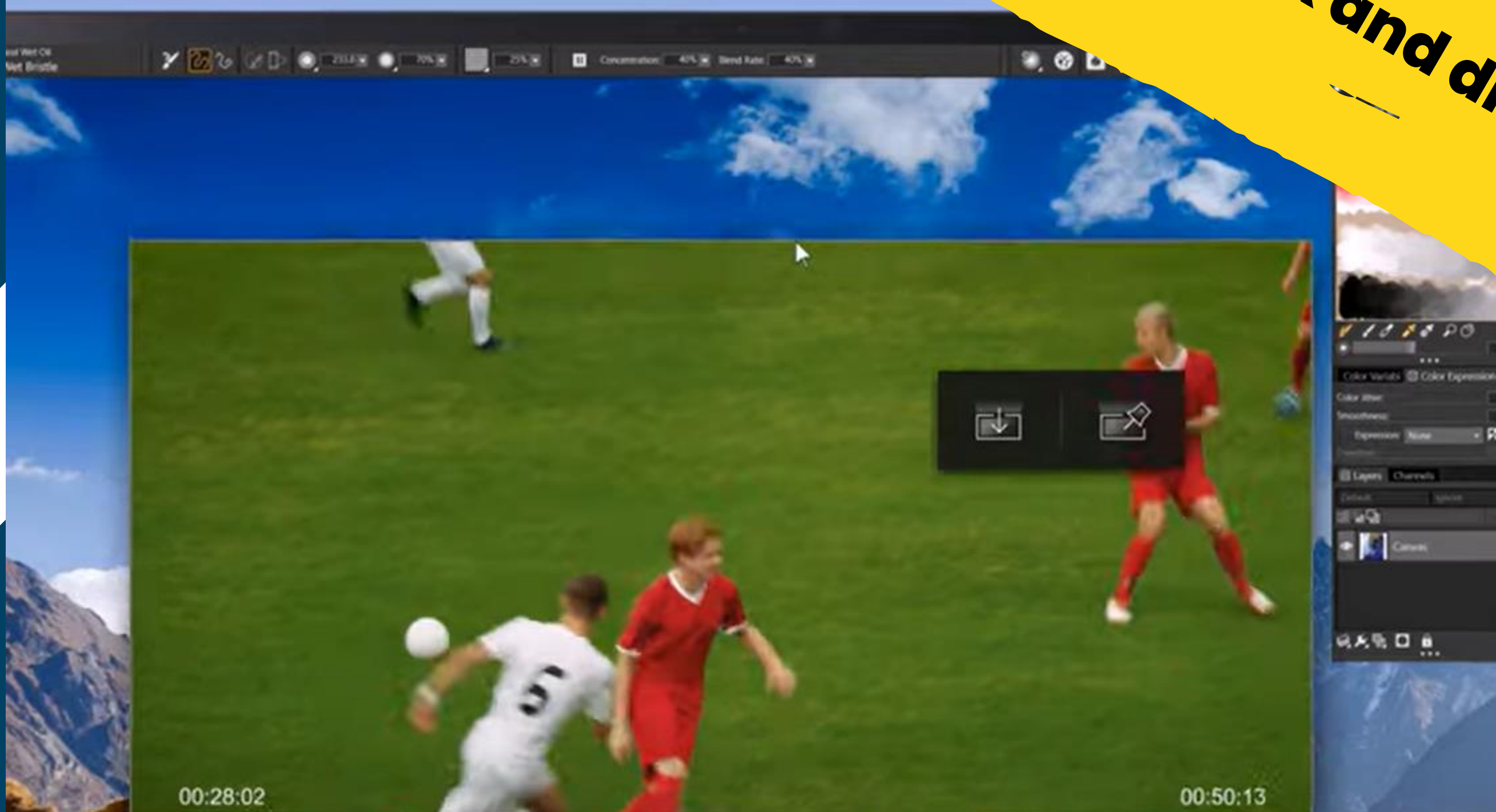
Our computer camera can be used to spy on us. Is it true? Is it even possible?



IR CAMERA
security camera



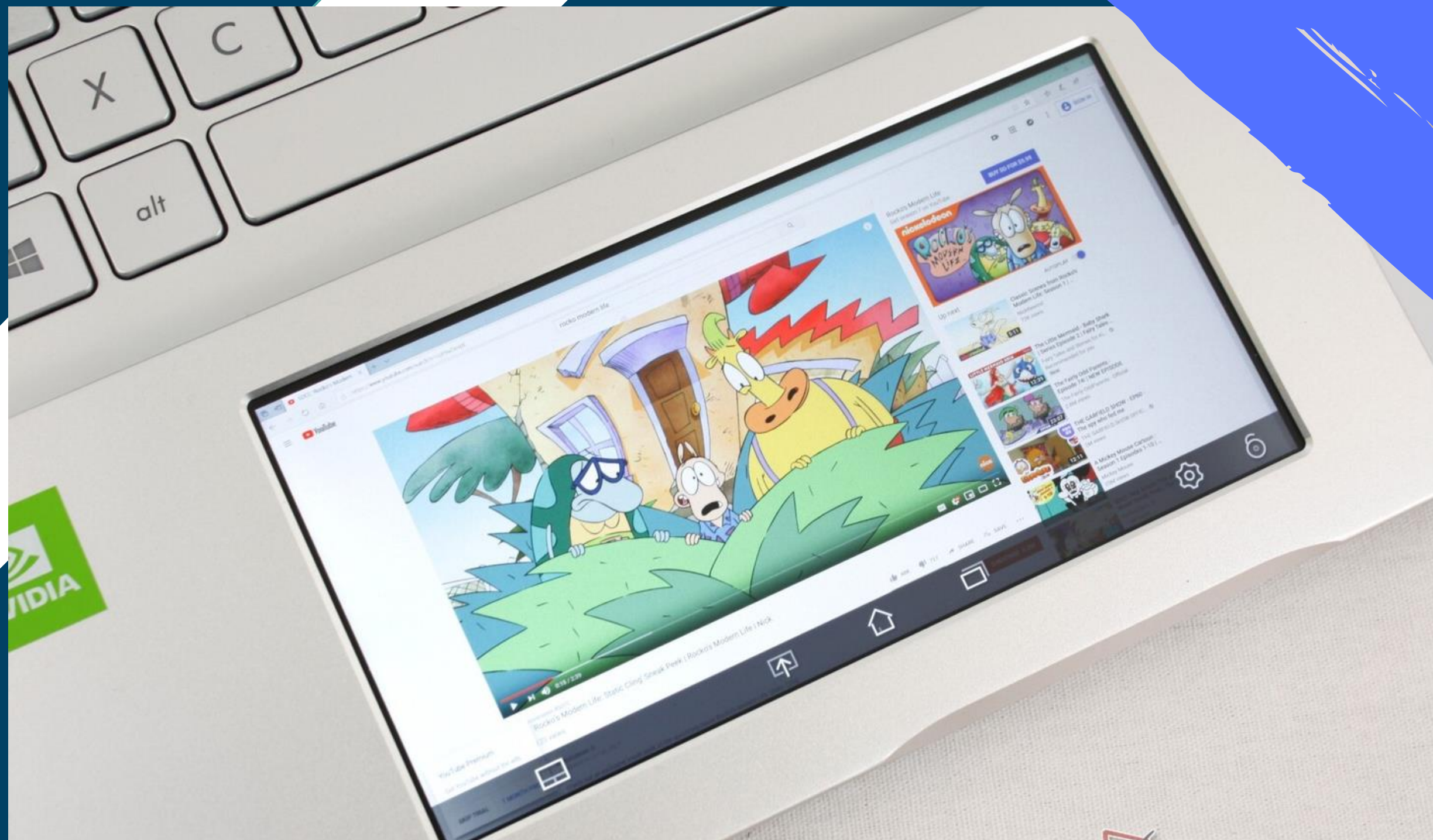
Track and drop to screenpad



screenpad 2.0 vivobook s15 s532

SOY VITOU

Youtube



screenpad 2.0 vivobook s15 s532

SOY VITOU

Game...



screenpad 2.0 vivobook s15 s532

SOY VITOU



screenpad 2.0 vivobook s15 s532

phone || call ...

SOY VITOU

DISADVANTAGES

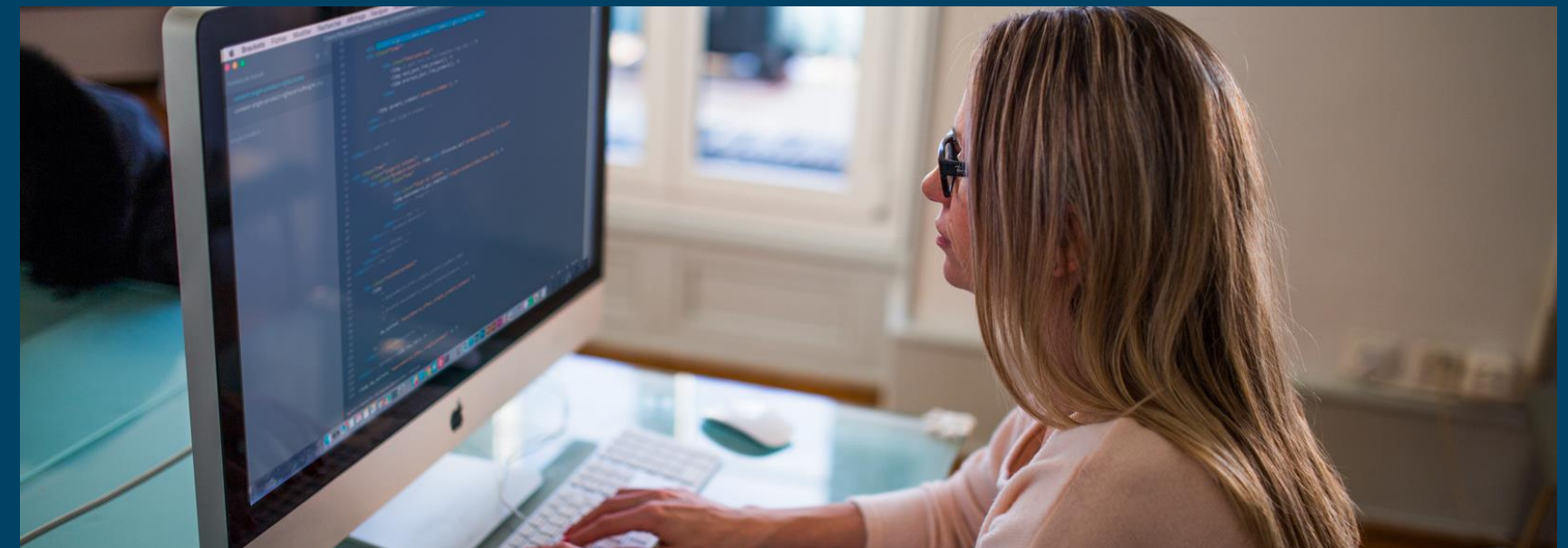
SOY VITOU

- User's experiences
- Slow hard drive in Asus
- Sluggish performances and boot time
- Unexpected black screen problems



- Not charging but plugged in
- Wifi - problems connection

<https://www.infofuge.com/asus-vivobook-s15-s532-common-problems-and-solutions/>



REFERENCES

- **specs** : <https://www.asus.com/laptops/for-home/vivobook/vivobook-s15-s532/techspec/>
- **award** : <https://www.asus.com/laptops/for-home/vivobook/vivobook-s15-s532/review/>
- **home** : <https://www.asus.com/laptops/for-home/vivobook/vivobook-s15-s532/>
- **Amazon** : https://www.amazon.com/ASUS-Light-Laptop-QuadCore-ScreenPad/dp/B0867SDKXQ/ref=sr_1_2?crid=24Y8RPKB0TIHY&keywords=Vivobook+S15+S532&qid=1675135806&sprefix=vivobook+s15+s532%2Caps%2C323&sr=8-2
- **Prices** : <https://www.asus.com/us/laptops/for-home/vivobook/asus-vivobook-s15-s532/where-to-buy/> Starting prices : 799.99\$
- **Introduce** : <https://www.asus.com/content/screenxpert-screenpad-tutorial/>





Ordinary

is

over

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RECOMENDATION & PICK

LENOVO LEGION 5 PRO

Price : \$1469

Brand : "Lenovo"

Model : " Legion 5Pro Gen 6 "

Storage : 2 TB M.2 NVMe PCIe SSD

CPU : AMD Ryzen™ 7 5800H Processor (3.20 GHz, up to 4.40 GHz Max Boost, 8 Cores, 16 Threads, 16 MB Cache)

Ram memory : 32 GB DDR4 3200MHz

Display : 16" WQXGA (2560 x 1600) IPS, aspect ratio : 16:10, refresh rate: 165Hz

GPU :NVIDIA® GeForce® RTX™ 3070 8GB

OS : Windows 11 Pro



SUON SOPANHA

RECOMENDATION & PICK LENOVO LEGION 5 PRO

- **Connectivity** : WLAN: 802.11AX (2 x 2)
- **Bluetooth**® 5.1
- **Color** : Storm Grey
- **Batteries** : Up to 7.3 hours(MM18)
- **Camera** : Built-in HD (720p) webcam
- **Audio** : 2 x 2W speakers with Nahimic Audio for Gamers
- **Weight**: 2.45kg / 5.4lbs



SUON SOPANHA

ADVANTAGES

1. DESIGN AND BUILD QUALITY

The laptop has a beautiful aluminum lid with brushed finish and diamond-cut edges, and a sturdy base with little flex

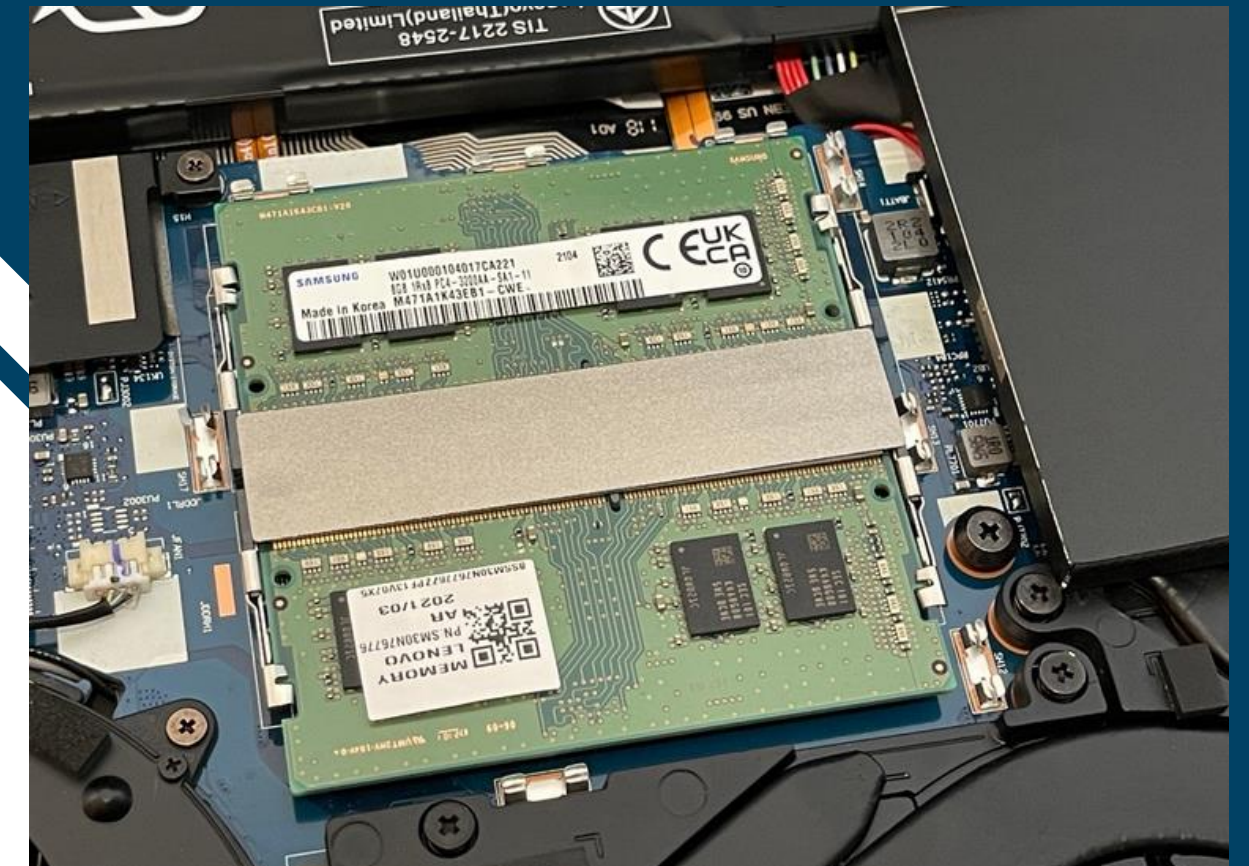
SUON SOPANHA



ADVANTAGES

2. UPGRADEABILITY

Lenovo Legion 5 offers up to 64GB of DDR5 memory and two M.2 PCIe x4 slots for Gen 4 drives.



ADVANTAGES

3. BATTERY LIFE

The 80Wh battery pack lasts for 15 hours and 13 minutes of Web browsing or 9 hours and 22 minutes of video playback.

ADVANTAGES

4. DISPLAY QUALITY

QHD IPS panel with 165 Hz refresh rate with 391 nits, 372 nits average, 10% deviation, 1130:1 contrast ratio, 97% sRGB color gamut.

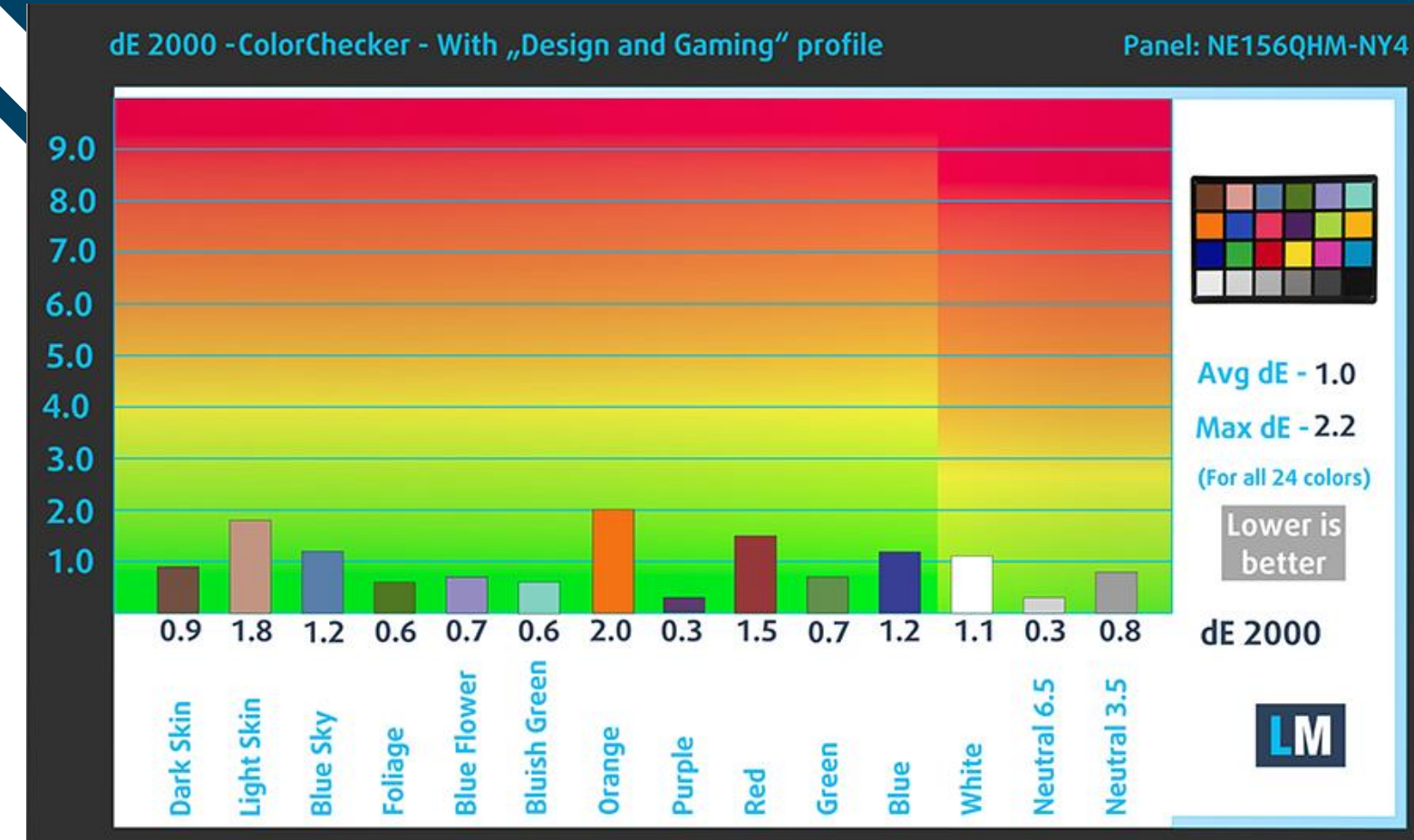
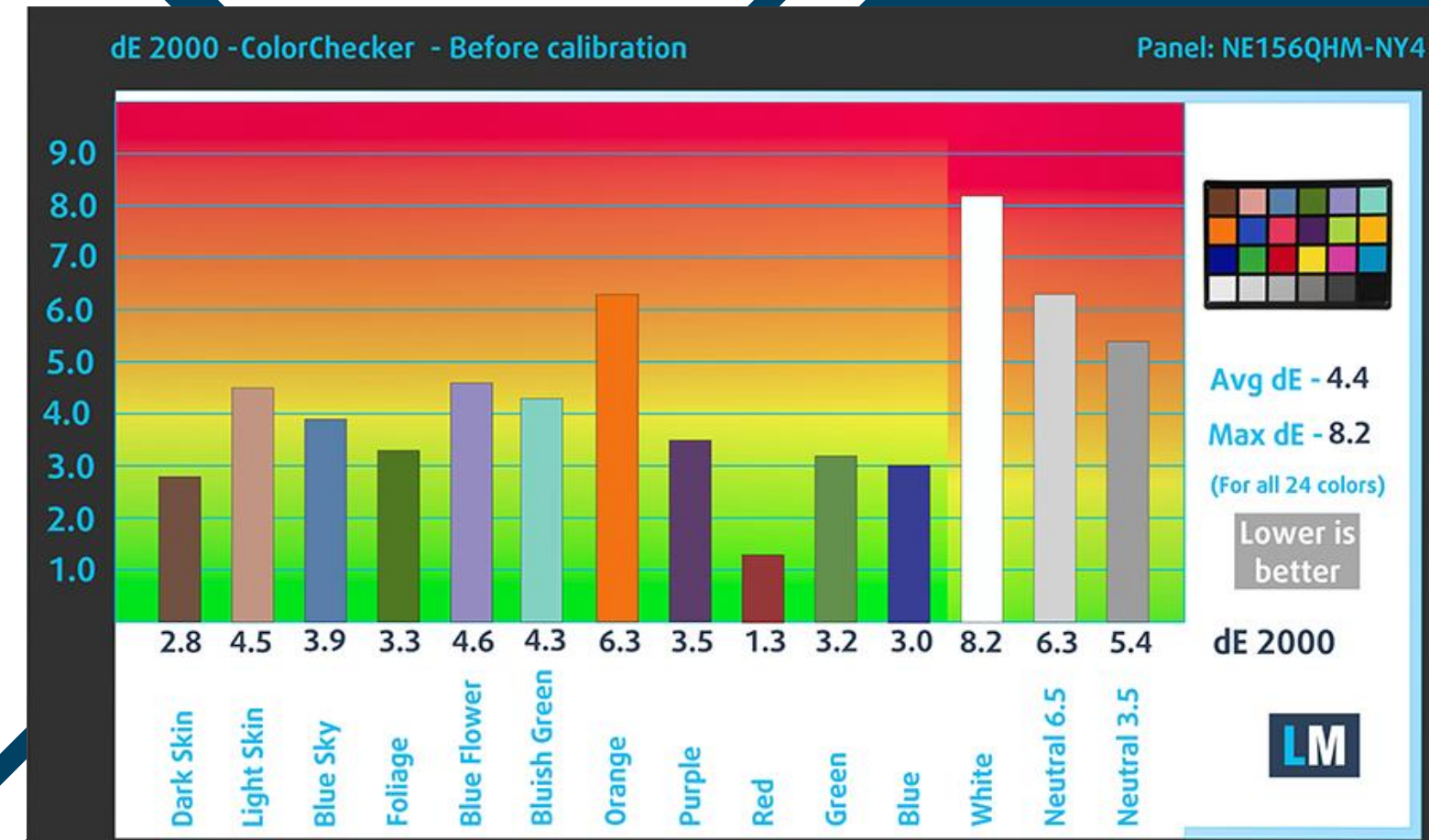


ADVANTAGES

4. DISPLAY QUALITY

When applying our Design and Gaming profile, the panel reaches a dE value of 1.0, which makes it accurate enough for color-sensitive work. Here are the results with the stock settings (left) and with our profile applied (right).

SUON SOPANHA



DISADVANTAGES

UNFAMILIAR ASPECT RATIO: 16:10

The 16 by 10 aspect ratio of the laptop can be beneficial for creators, but can lead to distracting blackbars during content consumption or gaming.

SUON SOPANHA



DISADVANTAGES

SLOWER RAM

The secondary timings of the ram stick pre-installed in the Legion 5 pro can lower the performance of the laptop by up to 15%, so it is recommended to spend more on a dual rank ram stick to get the full potential performance.

DISADVANTAGES

HEATING

The high-end specs of the Legion 5 pro can lead to overheating during heavy gaming, resulting in thermal throttling of the CPU and fan noise.



RERERENCE

- **Computer's Info**

[https://www.lenovo.com/us/en/p/laptops/legion-laptops/legion-5-series/legion-5-pro-gen-6-\(16-inch-amd\)/wmd00000468](https://www.lenovo.com/us/en/p/laptops/legion-laptops/legion-5-series/legion-5-pro-gen-6-(16-inch-amd)/wmd00000468)

- **Computer review**

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi2wKqh_I79AhVA53MBHe4XDUKQFnoECA0QAQ&url=https%3A%2F%2Flaptopmedia.com%2Fhighlights%2Flenovo-legion-5-15-2022-top-5-pros-and-cons%2F&usg=AOvVaw3zkDk8F0da9r_tYYf-KLgu

- **Computer drawbacks**

<https://www.youtube.com/watch?v=iZPX37qltM&t=48s>

- **Demo**

https://www.youtube.com/watch?v=h0k1MxA_pGQ

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Recommendation & Pick

MACBOOK AIR M1

- **Price :** \$999
- **Brand:** "Apple"
- **Product:** " MacBook Air M1 Chip "
- **Storage:** 256GB (SSD)
- **CPU :** "Apple M1 Chip 8-Core "
- **Ram memory :** 16GB Unified Memory
- **Resolution :** 2560x1600 Resolution Retina display
- **OS :** " MacOS "
- **GPU :** "7-core GPU"
- **Screen Size:** "13.3-inch Retina display⁵"
- **weight:** 2.8 pounds / 1.29 kg
- **Wireless Communication Standard:** 802.11ac
- **Color :** Gold, Silver, Space Gray
- **Batteries :**
 - Up to 18 hours Apple TV app movie playback
 - Up to 15 hours wireless web
- 720p FaceTime HD camera
- **On/ Off Bottom:** Touch ID sensor
- **Material:** 100% Recycle aluminum, tin in solder, 35% or more recycled plastic.



LANY MALIS

Advantages

1

GREAT DESIGN & LIGHTWEIGHT

There are three ports, screen, touch pad, magic keyboard surround by 2 stereo speakers.

2

BATTERIES LIFE

With 15 hours last with wireless web and Battery life warranty 1 year from Apple company.

3

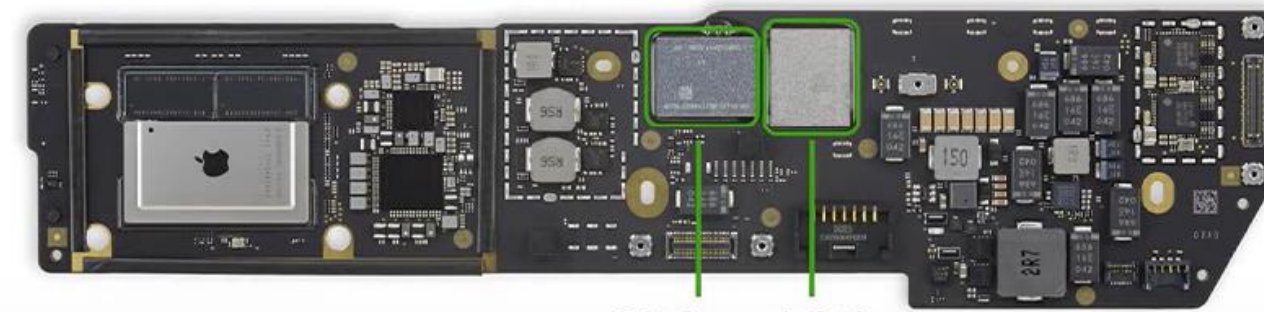
STORAGE

Apple MacBook air M1 256GB model have 2 nands chip of 128GB or 1 nand chip of 256GB.

Figure



MacBook Air 



128GB 128GB

LANY MALIS

Advantages

4

COLOR & COMPATIBILITY

With 227 pixels per inch, support for millions of colors, 400 nits brightness, Wide color (P3) and True Tone technology.



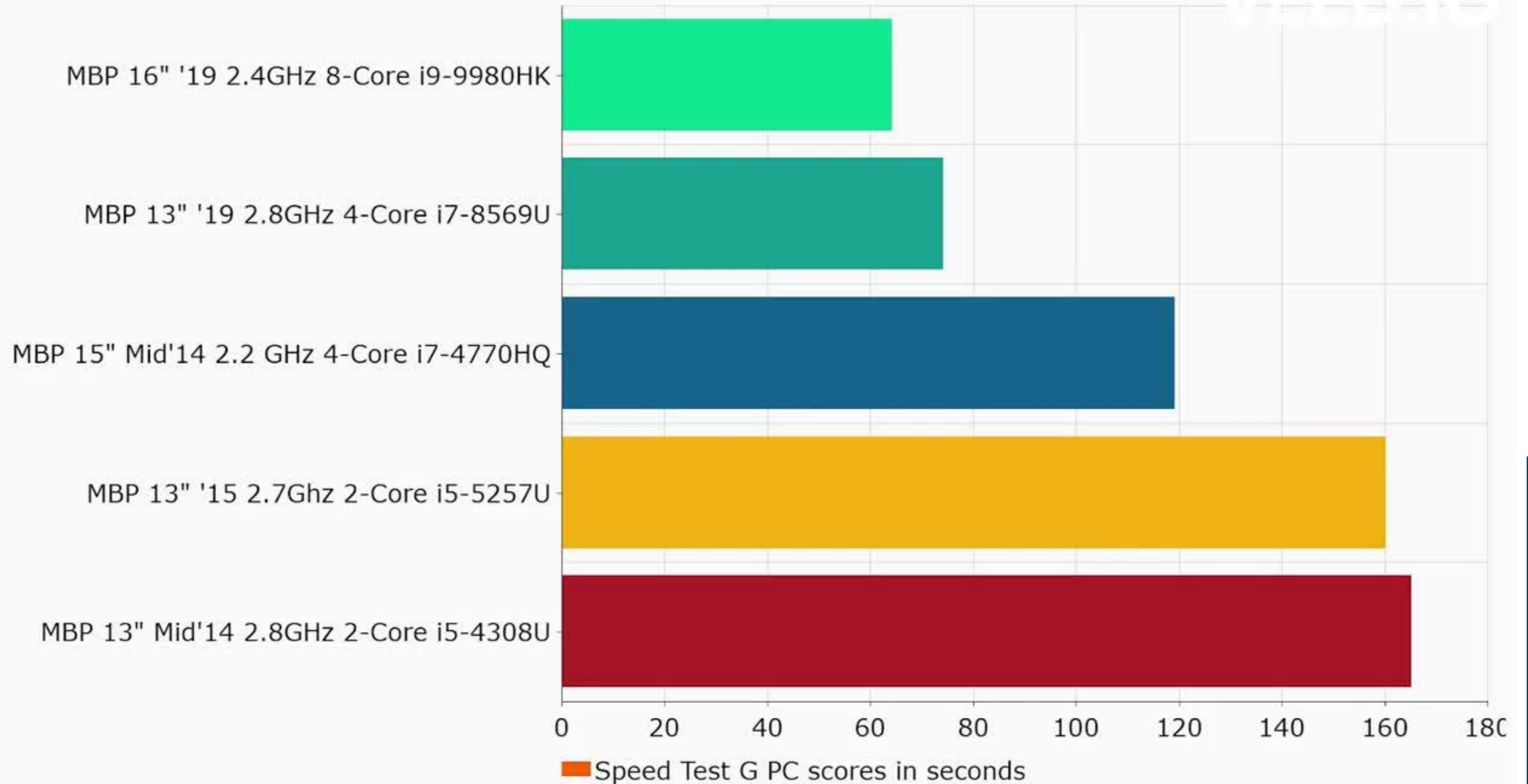
5

PERFORMANCE

- *CPU offers balances high-performance cores with efficiency cores while using far less energy.*
- *GPU delivers lightning-fast integrated graphics.*
- *16-core Neural Engine capable of 11 trillion operations per second.*

Speed Test G PC (Shorter is Better)

VEED.IO



Disadvantages

1

LESS PORT

MacBook Air M1 comes with only 2 thunderbolt which required to use Hub to help for those who is external device user.

2

M1 MACBOOKS CAN ONLY DRIVE ONE MONITOR

MacBook Air M1 will allow you connect only one extra monitor which has a problem for those who need more.

3

SSD WEAR ISSUE

Any shortfall in the amount of RAM required for a specific task is offered up by the SSD via something called 'swapping'.





References

- **computer's Info :**
- https://support.apple.com/kb/SP825?locale=en_US
- [https://en.wikipedia.org/wiki/MacBook_Air_\(Apple_silicon\)](https://en.wikipedia.org/wiki/MacBook_Air_(Apple_silicon))
- <https://www.apple.com/>
- **Apple's Warranty :** <https://www.apple.com/batteries/service-and-recycling/#:~:text=The%20one%2Dyear%20warranty%20includes%20replacement%20coverage%20for%20a%20defective,notebooks%20with%20built%2Din%20batteries.>
- **Performance Test:** <https://youtu.be/zirGHgNpzmc>
- **Pros & Con of MacBook Air M1:**
- <https://markellisreviews.com/the-most-important-pros-and-cons-of-the-m1-chip/>
- <https://mezha.media/en/articles/why-the-macbook-air-m1-is-still-one-of-the-best-laptops-for-everyday-tasks/>
- **SSD Swapping Issue:** <https://youtu.be/nuOBsXOaP38>
- **Demo :** <https://youtu.be/cBIlbJ78SRY>

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Final Presentation

HOUT YLENG



Vivobook S15 S532



Lenovo Legion 5 pro



MacBook Air M1

THANK

YOU