

i9 NUC vs Laptop



Deciding between a Mini-PC or laptop?

1. Choose a product that offers superior performance and scalability.
2. Ask yourself how much and what type of connectivity do I need?
3. Do you need a computer that allows post purchase expandability options like drives, memory, and discrete graphics.



Should I choose a NUC or Laptop?

If you want a space-saving desktop in your office, choose between a Mini-PC such as the Nfina NUC or a Laptop to fulfill your computing needs. Both offer plenty of power in small form factors, but there are considerable differences, and depending on the applications, users should take note before making a choice.

Footprint

Nfina's NUC, measuring 14" x 7" x 3", mounts directly to the back of a monitor or can sit on your desk next to your monitor. A standard laptop measures 14" x 11" x .8" but users relegate themselves to a smaller keyboard and screen or external add-ons that take up extra space on your desk. Nfina's NUC allows for a full-size keyboard and multiple display ports that support up to three monitors at higher resolutions than the typical laptop.

Cooling Factors and USB Ports

A laptop running an Intel® Core™ i9 processor will generally output more heat than the Nfina NUC running the same processor. Laptops by design, have less cooling surface available, while the NUC has active (large heatsinks and fans) and passive cooling systems in their small form factor.

Another notable difference is limited to the laptop form factor; the USB bus will always be smaller, usually leading to daisy chaining or one too many USB adapters. The Nfina NUC, however, comes standard with eight USB ports including two Thunderbolt ports that can fit any business needs without extra clutter.

Integrated LAN and WiFi

Nfina's NUCs come standard with integrated 10GB LAN, Wi-Fi 6E, and Bluetooth 5.2. Many laptops today do not offer an Ethernet connection and must connect via Wi-Fi only.



Nfina's i9 NUC: 8 x USB (2 x Thunderbolt®), 1 x HDMI 2.0, 1 x 10GB and 1 x Marvell® AQtion™ LAN, Wi-Fi 6, Bluetooth 5.2



Competitors laptop: 4 x USB Thunderbolt ports, Wi-Fi 6, Bluetooth 5.2

Expandability and Scalability

Laptops generally come preassembled with all components required to operate properly, as do most NUC builds. The difference between a NUC and a laptop is that a prebuilt laptop may not give you the option for customizing to meet your needs now and in the future.

Some laptops today have room to be modified, but that does not even come close to the caliber of modification one could do with the NUC package. The i9 NUC supports up to three internal drives that are upgradeable over time, unlike many laptops that are factory ordered to a set capacity and unable to swap out.

If your laptop is not up to the task of rendering, you might be able to change the GPU, but you will be resigned to a laptop series card, which is less powerful and capable than the full-size counterpart. One could change out the video card in a NUC for a more powerful, faster unit that any laptop video card series can provide, allowing for faster rendering and drafting that would bottleneck a laptop.

Upgrading the RAM on a laptop computer is often challenging, more expensive, or may not be an option. The NUC, however, is easily customizable and upgradeable to 64GB of memory.

Benefits of Nfina's NUCs

All in all, Nfina's NUCs far exceed the laptop when it comes to business applications looking for a small form factor computer.

- Mini-PC footprint allows for monitor mounting or desktop
- The difference between a NUC and a laptop is that a prebuilt laptop may not give you the option for customization – now and in the future
- I/O specifications eclipse that of a laptop offering 8 USB, 2 Thunderbolt, and Integrated 10GB LAN
- NUCs come with integrated graphics and also support full-size discrete GPUs
- Expandability and scalability far exceeds that of a laptop when it comes to RAM, drives, graphics cards, and PCIe expansion ports

More information is available at: <https://nfina.com/nucs/>



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