



How to Improve Business Efficiencies with Intel® NUCs Customized by Simply NUC

Today's mini PCs are powerful. They offer the high performance you need to stay productive—but come in small, space-saving and energy-efficient packages.



Will an Intel NUC Give You the Power You Need to Run Your Organization?

Organizations are under pressure to increase productivity, cut costs, and become more sustainable with limited resources.

One way to achieve these mandates is to make your computing systems more efficient. In particular, you can move away from energy-wasting traditional tower PCs to smaller systems that reduce clutter, noise, and electricity costs.

You might have heard that mini PCs don't have the compute power to keep pace with your demands. However, today's NUC options provide the high levels of performance that you would expect from much larger systems. You can perform all of your regular tasks on a NUC—from web conferencing to CAD work to video editing.

[This white paper outlines how mini PCs can boost efficiencies in the business, digital signage, education, and medical sectors. You will learn:](#)

The biggest challenges with traditional tower PCs

- How mini PCs can lower your energy costs by up to 50 percent
- Ways to increase your efficiencies and reduce your computing costs
- Six essential things to look for in a mini PC vendor

Read on to discover how mini PCs can deliver results in your organization.



Why Organizations Are Moving Away from Traditional Tower PCs

The demand for mini PCs is growing. According to industry experts, the annual global mini PC demand is expected to increase to 17.3 million units by 2023—up 10% CAGR from 2020.¹

Here are some reasons why organizations are replacing their desktops with smaller, more agile systems:

- ✔ Businesses need small computers with flexible mounting options to power technology such as digital signs and kiosks. Larger computers are inflexible and not practical if you want to use them in these configurations.
- ✔ Organizations are becoming environmentally conscious and want to reduce their power consumption. Desktop PCs require 60-200 watts of electricity to run normally, compared with the 20-50 watts required by mini PCs. The more power your systems use, the higher your electricity costs and carbon footprint.

- ✔ More employees are working from home and need flexible technology that helps them stay productive. It's much easier for an employer to issue remote workers portable mini PCs than cumbersome towers.
- ✔ Tower PCs generate a lot of heat and noise, which can make work and learning environments uncomfortable.
- ✔ Older, low-performing computers can reduce the productivity of your workforce — causing you to fall behind your competitors and lose market share.
- ✔ In the current environment, traditional PC vendors are dealing with supply shortages due to a number of factors and the immense demand for graphic cards and gaming systems. Mini PC providers haven't felt as much of a pinch and can still deliver units quickly.
- ✔ Traditional PC vendors have long lead times, as they receive their hardware from multinational manufacturers. Waiting a long time for a computer can impact your organization and harm your productivity.

Increase Efficiencies and Lower Computing Costs with NUCs

Organizations are turning to mini PCs to solve the challenges mentioned above. An Intel NUC (Next Unit of Computing) is a small computer, typically just 4" x 4", that packs the power of a much larger PC.

NUCs have been in the market for more than a decade. In 2011, the engineering team at Intel set out to create a small motherboard that would be fully featured and scalable from Atom up to Core i7. They started by taking laptop parts and putting them in a mini desktop, creating the first NUC.

Over the years, Intel has continuously improved the NUC's feature density and performance without increasing their size. You can complete all of your regular business functions with a NUC—even video editing and complex engineering work.

When you replace your tower PCs with mini PCs, you can:

SAVE SPACE: NUCs are much smaller than traditional PCs and can be easily mounted to walls or on the backs of monitors, helping you minimize clutter and use your limited space more effectively.

LOWER YOUR ENERGY COSTS: NUCs require less power than traditional tower PCs and can lower your energy costs by up to 50 percent compared to similarly configured desktops.

REDUCE HEAT: Since NUCs are small, they generate less heat than other PCs. Organizations that use small form factor PCs can lower their electricity bills while making their working and learning environments more comfortable.

MINIMIZE NOISE LEVELS: Many NUCs don't need fans, making them much quieter than other PCs and laptops in the market. NUCs are ideal for noise-sensitive environments such as classrooms, labs, call centers, and offices.

POWER ALL OF YOUR TECHNOLOGY: You can mount a mini PC on any surface and embed them in tight spaces, including kiosks or digital signs. Rugged NUCs are ideal for outdoor usage as they withstand challenging environments and harsh weather.

SAVE MONEY ON PC UPGRADES AND REPLACEMENTS: Many PC vendors won't support older systems after they launch new models, making it hard for you to repair computers that are a few years old. Some NUCs are built to last at least seven years and can support your organization in the long term. And, since some NUCs are rugged, they require less maintenance than laptops. Finally, some NUCs are modular and allow you to upgrade or replace the CPU while maintaining the chassis form factor.

MEET YOUR SUSTAINABILITY MANDATES: NUCs can have long lifespans and require minimal energy. According to research, switching from a tower to a mini PC has the same positive climate effect as planting 400 trees.²

How NUCs Power Digital Signage and Increase Sales



Digital signage—from menu boards to self-service kiosks—transforms the customer experience and helps businesses boost sales. Retailers that use digital signage can increase customer satisfaction by 46 percent and the average purchase amount by 29.5 percent. Meanwhile, brands that use digital signage have reported sales increases of up to 33 percent.³

But to see these results, you must ensure that your signage functions at all times.

Today's mini PCs offer the performance, memory, and storage you need to keep your signs running 24/7. They support any operating system and content management software, making it easy for you to push campaigns to signs remotely without needing help from a technician.

Mini PC media players offer flexible mounting options. You can attach them to the back of a sign or embed them in a kiosk. And, since some NUCs are rugged, they can power both indoor and outdoor signs.

HERE ARE SOME WAYS YOU CAN USE MINI PCS TO POWER YOUR DIGITAL SIGNAGE:

SELF-SERVICE KIOSKS

Kiosks with interactive touchscreens require high levels of processing power. NUCs offer ample performance in a small package to help people check in at hotels and airports, search a store's inventory, get directions, make a sale, and perform other self-service tasks.

DIGITAL SIGNAGE

Mini PC media players can stream 4K video and have been tested for round-the-clock commercial usage. Their reliability makes them a smart choice for lobby signs, wayfinding, menu boards, and sales transactions.

MULTI-PANEL VIDEO WALLS

A single mini PC can power an entire video wall with multiple displays. NUCs include multiple 4K video channel outputs so that you can project a continuous stream of content to your customers.

3: Screenfluence: 27 Digital Signage Statistics for 2021 That Prove It Works: Infographic, 2020

3 Ways Educators Use NUCs to Improve the Learning Experience

Moving from traditional PCs to NUCs can make learning more efficient, fun, and engaging. Here are three ways you can use mini PCs to enhance your classroom environment:

CLASSROOMS AND LECTURE HALLS

With mini PCs, teachers can spend less time troubleshooting technology and more time focusing on students. High-speed connections allow teachers to start sessions faster and make every minute in the classroom count.

NUCs can power 4K displays in classrooms, enable remote learning with conferencing tools, and support wireless presentations. Remote management technology also allows your IT team to keep your classroom technology secure and stable without disrupting the classroom.

LIBRARIES AND LABS

Traditional PCs take up a lot of space, generate heat, and are noisy. Since a library or lab contains up to 50 computers, tower PCs can negatively impact learning.

NUCs are small, quiet, and don't overheat. When you replace your tower PCs with small form factor computers, you can better use your space and give students room to study. NUCs also bring the heat and noise levels down to create more pleasant learning environments. When your facilities are comfortable, students are more likely to use them.

SCHOOL INFRASTRUCTURE

NUCs function as entry-level servers, as they offer uncompromising performance in a small package. Mini workstations allow you to declutter your wiring closet while getting all the power you need to run your school's IT infrastructure. NUCs can also fit within your budget, as they offer a tower PC's performance at a fraction of the cost.



How Mini PCs Are Transforming Patient Care



Healthcare organizations are using mini PCs to improve efficiencies and provide patients with higher levels of service. Here are three ways the medical sector is driving value from NUCs:

MEDICAL CARTS

Healthcare professionals rely on medical carts when moving throughout hospitals and providing patients with care. When their laptops or tablets run out of battery power, they must take time away from patients to charge their devices or find one with a full battery.

Mini PCs can be powered by hot-swappable batteries that medical professionals can change without powering down their medical cart. These batteries remove the dependence on electrical outlets and allow healthcare workers to use medical carts 24/7 without running out of power.

OPERATING AND PATIENT ROOMS

Small, high-performing Intel NUCs provide doctors with critical patient information and visualizations as they visit patients or perform surgeries. And, since some rugged NUCs are fanless, they won't blow dust around patient or operating rooms and spread bacteria that may cause surgical site infections (SSIs).

VIDEO CONFERENCING AND TELEHEALTH [CASE STUDY SUMMARY]

At the start of the COVID-19 pandemic, a non-profit healthcare organization needed to install 1,000 telehealth systems in patients' rooms. The systems would allow doctors and nurses to assist COVID patients without putting themselves at risk.

Since telehealth technology is complex and costly to install, the healthcare system decided to retrofit their in-room TVs with video conferencing tools. They simply attached a NUC to the back of each TV and loaded HIPPA-compliant telehealth software. Now, patients and medical professionals can chat virtually.⁴

4: Intel: How Banner Health created a telehealth system based on Intel NUC, 2021



6 Essential Things to Look for in a Mini PC Vendor

Not all computer hardware vendors are created equal. Many will sell you generic systems that lack the performance, quality components, and features you need. Others offer limited support and may not troubleshoot or manage your mini PCs if they have issues.

At Simply NUC, we provide full customizations and support for Intel NUCs. We believe that your mini PC partner should offer the following services:

1. **The ability to customize your Intel NUCs**

Your vendor should give you the option to configure your mini PCs any way you want—including the operating system, software image, processors, memory, storage, and the number of ports you require. Your NUCs must also meet your security and performance requirements. They should have the compute power to support you, whether you're performing day-to-day office tasks or resource-intensive work such as CAD, medical imaging, and video editing. If you need to ship NUCs to other locations, consider a vendor who can customize the units and packaging, as well as manage the logistics when delivering them to your end customer.

2. **A one-stop shop**

Look for a vendor who provides not just the mini PCs but the accessories, custom image management, consulting, and customer service you need along with them. When you choose a vendor who takes a holistic and partner-oriented solutions approach, you can scale quickly as your computing requirements change in the future. Ideally, your vendor will provide “demo” or “sample” units that allow you to try out the technology prior to making a financial commitment.

3. **Systems that will be supported for years**

Beware of vendors who might discontinue your mini PCs immediately after you buy them and then refuse to provide support. Look for a partner who will be with you for the long term. Ideally, they should support your mini PCs for as long as you plan to use them. Also, look for a vendor who has strong relationships with their suppliers and can ensure a smooth transition to a replacement model when your current model is discontinued due to technology transitions.

4. **Expert support at no additional charge**

Choose a partner who will give you unlimited technical assistance at no extra cost for the first year after purchase, with an option to buy an extended support package. Their technical support staff should know your products inside and out so they can get you up and running and troubleshoot any issues quickly. Also, make sure that their support team is easy to contact. They should have live agents available for phone and chat support with remote troubleshooting capabilities.

5. **An extended warranty and flexible return policy**

Your vendor should provide a three-year warranty on all mini PCs. They should also offer a flexible advance return policy where they will ship you a replacement before they receive your return unit in the mail. That way, you will minimize wait times for a new system and can keep your organization or customer up and running.

6. **A global footprint to support all of your locations and employees**

Look for a partner who has offices worldwide so that they can support you—no matter where you or your deployments are located. If your partner has warehouses and offices in your region, they can ship your items faster and provide you with a higher level of service and support.



Simply NUC: Your One-Stop Shop

Mini PCs can help you increase your productivity, cut costs, and become more sustainable with limited resources. And today's Intel NUCs do much more than just save space and energy—they also provide all the power you need for resource-intensive tasks, such as remote learning and video conferencing.

But to achieve these results, you need a mini PC partner who will completely customize and support your NUC solution to meet your needs. That's where Simply NUC can help. Contact us now for a free assessment and to request a demo unit.

US: sales@simplynuc.com / 512-766-0401

UK: info@simplynuc.co.uk / +44 2882 839699

EU: sales@simplynuc.eu / +44 2882 839699