



HELLO

2024

ARTIFICIAL FUTURE

A new year always begins with tech companies descending on Las Vegas for CES: the world's largest show for all the new technology that we will see in the year and beyond.

It's probably not a surprise but AI is everywhere at this year's show. From cars with ChatGPT integration, devices that use your phone apps for you, televisions utilising AI to improve picture quality, AI powered grills and even AI powered toothbrushes, companies are betting everything on AI.

Whilst it's an exciting time, the march towards this future is happening very quickly. Have warnings from prominent figures gone unheeded?

RABBIT



The Rabbit R1 has just launched to purchase and its founder Jesse Lyu believes it is the answer to

organising our lives which he believes are getting significantly more complicated, what with all the different apps we tend to have installed.

The Rabbit R1 is designed to simplify things for users by answering and handling requests rather than run apps. The idea is not to replace your smartphones but to deal with menial tasks. Like passing a phone to a friend to order take-out. Some examples given was playing music from a Spotify account or booking an Uber ride from the CEO's office to home. Unlike traditional AI companion's though, Rabbit R1 was able to not just make suggestions about the ride but fully book it with Uber asking for a simple confirmation. He is then able to make an adjustment saying there are six people with three pieces of luggage and asking Rabbit to find one that can fit all. It comes back quickly to confirm it recommends booking an Uber XL and after a moment asks him to confirm. The ride appears on the screen and he hits confirm, and with that, the ride is fully booked. Ordering a pizza is just as simple with only a simple confirmation of the order being placed being required. Testing what Jesse Lyu said about other AI based systems asking Siri to order me a pizza. All Siri could do was suggest pizza restaurants and takeaway

websites nearby. No attempt to order being made. Rabbit R1 was even able to schedule a full holiday and itinerary for the trip with a detailed breakdown of each days activities.

The device itself is about the size of a stack of Post-it notes featuring a 2.88-inch touchscreen and an analogue scroll wheel. Above the scroll wheel is a camera that rotates 360° which they call the Rabbit Eye which rotates out of the way when not in use for privacy. The camera can be used for taking photos or selfies. Demonstrating the eye, Jesse holds it up to an image of Rick Astley. He is of course rickrolled! Holding it up to the inside of the fridge, he asks if it can make him something that is low in calories. Of course, it does not make it, but it does provide a dish and the steps need to prepare it.

A feature called Teach Rabbit OS allows users to teach Rabbit tasks. Lyu used removing a watermark from an image from Adobe as an example (probably not the best to use as this was a copyrighted image), but the feature is interesting. Rabbit have even said they have taught Rabbit how to play Diablo IV.

Rabbit are keen to point out that it does not store any users credentials with all authentication taking place on the third party websites. Rabbit R1 is available for \$199.00. I'm sure it will roll out in the UK and Australia soon.

Valve's Steam Deck was not the first but it is the device that has other large manufacturers jumping on the portable gaming PC market, and now MSI are having a stab with the MSI Claw.

The Claw A1M is the industries first to utilise an as yet untested Intel 14th gen Ultra chip as its APU. Its an interesting choice as the Intel Core Ultra 7 155H has a TDP of 28 watts. The Ryzen Z1 Extreme and Steam Deck's custom AMD APU can run games below 10W. A significant reason why makers have tended to choose AMD's APUs. MSI have kitted the Claw with a larger capacity 53Whr battery which they state they promise will provide 2-hours of battery at full workload so similar to the Steam Deck OLED in demanding games, despite having a better quality 1920 x 1080 120Hz display. The display is also said to feature 500nits typical brightness and 100% sRGB. Alongside the screen, are 2x 2w speakers and a sound system that carries a HiRes Audio certification.

Connectivity is well catered for with a 3.5mm audio jack, a microSD card slot, and a Thunderbolt 4 port. There is even a fingerprint reader built-in to the power button.

The Claw is the first of these devices to offer access to both Windows and Android games via MSI App Player.

As it's only just been announced, price and release dates have not been provided but we should hopefully see this new contender very soon!

THE CLAW





W

inner of a CES 2024 award for the coveted title of

'Best of Innovation', Samsung unveiled a glasses free 2D/3D monitor that converts any 2D image of a game into a 3D image.

Glasses free 3D has never really gone away. Of course, the most successful attempt was Nintendo's 3DS line of handhelds, and over the year's Asus has been trying to incorporate it into laptops. The problem with glasses free 3D has always been a very narrow sweet spot, where if the user moves out of this area, the illusion of 3D is broken. Whilst it was improved later on the New Nintendo 3DS models it was still incredibly easy to lose the effect with even a slight movement of the users head. Seemingly in demos, this new Samsung monitor may have cracked it, or at least made big

strides to make the technology viable.

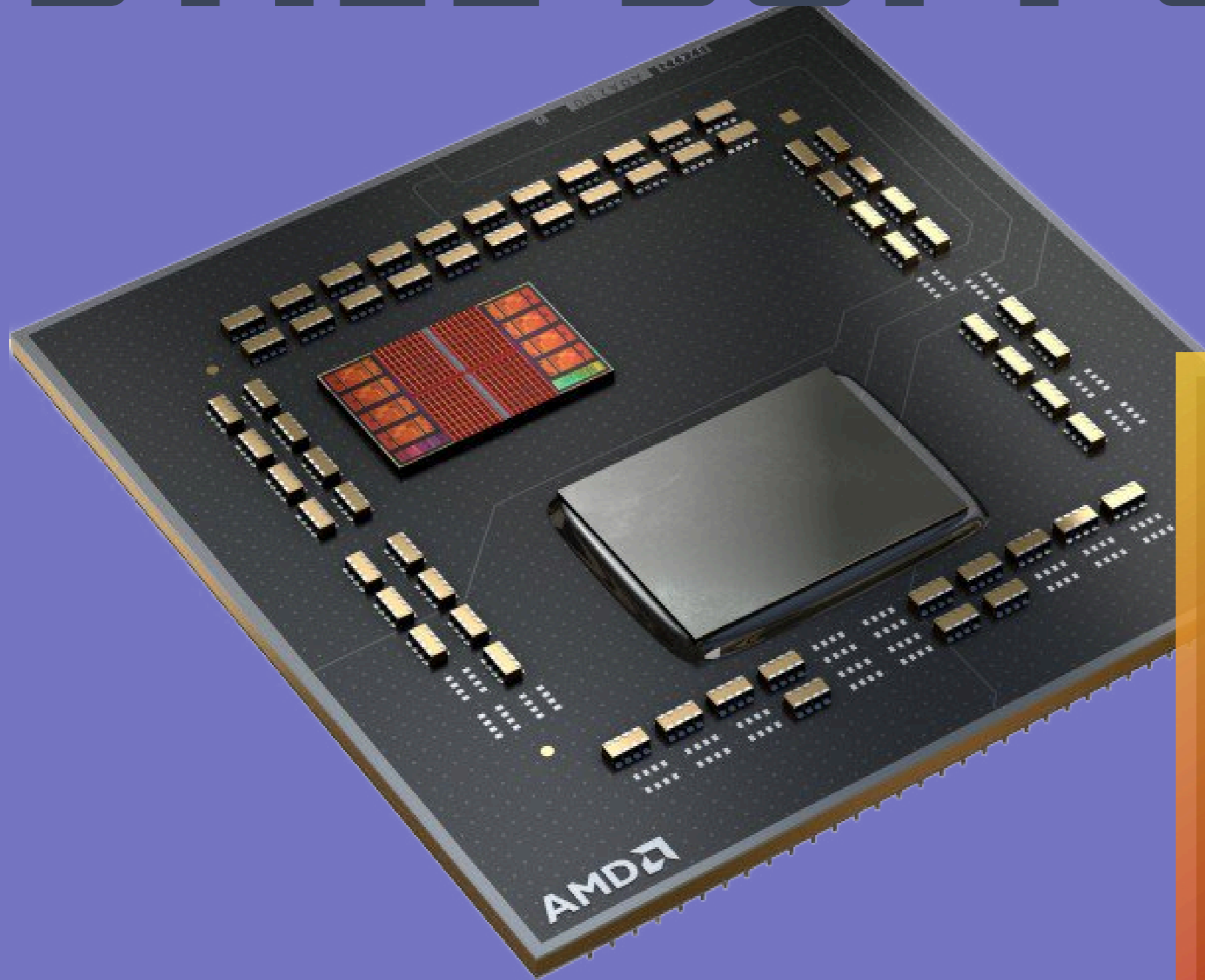
A reporter at CES reported that it is the most convincing glasses free 3D they have seen to date and they were happily playing Lies of P without the illusion breaking. The only thing they did notice was that there was some screen tearing on background elements when turning which could be a little distracting but it sounds very similar to the screen tearing when v-sync is turned off on non G-Sync or Freesync monitors.

The effect employs two cameras and eye tracking in order to ensure the effect is not broken and unlike previous TV's and screens that have used similar methods it seems Samsung has gotten the closest to making it a reality.

Samsung have stated there will be more on this product later in 2024.

IS 3D BACK?

STILL SUPPORTED



In the computing world it is great to see competition once again with AMD doing incredibly well now against Intel and NVIDIA both in the performance and price department.

Another aspect where they often win is their support for older platforms, and whilst they announced new products for their newer AM5 platform, they also announced new processors for the older AM4 platform that first launched in 2016, offering a promising upgrade path to those who have not decided to upgrade to AM5 and DDR5 memory.

Four new AM4 processors were announced. The first up is the Ryzen 7 5700X3D, an 8 core/16 thread processor with a 3.0GHz clock speed, with a boost up to 4.1GHz and 100MB total cache. This will be priced at \$249.99. Next up is the Ryzen 7 5700 which has a faster clock speed at 3.7GHz and boost up to

4.6GHz but falls short on the cache department with just 20MB, and of course its not AMD's 3D cache, which has proven itself to be great for gaming. This is listed as \$175.00.

The budget chips in this new release are the Ryzen 5 5600GT and 5500GT. Both are 6 core/12 thread processors with a clocks speeds of 3.6GHz but with 4.6GHz and 4.4GHz boost speeds respectively. Both come with 19MB total cache and are priced at \$140.00 and \$125.00.

Pairing nicely with this AM4 release is a new budget Radeon graphics card aimed at entry-level 1440p gaming. It's basically a better Radeon 7600 with faster clock speeds and 16GB VRAM. AMD state in its benchmarks that it can achieves an average of 71fps in Starfield with settings maxed and resolution set to 1080P. Pricing puts the new graphics card at a \$329.00 price point and it launches on January 24th.

SWEEP

Sticking to the computer components area of CES, other graphics card manufacturing giant NVIDIA officially announced the much rumoured RTX Super range of graphics cards. They announced the RTX 4080 Super, RTX4070 Ti Super and the RTX 4070 Super.

The RTX 4070 Super will be starting at £579.00/AU\$1,119.00 and is pitched as an ideal replacement for those on previous 2070 or 3070 cards with performance that actually is better than the previous RTX 3090. Designed for running games at 1440p and with max settings it is a significant upgrade over the previous 30 and 20 series offerings although it is still a little low in the VRAM department with just 12GB. That's fine at the moment, but the way things are moving, low amounts of VRAM could be a sticking point for graphics cards sooner, rather than later.

Next up is the RTX 4070 Ti Super for maxing out settings at

1440p and hitting the frame rates required to make the best of 144Hz monitors. It is also a viable option for gaming at 4K. It features double the amount of memory of the previous 3070 Ti and 2070 Super with 16GB VRAM. This cards Tensor core count is a massive increase up to 706 compared with just 174 on the 3070 Ti. The RTX4070 Ti Super will start at £769.00/AU\$1,499.00.

The flagship of this new launch is the RTX 4080 Super starting at £969.00/AU\$1,870.00. The draw for this card is running the likes of Alan Wake 2 and Cyberpunk 2077 at maxed settings with ray tracing. NVIDIA claim the card is twice as fast as the RTX 3080 Ti and second only to the more expensive RTX4090. The 4080 Super is also great for productivity and creativity with them claiming apps like Blender run 70% faster than on previous generation cards. Whilst it is still expensive, it has come in at a price point similar to AMD's best cards. It will be interesting to see how they counter!





I SEE THROUGH YOU...



LG never seem to disappoint at CES and this year was no different as they wowed the crowd with the unveiling of a transparent television. The sort of thing we have seen in various films sci-fi films over the decades.

The LG Signature OLED T is a 77-inch 4K OLED combined with LG's wireless video and audio transmission and won five innovation awards at this year's CES. LG are stating that "no longer does the TV need to be placed against the wall. Instead, users can place the OLED T in the middle of the room to become a divider or prop it against the window without blocking the view outside". Whilst it remains to be seen as to whether or not this is a viable option for people's home entertainment purposes or just a neat piece of tech, there is no denying that it is very cool indeed. The ability to place it anywhere is down to the included Zero Connect Box which is what enables the wireless transmission

capabilities of the television set. It will be available as either stand alone, wall mount or against the wall options and customers will be able to customise with standing or floating shelves.

The display features an Always-On-Display feature that when enabled can show photos, artwork or videos and another feature called the T-bar which is a useful information ticker that can highlight news alerts, weather updates or song titles whilst the rest of the screen remains transparent showing what is behind.

LG have thought about the entertainment aspect of the set. At the push of a button a contrast screen raises to provide more traditional vibrant OLED picture. LG state this takes full advantage of the new **α** (Alpha) 11 AI processor which offers four times the AI processing power of the previous model.

There's now news on release or price as yet, but watch this space.

HOW MUCH?

Apple are never one to feature at CES but they did release a new information on the upcoming Apple Vision Pro just before CES kicked off.

The official launch date of Apple's 'spatial computer' is the 2nd February in the US and the price remains the same at \$3,499.00. Those wishing to pre-order on the 19th January. With this recent announcement, we now also know the costs involved for those that will require prescription lenses alongside which are an unfortunate requirement. Unsurprisingly, the options are not cheap and are provided by ZEISS. These lens inserts magnetically attach to the inside of Vision Pro and come in to forms. Readers that will cost \$99.00 and prescription lenses at \$149.00. Apple have not gone into exactly how these are configured or what the ordering

process is for the different inserts so we will need wait.

At least it's not long until we find out whether or not the Apple Vision Pro is a viable product and Apple once again manage to push a product category into the mainstream or its a bit of a turkey.





Rumoured for years now, Nintendo's next system, the Switch 2 may have just had its release date announced, but not in the way Nintendo had planned!

Cheat code company Ai Shark, will be reviving the GameShark brand to release Ai enhanced software to "aid individuals in improving their gameplay over time" but unlike GameShark which provided cheating tools, Ai Shark will instead aid gamers with the focus market being casual gamers. The frustrating part for Nintendo is that the press release also stated its release "is planned to coincide with the Nintendo Switch 2". Looking now, this part appears to have been changed but it was first spotted by digital Trends and of course has gone around the internet. Since then, Altec Lansing have made a revised statement to Digital Trends and Bloomberg's Jason Schreier stating a fall 2024 release, and that the previous date was guesswork.

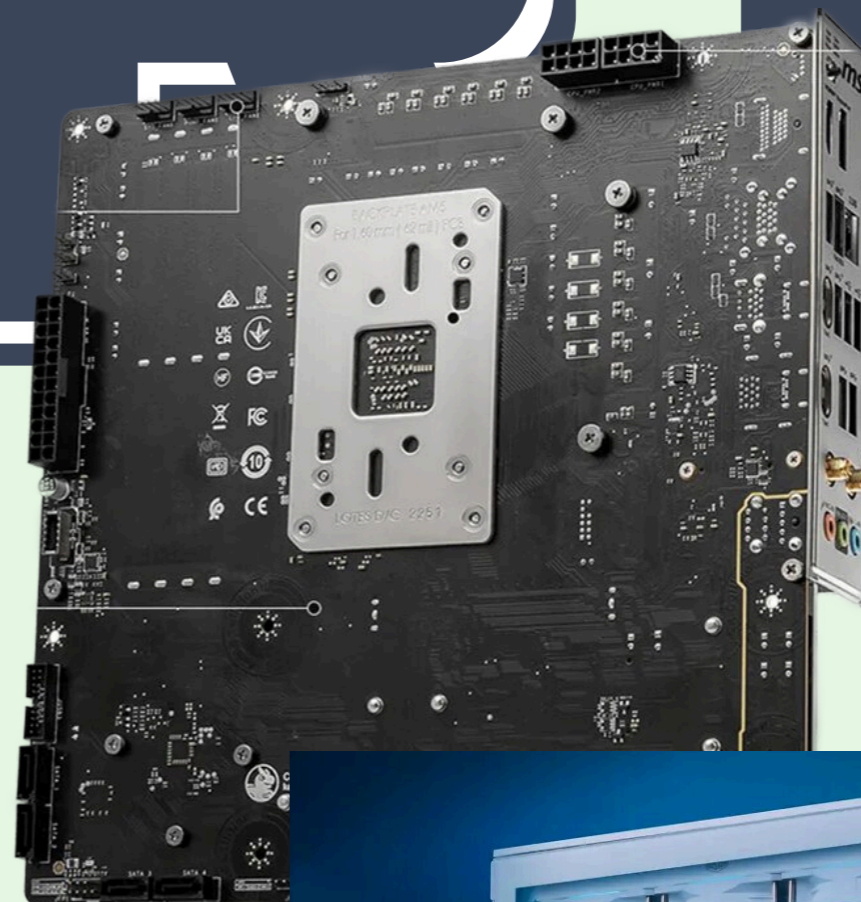
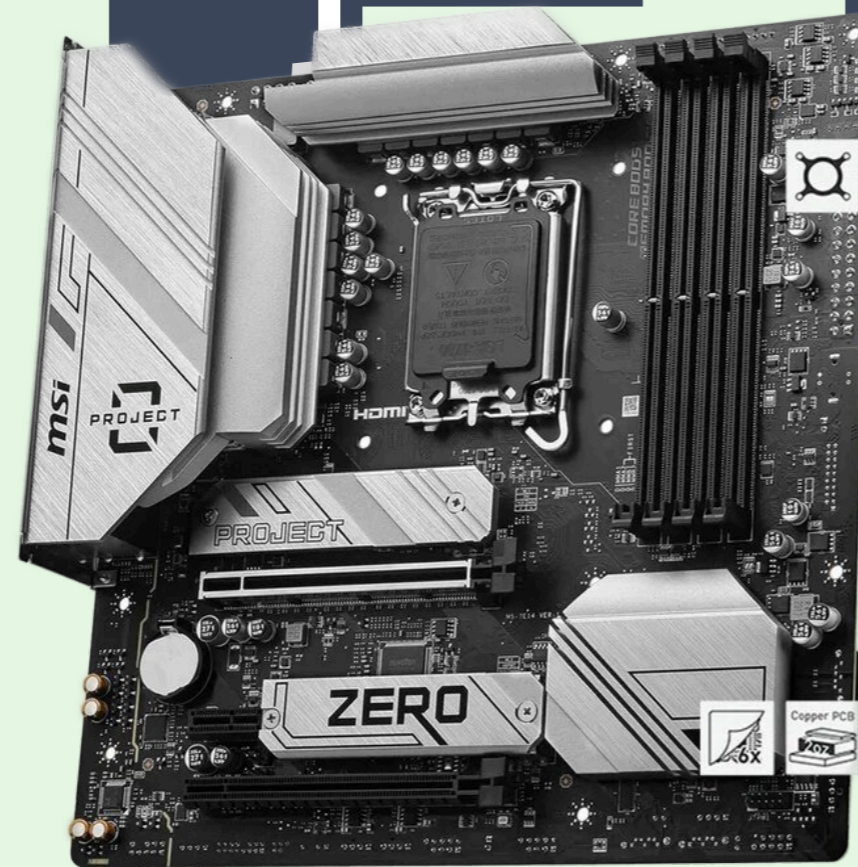
Whatever the case, I suspect we will be getting some solid details around Switch 2 soon. It's just good to see that Nintendo may be sticking with a winning concept, as opposed to making sweeping changes like they did with the Wii U, which was a complete flop!

Another CES reveal was MSI's Project Zero motherboards which for gamers or those looking to de-clutter their builds could be of interest. Asus and Phanteks also had similar reveals to eliminate clutter.

For those who look carefully, the Project Zero motherboard features power connectors on the rear of the board. A place that seems so obvious it's bewildering that nobody thought of it sooner. Of course, this will require some re-thinking by case manufacturers but this is a welcome change and could actually make PC building a little easier. Without the need to route cables neatly through to the front. Case manufacturer Phanteks announced their Maingear Zero Drop NV9 case to go with pre-built Maingear PC's and showcased it with MSI's Project Zero board for a cable free look with only the cooling tubes to the radiator and the GPU power cable visible. All other cables route to the back of the motherboard.

Asus revealed an RTX4090 BTf (back to front) that ditches the traditional power connector in place of a new GPU power connector on the card and motherboard.

Perhaps one for PC enthusiasts but a boon for PC builders moving forward for sure!



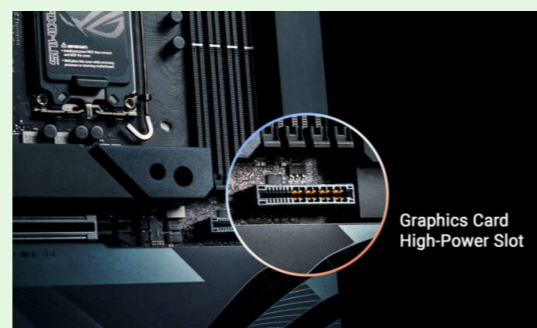
Phanteks new NV9 case



Asus new GPU connectors



PCIe High-Power Connector



Graphics Card High-Power Slot