market info

Be Valued

CES™ 2025

2025

This year's biggest tech event has been and gone and there was a lot of interesting tech on show. Of course televisions made up a big part of it, but there's new projectors, and even a television that wall mounts using suction cups! Yes, you read that right.

Of course, it's display tech is not the only thing at CES. The show saw the announcement of some new battery tech, not using lithium ion, that is environmentally friendly and compostable and new robot vacuums and lawnmowers. Computers were also a big part of it, especially as NVIDIA used the event to announce their new RTX50 series of graphics cards, which promise to be a huge upgrade on the previous generation. There was even a plant pot that can analyse the type of plant potted and provide updates on how much and when to water it.

Outside of CES, DJI launched yet another drone: the DJI Flip. This is a new entry level drone that is slightly bulkier than some of the other more affordable drones, but offers solid battery life.

Oh, and Nintendo finally broke their silence on the Switch 2 by showing it off in a short video!

DISPLACE

The Displace TV Pro, which will initially only be available in the US, is a truly wireless OLED television that utilises an in-built battery system to provide up to 15 hours of viewing before requiring a recharge. Better yet, with the optional Displace Soundbar and speakers, which also have built-in batteries, the Displace TV's run time is extended to up to 60 hours!

A key highlight for the TV is the aforementioned suction cup wall mount system. It utilises active loop vacuum technology that allows the TV to stick to any wall in a few moments. Whilst in operation, the set guides the user through the wall mounting process, providing a read out for each of the suction cups, as well as a levelling meter that lets you know when it's safe to let go.

Access to the televisions ports has been well thought through too. A charging port pops out from the side of the television, as does an array of USB-C ports and HDMI ports. These require a simple push to reveal.

Another neat feature of the Displace TV is it's ability to create a larger TV with Displace Video Wall System. Up to four TVs can be linked together to create a larger 110" screen, and with virtually no bezels, the connected screens can display a single source stretched across all four, or can be used independently of each other.

The Displace TV is powered by an Intel N-300 8-core CPU with integrated GPU, with 32GB RAM and 256GB storage. This runs Displace OS, the TV's operating system, which is an AI based operating system that will operate as a hub for both entertainment and productivity. This can be interacted with in a variety of ways. There is voice control: simply say "Hey Displace" to interact. The TV also allows for simple gesture controls for quick actions like play/pause. There is also a Displace Multi-Touch controller that has a trackpad and keyboard. There is also a feature called Displace Agents: specialised AI agents that can aid with tasks such as ordering food, shopping or online searches.

The Displace TV Pro is available to pre-order now for $599.90 with a retail price of $5,999.00 for the 55-inch. A 27" can also be pre-ordered for $399.90 with a retail cost of $3,999.00. Hopefully these sets hit Europe later in the year, or push existing manufacturers to innovate.

FLIP!

DJI's new drone is quite the design departure from the others in it's lineup. Like the more recent Neo and Avata drones from the drone giant, the DJI Flip features propeller guards, but the guards and propellers fold away underneath the drone - a first for a drone. This makes the overall footprint a little larger than other drones, but adds no extra weight, owing to the carbon fibre supports that make up the structure, making the Flip another sub 249g drone in DJI's extensive lineup.

No device seems devoid of AI and Flip is no different with it's AI Subject Tracking. Flip can keep track of your selected subject through a variety of settings. There's six intelligent shooting modes to choose from: dronie, circle, boomerang, rocket, helix and spotlight..

Both video and photo quality are excellent. The 1/1.3-inch sensor features Dual Native ISO Fusion that allows it to use it's two native ISOs simultaneously for the best quality and lowest noise levels. The sensor can take 48MP photos, and the camera lens is a 24mm (35mm equiv.) f/1.7 with 2.4µm 4-in-1 pixels and, with a digital zoom up to 4x, Flip can get closer to it's subject. Video performance is also superb with Flip capable of 4K video up to to 60fps in HDR. Slow motion footage can also be captured, with 4K/ at 100fps, ideal for capturing sport or action scenes. The 4:3 ratio sensor allows for 2.7k resolution vertical shooting, which is optimised for viewing on a smartphone. These videos can be shared on social media without the need for cropping. If all that was not enough, this small drone shoots in 10-bit D-Log M for support of 1 billion colours - retaining colour and detail in highlights and shadows.

Battery life is superb, with flight times up to 31 mins and, with the Flip Parallel Charging Hub, two batteries can be charged at once. There's next level video transmission with Flip able to transmit 1080p/60fps at a distance of up to 13km, and finally, there's a 3D Infrared Sensing System that allows automatic braking, which even works at night.

The DJI Flip is available now, starting at £369.99/AU$699.00 for the basic kit, which comes with the RC-N3 controller that requires a smartphone to function. £549.99/$AU949.00 with the RC 2 controller and it's integrated screen. A Fly More pack ,which features the RC2, charging hub, 3x batteries and shoulder bag, costs £659.00/ AU$1,159.00.

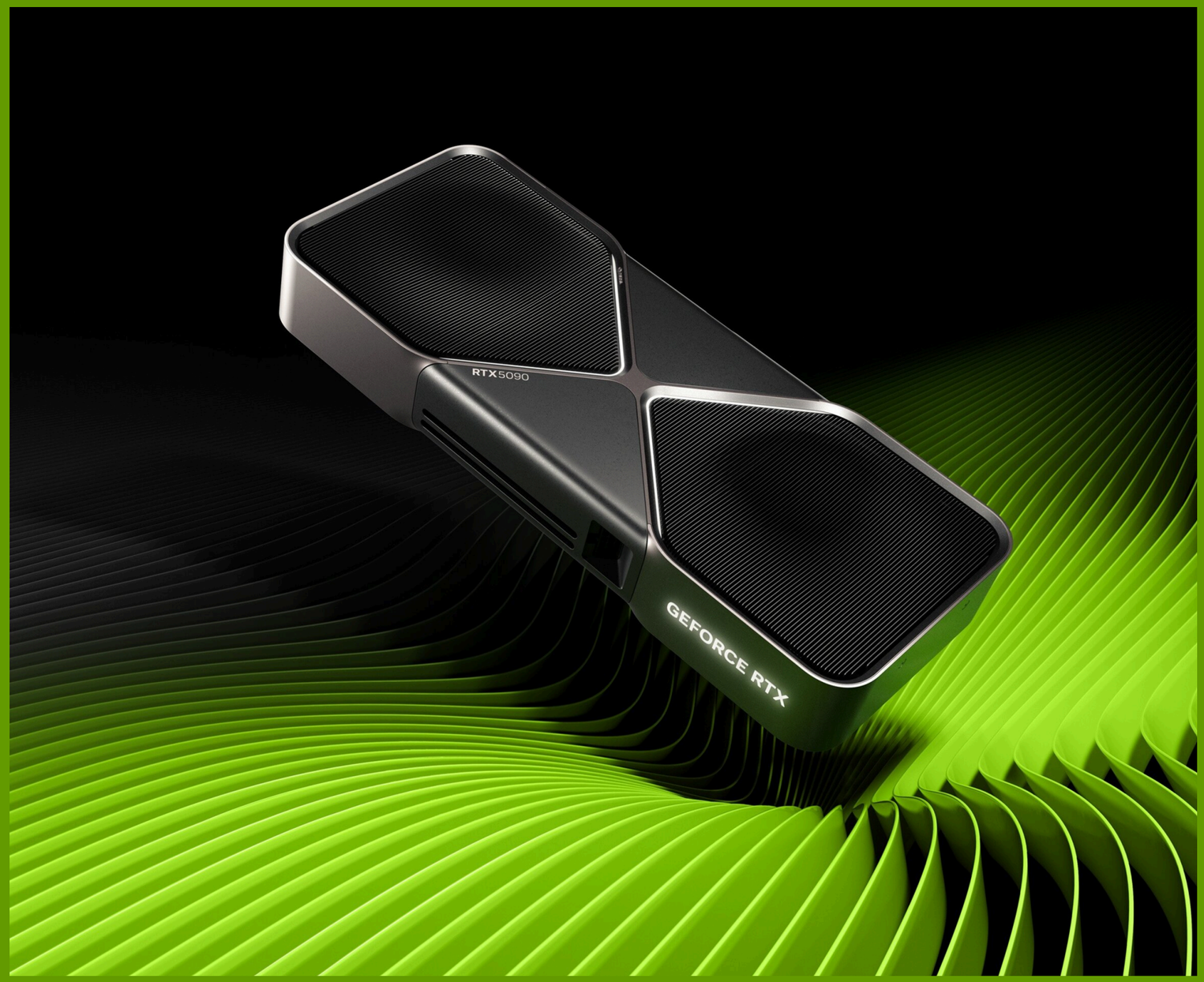
50 SERIES

NVIDIA announced their latest generation of graphics cards and they are looking to be extremely powerful, with NVIDIA stating "Neural Rendering is the next generation of GPU graphics".

DLSS was just the start, and with RTX 50 comes DLSS 4 with multi frame generation. They state that this can improve frame rates by up to 8x. In promotional material shown, DLSS 4 increases frame rates from 25fps all the way up to over 230fps. But that's not all, RTX Neural Shaders can compress textures by up to 7x, placing less strain on graphics memory. This is perhaps why NVIDIA's new GPUs do not feature as high memory counts as AMD's cards. They simply don't need as much due to this new tech, and the new Blackwell architecture has been built and optimised for neural rendering. Blackwell architecture features up to 92 billion transistors and, with improved hardware and software improvements, the speed and efficiency of the Neural Shaders is twice as efficient. New RT cores have 2x the ray triangle intersection rate of the previous generation, and enhanced compression also helps to alleviate strain on GPU memory. Speaking of which, the new Blackwell GPUs utilise brand new GDDR7 memory with speeds of up to 30Gbps and 1.8TB/s of memory bandwidth.

This all sounds very nice, but what does it actually equate to in real world terms? For starters, NVIDIA quote that the RTX5090 performs 2x faster than the previous RTX 4090. Using "Cyberpunk 2077: Phantom Liberty" as an example, with DLSS 4, and Full RT On, they state frame rates of 234fps, compared to RTX 4090 with DLSS 3.5 and Full RT On. This card is likely out of reach for many gamers though coming in at a starting cost of a Founders Edition card announced at $1,999.00 (US). Third party cards are expected to be even more expensive.

The sweet spot for the new RTX cards appears to be the RTX 5070 and 5070Ti, and, perhaps if gamers can stretch to it, the RTX5080. Like the RTX 5090, each of these cards has doubled the performance of the cards they replace, but it's their pricing that is the most appealing thing (at least until the scalpers get a hold of them). RTX 5070 starts at £539.00,, whilst RTX5070Ti starts at £729.00. Pricing in Australia is yet to be announced.



aF-1

The resurgence of analogue gadgets continues, this time from a brand we have covered before. Analogue are best known for their high quality remakes of old consoles: the Pocket, Super Nt (Super Nintendo), Mega Sg (Megadrive) and others, but they have also been working on a new 35mm compact film camera.

Styled on popular 35mm compacts like the Contax and Yashica T, as well as Olympus Mju cameras, the aF-1 is a feature rich compact with a LiDAR based autofocus system. The design is also undeniably Analogue, with their DNA visible on it's sharp lines coupled with subtle curves. It can focus from 0.5m to infinity. The Renaisson lens is a 35mm f/2.8 with a double gauss design, featuring 6 elements of high quality glass in 4 groups for sharp clear photos. For when the fast lens does not have enough light, there is also a built-in flash that can reach 3m at ISO 100 with a quick recycle time of just 0.5 secs, and will automatically fire when it is needed.

The aF-1 also features automatic winding, and when a roll is finished, it will wind back seamlessly. The viewfinder is clear and bright and shows users frame lines as well as correction markers for close-up shots.

The Analogue aF-1 is not that far away either. The roadmap puts the camera at a summertime release. When I first saw the camera, I did think it was going to be expensive, but it turns out that price-wise it will actually be quite reasonable, coming in at less than the Pentax 17 released last year. When it launches, it will cost €399.00, with an early bird offer currently available for €339.00.

PAPER ENERGY

Winner of the "best of CES 2025 award", a small start-up called Flint introduced it's new biodegradable paper batteries. Yes, you read that right, paper batteries.

The new company has secured funding of $2m to accelerate the commercialisation of it's new technology, which features a number of benefits over the typical lithium-ion battery tech we have become accustomed to. First of all, they require the use of no lithium, cobalt or nickel - materials that are currently mined in an unsustainable way. Paper batteries are safer and do not leak hazardous chemicals, overheat or explode, and, best of all, they are compostable and can break down in just 6 weeks.

The batteries are made of 100% renewable materials: water, cellulose, as well as a combination of zinc and manganese, which are both commonly found in the environment and our own bodies. Despite this change of composition, Flint have aligned the manufacturing process with current lithium-ion manufacturing processes. A deliberate choice to enable rapid scaleability and compatibility with existing infrastructure. This makes a lot of sense, especially as Flint are aiming the tech at almost every device you could think of, even the grid and energy storage solutions.

The paper batteries are light weight, rechargeable and feature a cost per kWh 1.8 times lower than current lithium-ion technology, whilst being more affordable. Power demanding applications are not an issue with their rapid energy transfer and low internal resistance with minimal loss of energy and currently nearing production in both coin cell and pouch cell form.

Another benefit is the range of temperatures that the batteries can operate in, with a range of -20°-80°C. This range is twice that at both ends of current lithium-ion batteries, which tend to perform very poorly at low or high temperatures temperatures. The safety aspect cannot be overlooked. Owing to the materials used, they cannot catch fire: Flint have tested and the batteries will not burn. They are also not harmful if pierced.

There is no date yet on the new battery technology, but hopefully it will come to devices in the coming years.

ACTIVE ROBOTS

Robot vacuums and mowers have been getting more and more popular over the years and CES highlighted some new models that are coming out.

The Lymow One robot mower adds a couple of key features that have been missing from robot mowers since their introduction. First of all, it's the first to feature the capability to mulch leaves, small sticks, fruit, pine cones etc. The mulching blades, in combination with a centrifugal fan, evenly distributes the mulch without clumping, providing food for the lawn.

It also features tank-like treads that Lymow call the Savage Traverse System. This enables the Lymow One to traverse terrain that other robot mowers simply can not. It can traverse inclines of up to 45°; obstacles of 2-inches in height; small steps; and can cover an area of 1.73 acres per day. Far superior to most. The One also features advanced navigation with it's LySee navigation system, which requires no manual boundaries being set. It combines precise area mapping with RTK satellite positioning and VSLAM. According to Lymow, it has the most advanced mapping of any robot mower for unobstructed mowing. The Lymow One is expected to launch in April costing $1,999.00.

The Roborock Saros Z70 is the first robot vacuum cleaner with a mechanical arm for moving obstacles out of the way. The OmniGrip Mechanical Arm is a 5-axis arm that emerges from the body to move obstacles out of the way prior to vacuuming. It can only lift up to 300 grams and was demoed moving socks out of the way and placing them in a laundry basket, opening up areas for cleaning that would have previously been blocked and cleaned around. Despite this extendable arm, the Saros Z70 is still thinner than the competition, with an ultra-thin 7.98cm design. It also features another industry first in the form of it's AdaptiLift Chassis, which enables it to clear 4cm high obstacles.

A FlexiArm Side Brush and Mop enables it to reach into corners for 100% coverage around the home. The Multifunctional Dock 4.0m features 10-in-1 Hands Free Maintenance, which charges; removes the mops; dispenses detergent; empties dust; and drys. There's not a lot the new robot vacuum cannot do.

It launches later this year, but there is no news on price.