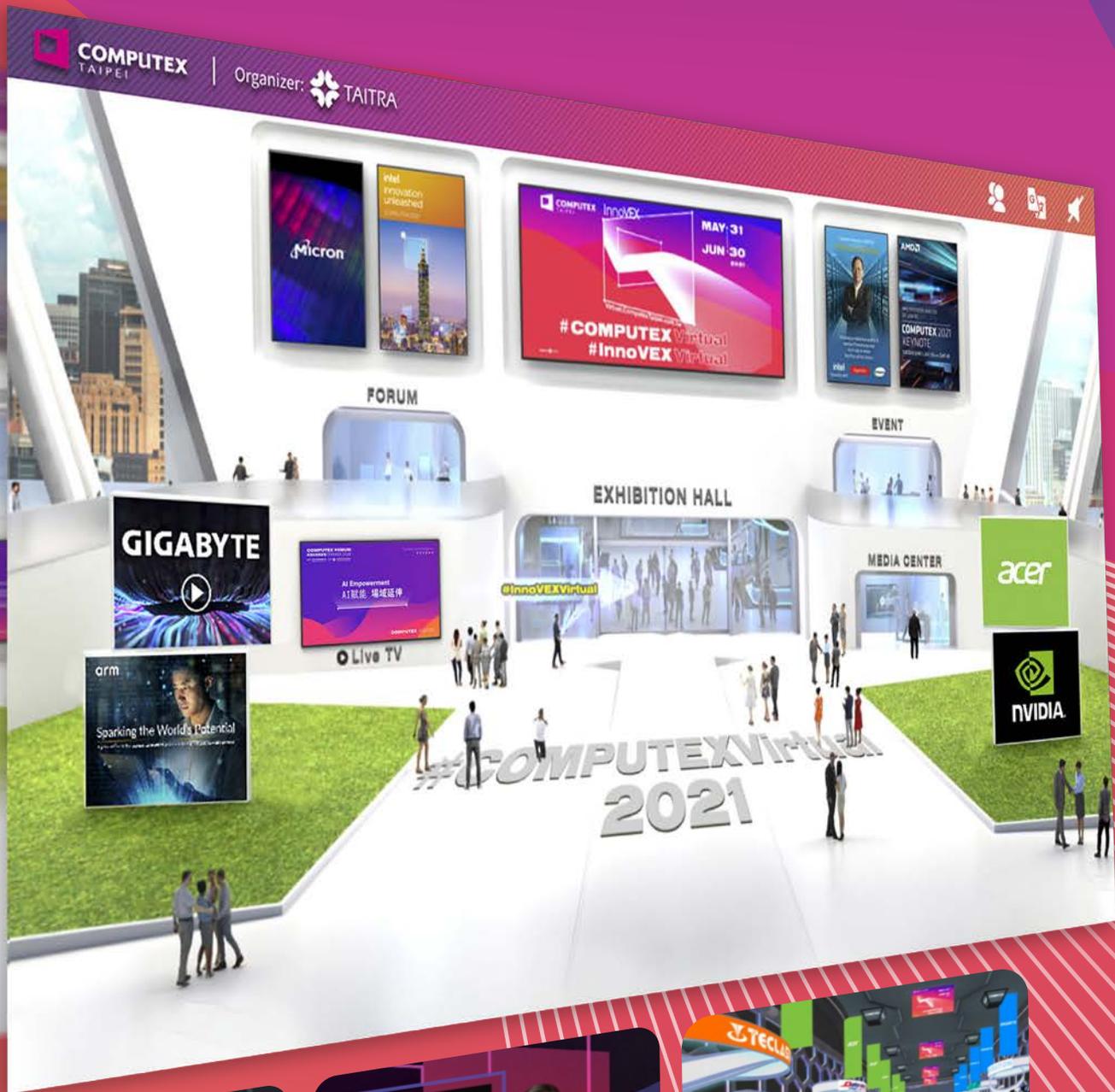


**MAY 31 — JUN 30, 2021**

# # COMPUTEXVirtual TAKEAWAY



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# Sparking the World's Potential

Together with our brilliant partners, we unlock the power of technology and spark the world's potential.

At this year's virtual Computex event, Arm's CEO Simon Segars and President, IP Group, Rene Haas, discussed technology's key role in the post-pandemic recovery and the acceleration of compute trends driven by the growing demands for ubiquitous intelligence across every device. Visit [Arm.com](https://www.arm.com) to watch both keynotes.

**arm**

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# COMPUTEX 2021 Virtual features industry leaders, insights on the future and award-winning products

The online platform leverages AI and automation to provide an unparalleled experience for visitors and exhibitors from around the world

COMPUTEX 2021 kicked off today, embracing a completely virtual format to overcome the limitations caused by the global pandemic. The show's organizer, the Taiwan External Trade Development Council (TAITRA), has worked with key global technology firms to launch #COMPUTEXVirtual, a month-long platform designed to provide a truly exceptional experience for exhibitors and visitors around the globe.

#COMPUTEXVirtual provides exhibitors with booths powered by AI and automation technologies. The platform facilitates a variety of communications channels between exhibitors and visitors, including video conferencing, meeting requests and instant messaging. Exhibitors can leverage the power of AI to identify their target



audiences for product promotion and receive personalized recommendations to assist them with matchmaking.

Each year, the world's leading global information and communications technology trade show features leaders of some of the

industry's most influential companies — and COMPUTEX 2021 is no exception. Today's opening keynotes by Intel chief revenue officer Michelle Johnston Holthaus and Arm CEO Simon Segars will be followed over the next few days by other luminaries, including AMD CEO Lisa Su, Micron Technology CEO Sanjay Mehrotra, Supermicro CEO Charles Liang and NXP Semiconductors CEO Kurt Sievers. In addition, NVIDIA head of enterprise computing Manuvir Das will present on "The Transformational Power of Accelerated Computing, from Gaming to the Enterprise Data Center."

#COMPUTEXVirtual features 147 exhibitors from 33 countries and regions, including Taiwan's Acer, Asus, Delta Electronics, and Gigabyte, as well as international heavyweights such as AMD, Intel, NVIDIA, NXP, and Qualcomm. The show has 4 unique features this year: tech insights through keynotes, such as COMPUTEX Forum and InnoVEX Forum; virtual booths where exhibitors will display their latest products; matchmaking and networking via a variety of communications technologies; and hyper-personalized recommendations generated by AI to provide exhibitors with marketing strategies.

### Exploring a 'New Era of Intelligence'

One of the biggest highlights of the trade show calendar, the COMPUTEX Forum this

year examines "The New Era of Intelligence," with an emphasis on artificial intelligence (AI), 5G communications, Internet of Things (IoT) technology and electric vehicles. On June 2 and 3, these topics will be discussed by industry leaders in four panels: AIoT Evolution, AI Empowerment, Critical Technology and Tomorrow Tech. These panels will each feature multiple invited speakers, who will delve into the development of quantum computing, explore the infinite possibilities of future technologies and discuss the business strategies and trends of the post-pandemic world.

With a global market projected to soon exceed US\$500 billion, AI will be one of the hot topics at the show. COMPUTEX is working with major international technology companies to showcase the AI ecosystem. Several manufacturers will be showcasing their extensive portfolios of products designed not only to power next-generation AI applications, but also expedite the realization of Artificial Intelligence of Things (AIoT) solutions.

### InnoVEX continues tradition of fostering innovative start-ups

InnoVEX, the exclusive exhibit for startups at COMPUTEX, is where you spot the perfect fit in markets, accelerators, VCs and partners. Innovative startups have always been key motivators for progress in the technology industry.

Following in the tradition of its offline namesake, #InnoVEXVirtual is a featured exhibition area designed to help startups gain international attention. In addition to pavilions dedicated to France, South Korea

and the Netherlands, a delegation of 18 startups from seven countries led by the European Bank for Reconstruction joins InnoVEX for the first time. They are among the 79 startups from 24 countries that are participating in InnoVEX this year.

### COMPUTEX d&i Awards recognize outstanding products

For more than a decade, the COMPUTEX d&i Awards have not only recognized revolutionary innovation, but also provided the public with a sneak peek at the technology trends of the future. That tradition continues at this year's COMPUTEX, with 21 judges including investors, journalists and subject-matter experts selecting the 50 most innovative products of the year based on several criteria: Innovation, Technical, Functionality, Social and Craftsmanship, as well as aesthetics. The 13th d&i Awards focused on recent technology trends in nine areas, including Startups, a new category aimed at fueling business opportunities and technological breakthroughs.

The COVID-19 pandemic has changed how people around the world live and interact with each other, which was evidenced in this year's submissions. Due to lockdowns and an increase in remote work over the past year, the demand for home entertainment and fitness, esports and gaming equipment has skyrocketed, with such products constituting about 38 percent of the total submissions from seven countries for the d&i Awards. From the 50 winning products in the preliminary round, the judges bestowed three special and three gold awards in the final.



Michelle Johnston Holthaus  
Executive Vice President, Chief Revenue  
Officer, General Manager, Sales, Marketing  
and Communications Group, Intel

# The Secret to Unleashing Innovation? Listening to Customers

- Michelle Johnston Holthaus, Executive Vice President of Intel Corporation

Everything at Intel starts and ends with our purpose: to create world-changing technology that improves the life of every human on Earth. And the only way that can be achieved is through our customers and partners. As simple as it sounds, listening to customers continues to be the secret to unleashing innovation at Intel.

In my keynote at COMPUTEX today, I shared the virtual stage with partners and colleagues from around the world. We highlighted that the innovation being unleashed by Intel is a direct result of listening to our customers and taking specific actions based on their feedback. What they tell us informs our strategy and our purpose, products and services — it also enables our collective success.

Technology has never been more important for humanity than it is today. In the past year, technology made remote working and learning possible, enabled telehealth solutions for patient and caregiver safety, and brought online streaming capabilities to new heights. But the demand for technology started long before COVID-19, and semiconductors are at the foundation of it all.

We have a deep understanding of the

global supply-and-demand challenges, and know consistent supply is the key to industry growth. We are committed to continuing to lead and drive collaboration across the entire semiconductor industry to tackle these challenges together and fuel the next era of innovation.

In March, Intel CEO Pat Gelsinger unveiled our IDM 2.0 strategy. It's a powerful, winning formula that strategically uses internal factories and external foundries to deliver our leadership products — and provides the industry more advanced foundry capacity through Intel Foundry Services.

Clearly, semiconductor demand is unprecedented. Nowhere is that more evident than in the PC market. As Steve Long, Intel corporate vice president, said when he virtually joined me on the COMPUTEX stage, "This year is shaping up to be the largest PC market ever."

This year, we announced four new families of Intel® processors, 27 new CPUs built specifically for business, six new CPUs for education, 12 high performance mobile CPUs and eight high performance desktop CPUs for consumers. On the data center side, we

launched our latest Intel® Xeon® Scalable platform, which includes over 40 individual CPUs optimized for cloud, high performance computing, network and security workloads. We also launched our latest Intel® Optane™ memory and storage products, FPGAs and Ethernet technologies — something new and exciting every quarter!

Just a few weeks ago, we launched our 11th Gen Intel® Core™ H-series mobile processors — the world's best gaming laptop processors\* — offering desktop-caliber game play from anywhere. We also just announced two additions to the 11th Gen Intel® Core™ family that will deliver even more performance and extend our leadership in the thin-and-light notebook category. More than 60 designs based on these two new products will be available by the holidays, with designs from Acer, ASUS, Lenovo and MSI landing on shelves this summer — some selling this week. That totals nearly 250 thin-and-light laptops powered by 11th Gen Intel Core processors.

Intel is continuing to advance PC experiences beyond pure performance as well. With a combination of key platform technologies and system optimizations, [Intel® Evo™](#)



Pat Gelsinger, CEO, Intel

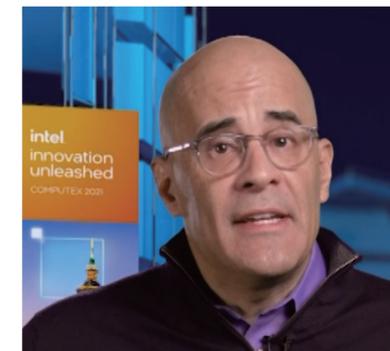
verified designs are co-engineered to ensure exceptional responsiveness, long battery life, instant wake and connectivity.

Our customers are taking advantage of delivering unique innovations on this platform: more than 85 Intel Evo designs have launched from top OEMs including Acer, ASUS, Dell, HP, Lenovo, MSI and Samsung, and we expect to verify more than 100 designs from over 15 OEMs by the end of this year.

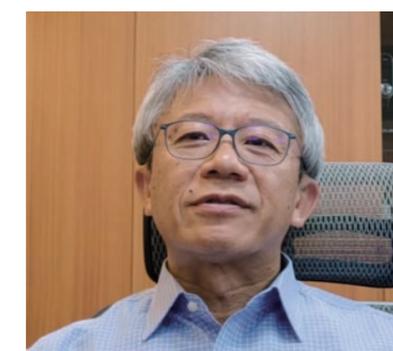
And I'm excited to share that we've also partnered with more than 150 ecosystem partners to create a deeper level of premium mobile computing with plans to invest more than \$50 million in Intel Evo ecosystem innovation this year.

Of course, we're not just focused on the CPU. We are innovating at a platform level, too. We know real-world performance and connectivity are vital to our partners and the people that rely on PCs every day, so we're accelerating the support and availability of Wi-Fi 6E with our 11th Gen lineup.\*\* We're even continuing that momentum beyond Wi-Fi with more platform capabilities and choice in the market with the launch of our first 5G product for PCs: the Intel® 5G Solution 5000.

This is not innovation for the sake of advancing technical specifications. It's



Rick Echevarria, Vice President, Sales, Marketing & Communications Group General Manager of the Intel Olympic Program, Intel



Joe Hsieh, Chief Operating Officer, ASUSTek Computer Inc.

innovation designed to accelerate the meaningful build-out of what Pat calls the four superpowers: cloud, 5G, artificial intelligence (AI) and the intelligent edge. Innovating in these areas is essential because they have the potential to impact the ways we live, work and play on a global scale.

As these superpowers accelerate, it is critical we deliver a data center platform that is flexible, that brings AI everywhere and that services all workloads from the edge to the cloud. This year, we advanced the capabilities of the Xeon platform with our latest 3rd Gen Intel Xeon Scalable processors (code-named "Ice Lake"), which deliver a nearly 50% performance improvement over earlier generations.\*\*\* Cloud providers, OEMs and ODMs worldwide are deploying hundreds of



Lisa Spelman, Corporate Vice President and General Manager, Xeon and Memory Group, Intel



Jason Chen, CEO, Acer

unique systems and services to take advantage of these capabilities.

These advancements are the result of close partnerships with our customers. The key to unleashing innovation and achieving our ambitious goal of improving the life of every human on Earth can only happen through collaboration with customers and partners. And to help them, we must listen to them so we can deliver what they truly need.

We've done amazing things together over the years, and we know there's more to do. We are committed to continuing our listening journey, collaborating and unleashing the Intel innovation machine with an unprecedented level of investment, focus and customer obsession. Our future together is bright!

## Notices & Disclaimers

\* Visit [www.intel.com/Computex21](http://www.intel.com/Computex21) for all configuration details. Results may vary.

\*\* Subject to regional availability; not available in all markets.

\*\*\* See [125] at [www.intel.com/3gen-xeon-config](http://www.intel.com/3gen-xeon-config). Results may vary.

Performance varies by use, configuration and other factors. Learn more at [www.Intel.com/PerformanceIndex](http://www.Intel.com/PerformanceIndex).

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See [www.intel.com/Computex21](http://www.intel.com/Computex21) for configuration details. No product or component can be absolutely secure.

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# COMPUTEX and Arm aim to inspire the post-pandemic recovery

COVID-19 has created an opportunity to consider how we want to reshape a more secure and sustainable future

Disruptions wrought by COVID-19 were in clear view on Monday, as Taiwan External Trade Development Council (TAITRA) Chairman James C.F. Huang delivered the opening address of COMPUTEX 2021, not in front of a room of attendees, but to a camera lens. Yet optimism pervaded the opening day of speeches, as Huang and keynote speaker Arm CEO Simon Segars detailed ways in which technology can help us “navigate the new normal with innovation.”

“Everyone, from nine to 90, now knows social media, streaming services and online shopping,” Huang said. “It is only a matter of time before we prefer voice over keyboards and VR over our phones.”

At the center of this new ecosystem is Taiwan, which is “helping to interface, integrate and innovate as always” in areas as disparate as e-mobility and smart sporting, he added.

The innovations built today are to shape the world of tomorrow, Huang said, welcoming Segars to share ways in which the semiconductor designer is looking to “spark the world’s post-pandemic recovery.”

Just as scientists spent decades researching mRNA vaccines in preparation for a global pandemic, today’s technological development is to play a critical role in the years to come, Segars said.

“At the core of this is the question of sustainability,” he added. “How do we use the opportunity this moment provides to reimagine and build a world that manages risk and provides greater access and opportunity?”

Simon Segars, CEO, Arm



James C. F. Huang, Chairman of TAITRA, Organizer of COMPUTEX

Arm’s response to these needs is Armv9, developed over a decade, which promises new approaches to security and efficiency.

As the ubiquity of computing creates new vulnerabilities, Arm baked its Confidential Compute Architecture into the hardware itself, creating universal architecture to free up resources otherwise spent on security for investment into other innovations.

The other challenge is learning how to “run smarter,” Segars said, which in 2021 means “managing our impact on

the planet, and in this case, greenhouse gas emissions.”

Arm is therefore focusing on reducing energy consumption without sacrificing performance, especially as 100 percent of the world’s data is soon expected to flow through an Arm device.

This also involves making cities smarter and more efficient, Segars said, offering for example the home of COMPUTEX, the Taipei World Trade Center, which has been retrofitted to improve energy efficiency.

New technologies powered by Arm can also be used to protect natural resources, whether through detecting loggers with recycled cellphones or reducing battery waste from hearing aids, he added.

Yet amid all these exciting visions of the future, Segars urged attendees to take a moment for reflection.

“This year has been challenging, filled with adversity and incalculable loss, but it has given us an opportunity to reflect on the type of future we want to build,” he said. “Like those remarkable scientists who spent decades researching the mRNA vaccine, the work you’re doing today will be critical to building the world of tomorrow.”



Dr. Lisa Su  
President and CEO  
AMD

## AMD accelerates performance for gamers and more

New Radeon and Ryzen products enable cutting-edge graphics on devices large and small — even on the go — while open-source upscaling technology improves fidelity for all gamers

No stranger to pushing boundaries, AMD is once again testing the limits of high-performance computing with its suite of new offerings announced on Tuesday at #COMPUTEXVirtual, organized by the Taiwan External Trade Development Council (TAITRA).

In a sign of what is to come as the world emerges from the pandemic, AMD president and CEO Dr Lisa Su once again took to the stage for her keynote, speaking to an auditorium of socially distanced and vaccinated employees about industry-leading advances in processors, graphics and advanced technology.

Nowhere has needed speed more over the past 15 months than data centers, especially cloud and e-commerce providers. AMD’s third-generation EPYC server processors have stepped in to handle usage surges for partners including Zoom, Microsoft and Twitter, while giving a 50-percent boost in throughput for e-commerce platforms over the competition.

Yet the most anticipated announcements were for consumer devices, led by new RDNA 2-based mobile graphics for the Radeon RX

6000M series, offering an impressive 1.5-fold generational performance boost.

“It has never been more important to deliver a laptop gaming experience” as sales surge amid a year of work-from-home, corporate vice president and general manager of graphics Scott Herkelman said as he took the stage to introduce the most powerful mobile gaming graphics yet.

With up to 12GB of RAM, the top-of-stack Radeon RX 6800M in testing was “hitting desktop-level performance” at 120fps and above at 1440p max settings, Herkelman said, to be available soon in the ROG Strix G15 by Asus.

“There is no dispute. Gamers know that performance is king, whether it’s an immersive AAA game or a competitive esports title,” he said. “Many gamers also want to be able to turn on the latest visual technologies like ray tracing while maintaining an acceptable frame rate,” which is why AMD developed FidelityFX Super Resolution. This open-source technology allows gamers to choose from four



(Right) Scott Herkelman, Vice President & General Manager, Graphics Business Unit, AMD  
(Left) Frank Azro, Chief Architect of Gaming Solutions and Marketing, AMD

quality settings on whatever device they own, even on competitor GPUs.

Knowing that buying a laptop can be a daunting task, AMD also announced a new design framework to guarantee the best performance. “AMD Advantage gaming laptops make a great gaming laptop simple, as it ensures that you’re getting a premium gaming experience through and through,” chief architect of gaming solutions and marketing Frank Azro said.

Fans might also be surprised to learn where AMD’s RDNA 2 graphics architecture will be found next: on the road. The infotainment centers on the new Tesla Model S and X vehicles are to include a discrete RDNA 2-based GPU, enabling passengers to play AAA games while on the go.

For the desktop user, Su also announced new offerings in AMD’s Ryzen 5000G series of Accelerated Processing Units (APUs) that integrate processing and graphics “all in a single chip.” In a demo running only on the built-in graphics of the new Ryzen 7 5700G, the game Rogue Company averaged 78fps at 1080p resolution.

Lastly, Su offered a glimpse into the future of computing with advanced 3D chiplets, which offer 15 percent faster gaming on average. “Now just think about that. That’s 15 percent, which is an entire architectural generation’s worth of gaming performance just from the 3D V-cache technology,” she said, vowing a start to production by the end of the year.

With these exciting offerings and more to come, “you can count on AMD always pushing the envelope in high-performance computing,” Su added.



Manuvir Das  
Head of Enterprise Computing, NVIDIA



Jeff Fisher  
GeForce Senior Vice President, NVIDIA

## NVIDIA unveils RTX3080 Ti, reveals roadmap for AI and data processing

NVIDIA's executive keynote introduced the future of competitive gaming hardware and AI-infused services

NVIDIA today delivered an informative virtual keynote at COMPUTEX 2021. The virtual presentation, entitled "The Transformational Power of Accelerated Computing, from Gaming to the Enterprise Data Center," was one of the most anticipated highlights of the trade show, organized by the Taiwan External Trade Development Council (TAITRA).

The keynote was delivered by Jeff Fisher, senior vice president of NVIDIA's GeForce Business Unit, and Manuvir Das, head of enterprise computing. Fisher opened the keynote with a heartfelt shout-out to Taiwan, home of the world-renowned expo.

"We miss Taiwan and wish we could be there in person for COMPUTEX," Fisher said. "So, we created Taipei City in Microsoft Flight Sim and flew in virtually on a GeForce RTX 3080 (Ti)."

### Faster GPUs enable better entertainment

NVIDIA took the opportunity to officially unveil the RTX 3080 Ti, the company's latest flagship gaming graphics processing unit (GPU) which is claimed to be 1.5x faster than its predecessor. The GPU is capable of running the latest games with nearly photorealistic graphics while maintaining seamless performance.

Fisher proudly touched on how the company's RTX technologies have also transformed entertainment for 150 million



creators, broadcasters and students alike, making RTX the new industry standard.

NVIDIA's most notable progress, according to Fisher, was in further integrating artificial intelligence (AI) into the company's hardware. This has enabled a reduction in power consumption while retaining the same high level of graphics performance in similar models.

### Democratize AI by bringing its transformative power to Every Company and Its customers

Regarding AI, Das began by outlining NVIDIA's three primary goals regarding the use of the technology: AI in every application, AI in every data center and AI in every product.

As a result of the technology's rapid development, Das said he is convinced that current and future applications must be infused with AI, or they will fall behind.

"Taiwan has always been a special place for NVIDIA," Das said. "From system builders and solution providers, to universities and the government, all have partnered with us."

Together, NVIDIA and its partners have laid the foundation for a new computing model based on AI, which, at its simplest, is defined as software that writes software, he said.

This foundation aptly includes GPUs deployed in the cloud and in data centers, areas in which NVIDIA is an industry powerhouse. Many of our NVIDIA Certified program partners are from Taiwan, including [Advantech](#), [Altos](#), [ASRock Rack](#), [ASUS](#), [GIGABYTE](#), [QCT](#), [Wiwynn](#) and you will see more in the coming future.

Das explained that the company developed the NVIDIA Certified program for servers that incorporate GPU acceleration. The program was designed to help system manufacturers create AI-optimized designs and to ensure system reliability for customers.

In the future, the NVIDIA Certified program would expand its reach with NVIDIA BlueField Data Processing Units (DPUs), an essential component for handling massive amounts of data.

"Going forward ... the DPU will be an essential component of every server, in the data center and at the edge," Das said

## Micron Technology's Sanjay Mehrotra expresses optimism on the future, despite challenges ahead

Advanced data analytics technologies are forecast to add trillions to the economy, but doing so will require new approaches, innovation



Sanjay Mehrotra  
President and CEO, Micron Technology, Inc.

"Data lives, and its impact on each of our lives over the years ahead is going to be astounding," said Sanjay Mehrotra, president and CEO of Micron Technology. "We are absolutely living in a transformative age."

Mehrotra made the comments as he opened his keynote address at COMPUTEX, the leading information and communications technology trade show organized by the Taiwan External Trade Development Council (TAITRA) which is this year being held virtually due to the COVID-19 pandemic.

The world's economy is now based on data and driven by related technologies. Mehrotra cited a forecast that advanced data analytics technologies would add US\$13 trillion to the global economy by 2030. For Micron Technology, the world's fourth-largest semiconductor company and a powerhouse in memory chips, such an outlook presents a literal world of opportunities.



Raj Hazra  
Senior Vice President and General Manager,  
Computer & Networking Business Unit,  
Micron Technology, Inc.

The massive, projected added value is driven by the ability to make faster and better decisions based on available data, but capitalizing on new opportunities will require new computing approaches and platform innovation to adapt to changes in data-intensive computing. Two trends driving this change are artificial intelligence (AI) and 5G, which are supporting growth in each other.

At a COMPUTEX Forum session later in the afternoon, Raj Hazra, senior vice president and general manager of Micron Technology's compute and networking business unit, cited a forecast that 90 percent of enterprise applications will feature embedded AI by 2025.

Possible uses include conversation interfaces and dealing with multiple sources of data to train and make predictions, he said, adding that to continue enabling such progress, memory is changing to meet the need for infrastructure to keep up with the promise of AI.

Meanwhile, 5G's high-bandwidth capabilities and multitude of connections will enable "an intelligent infrastructure on the edge of our networks ... giving us access to data in real time; data that we simply aren't able to make use of today," Mehrotra said.

Mehrotra touted Micron Technology's validation of its 1-alpha DRAM process — whose low-power variant reduces power consumption by up to 20 percent — making it available to even end users. However, he pivoted to the future with DDR5, saying that its specification was drafted with a focus on data center requirements to enable the capabilities of the future.

Perhaps even more exciting is Compute Express Link (CXL), an open standard interconnection designed to improve far memory performance, which in turn would relieve the CPU bottleneck and accelerate data center performance.

Collaboration is a requirement for unleashing the full potential of all these new technologies. In that vein, Mehrotra invited a number of top executives from some of Micron Technology's many partners: Acer CEO Jason Chen, AMD chief technology officer Mark Papermaster, BMW senior vice president Carsten Regent and Qualcomm senior vice president Nakul Duggal.



# Performance begins at the edge for 5G, intelligent IoT

Supermicro's "building block" solution, alongside partners, present products of superior quality, serviceability, and compatibility, essential for any optimized total solution

Supermicro today attended COMPUTEX 2021, the annual tradeshow organized by the Taiwan External Trade Development Council (TAITRA), firm in its belief that the software and firmware designed by its "building block" solution can meet the upcoming challenges of the IT industry.

The keynote was jointly delivered by Supermicro's Vice President Michael Clegg and IoT Embedded & Edge Computing General Manager Mory Lin. Supermicro's President Charles Liang, opened the keynote speech with high praises for Supermicro, while urging all viewers to keep themselves, their families and coworkers safe during the COVID-19 pandemic.

## Building block solutions boosts greater manufacturing capability

"With Rack Scale Plug and Play, we are bringing our system design expertise and building block architecture to the rack level to deliver true at scale data center solutions," Liang said.

With this capability, Supermicro can ship large quantities of servers or fully tested pre-defined racks of expertly selected servers, storage, and networking components, perfectly matched to existing and future workloads, directly to our customers.

The new manufacturing facilities will enable Supermicro to keep costs low by leveraging US design excellence with lower-cost manufacturing in Taiwan.

## Standalone 5G networks coming into its own

The concept of 5G networks have become gradually more prevalent and is seeing deployment, though Clegg states that it is only standalone 5G networks that would reap the most benefits of the concept.

Alongside the beginnings of deployment for standalone 5G networks, Clegg noted that the open Radio Access Network (RAN) standards are also maturing, freeing the RAN from being monopolized by proprietary dealers and being used on cross-hardware.

"We are at the point where the method has been validated with 4G and with the latest processors, we can now achieve the same thing for 5G," Clegg said, turning the screen over to Lin on how Supermicro products capitalize on this trend.

## Supermicro servers assist operators expand into 5G telecommunications

Supermicro's Hyper-E servers, using open RAN combined with Intel's Xeon 3rd Gen Scalable Processors, boasts of bringing datacenter-like performance to edge networks.

With Intel's Xeon processor, the server can support dual-processor architecture, allowing the server to run up to 270 watts, while greatly widening the range of accepted accelerator cards inserted into the server externally.

The server is designed with all inputs and outputs, as well as accelerator card slots and power plugs, facing forward, to facilitate IT teams and operation teams when installing the servers onto racks.

Furthermore, Supermicro has taken into consideration the depth of server cabinets and offers two customized depths, at 200mm and 574mm, respectively, for installing the server into tight spots.

With innovative technology and a new design combining GPUs, VPUs, and FPGAs, Supermicro brings edge computing to a wide variety of environments, from the central office, to datacenters, down even to factory floors.

"We bring virtualization to the edge, which brings intelligence to the retail space," Lin said.

Supermicro and its partners have also developed new insulation and mounts for servers to be installed in factories, which may not have enough room to accommodate the standard server rack.

The promise of a cloud-native 5G network in open RAN has been validated by innovations such as Network as a service and programmatic servers being developed, while AI will contribute to reducing the costs of running the network, all made possible by high-power performance machines.



# NXP accelerates the transformation to the edge across IoT, industrial, and automotive

New S32 series by NXP brings the power of the edge to connected and autonomous vehicles

New technologies are only as strong as the smallest of their parts, built by innovators such as NXP Semiconductors. In today's keynote address, president and CEO Kurt Sievers shared with #COMPUTEXVirtual his vision for how NXP will create this future by "accelerating the secure intelligent edge."

Our current devices are fast when told what to do, but "my vision of technology for us as people is very different," Sievers told attendees of the virtual show organized by the Taiwan External Trade Development Council (TAITRA). "It is about a world where technology is actually automated. It is anticipating what we want."

The semiconductor industry "has always been driven by waves of innovation," from the computer boom in the 2000s to the cloud computing surge of the 2010s, but Sievers believes the next decade is to be defined by the rise of the edge.

"I see this massive opportunity of probably 50 billion intelligent and securely connected devices in the year 2025, and that goes hand-in-hand with a significant change in what technology is going to do," he added, announcing NXP's latest tools for enabling this shift.

Starting from today, NXP in collaboration with TSMC began mass production of the S32R294 automotive radar and S32G2 processor, designed to ease chip constraints by utilizing new 16nm FinFET processes.



NXP's Trimension™ Ultra-Wideband technology helps Samsung users easily find their misplaced belongings.

"The car is the most complex edge device in the world," said Shelly Van Dyke, vice president of automotive strategy and processing. "Already we're at 100 to 200 million lines of code, more than a spaceship," necessitating efficient and secure solutions.

Complemented by NXP's development platforms, the S32G2 "extends advanced cloud capabilities into the car," enabling vehicles to receive and process data on weather, traffic, road gradient and more to optimize performance. Paired with Amazon Web Services' Greengrass, the tools would make it easy for manufacturers to "integrate and expand, do regular updates and continue

to advance the capabilities of their cars," AWS vice president of technology Bill Vass said.

The power of edge computing with the cloud also extends to IoT and manufacturing, as AI has never been easier to deploy, NXP executive VP and general manager of edge processing Ron Martino said.

People believe that it is expensive and complex, "but the truth is the opposite," he said. "AI doesn't always need large, complex, costly processors, and you don't need a PhD in mathematics if you have the right development tools."

With NXP's scalable EdgeVerse platform, advanced processes such as facial recognition can be included in IoT devices as simple as a doorbell, protected through secure enclaves in the chips themselves. Efficiency is another strength, as up to 90 percent of "vampire power" — energy wasted by idle devices — could also be eliminated with Energy Flex architecture. All of these benefits also apply to factories, which could be made situationally aware to keep people safe and optimize production.

Achieving this vision of the future "is a task that cannot be achieved by any company alone," Sievers said, thanking additional partners Advantech, BMW, Garmin, Microsoft and Samsung. "2021 is only marking the beginning of the edge era. It is going to be long and challenging, but also very rewarding."



## Expansive Portfolio Supporting the Most Advanced CPU and GPU Platforms



# Wi-Fi 6

Helping fuel a new generation of connected devices and services in the 5G era



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## Qualcomm to push the boundaries of what is possible with 5G network

Embracing the 5G network and always-on connectivity and implementing the millimeter wave (mmWave) system

"We're rapidly moving towards a world more connected and intelligent. It is being driven by the convergence of connectivity and computing technologies from mobile," said Qualcomm Technologies Senior Vice President and General Manager of Mobile, Compute and Infrastructure Alex Katouzian. "It's already starting to transform the way we work, live, play, and connect with others."



Alex Katouzian  
Senior Vice President and General Manager  
Qualcomm

Katouzian made the comments at the 2021 Taipei COMPUTEX, the annual tradeshow organized by the Taiwan External Trade Development Council (TAITRA) held online this year due to COVID-19.

The momentum of 5G network growth has exceeded all expectations and the 5G ecosystem's resilience leaves nothing to doubt, as the majority of its growth - more than 65 operators over 160 countries launching commercial 5G networks - occurred during the pandemic.

Qualcomm recognizes that 5G will have a tremendous impact on the computing segment of the industry, prompting Qualcomm to work closely with its partners to develop a 5G PC.

Qualcomm believed that PC users harbored the desire that their PC user experience would be comparable to using a smartphone.

"The ability to pick up your laptop, open the lid and know that it's connected, synced and ready to go, without having to worry about a power cord, or having to ask for a Wi-Fi password. That is the Qualcomm goal," Katouzian said.

Giving screen time to Samsung Electronics America Director and Head Product Management for New Computing Hassan Anjum, Anjum reaffirmed this trend, stating that user demands for PCs - portability, connectivity and convenience - were incidentally the same qualities that have been associated with smartphones.

One piece of technology central to unlocking 5G and future computing experience is the mmWave tech, which can allocate more

bandwidth to deliver higher-quality videos, multimedia content and other services faster.

Installation of mmWave devices with mid-band spectrum has lower total cost of ownership than mid-band devices alone, making it a possible option for operators installing said systems in dense urban areas.

The mmWave is also being used to bridge the digital divide between rural communities with fixed wireless access, providing fast, reliable broadband connectivity so students can use their PCs to access school portals and other important educational resources.

With more than 170 operators globally investing into mmWave tech, Qualcomm expects that mmWave will be deployed across all regions within the next two years.

Qualcomm stated that it had acquired Nuvia to significantly increase in compute capabilities, as enabling tomorrow's highly-immersive AI-driven experience will require more than just fast connectivity.

It is our collaboration with the ecosystem that makes these advancements and opportunities possible, and Qualcomm, with continued and significant investment in R&D, is committed to continue to push against the boundaries of what is possible with 5G.

## COMPUTEX FORUM - ICT Insight

**AIoT Evolution** June 2, 2021 (Wed.) (GMT+8) 09:00-11:30

Time	Topic	Replay	Speaker
09:00 - 10:00	COMPUTEX Micron CEO Keynote - Innovation for the Data Economy: Why today's infrastructure innovation brings data to life, powering insights <i>for all</i>		<b>Sanjay Mehrotra</b> President and CEO, Micron Technology, Inc.
10:00 - 10:30	Brighten Tomorrow with Intel Inside		<b>Nash Palaniswamy</b> Vice President, SMG, General Manager, AI, HPC, and Datacenter Accelerators Solutions and Sales, Intel
10:30 - 11:00	COMPUTEX Supermicro CEO Keynote - Performance Begins at the Edge for 5G and Intelligent IoT		<b>Charles Liang</b> President and CEO, Supermicro
11:00 - 11:30	The Promise of Digital Transformation: How AI-infused industrial systems are rising to meet the challenges		<b>Jerry Chen</b> Head of Global Business Development for Manufacturing & Industrials, NVIDIA

**AI Empowerment** June 2, 2021 (Wed.) (GMT+8) 14:00-17:00

Time	Topic	Replay	Speaker
14:00 - 15:00	COMPUTEX NXP CEO Keynote - Accelerating the Secure Intelligent Edge		<b>Kurt Sievers</b> President and CEO, NXP Semiconductors
15:00 - 15:30	Accelerating Ubiquitous Intelligence		<b>Rene Haas</b> President, IP Products Group, Arm
15:30 - 16:00	Accelerate Intelligence-driven Manufacturing		<b>Dr. Steven Chen</b> Leader, Intelligent Mobile Machine Cluster, Delta Electronics, Inc.
16:00 - 6:30	Memory at the Heart of AI Innovation		<b>Raj Hazra</b> Senior Vice President and General Manager, Computer & Networking Business Unit, Micron Technology, Inc.
16:30 - 17:00	Cybersecurity Risks and Management		<b>Kev Hau</b> Check Point Security evangelist, office of the CTO, Check Point Software Technologies Ltd.

**Critical Technology** June 3, 2021 (Thu.) (GMT+8) 08:35-11:10

Time	Topic	Replay	Speaker
08:35 - 08:40	Opening Remarks by Organizer		<b>Cynthia Kiang</b> Director General, Bureau of Foreign Trade, MOEA
08:40 - 09:10	5G and the Future of the PC		<b>Alex Katouzian</b> Senior Vice President and General Manager, Qualcomm
09:10 - 09:40	5G New Era: Great Convergence, Broad Ecosystem, Golden Opportunity		<b>Mike Yang</b> President, QCT
09:40 - 10:10	Shape our future life- compound semiconductors inside		<b>Yu-Chi (YC) Wang, Ph.D.</b> Vice Chairman, WIN Semiconductors Corp
10:10 - 10:40	Technology with Purpose to Transform - Industrial 5G, Grid Edge and Connected Mobility		<b>Erdal Elver</b> President & CEO, Siemens Taiwan, SIEMENS
10:40 - 11:10	5G Clinical Intelligence		<b>Dr. Chee Ching</b> President, FarEastTone Telecom

**Tomorrow Tech** June 3, 2021 (Thu.) (GMT+8) 14:30-15:30

Time	Topic	Replay	Speaker
14:30 - 15:00	The Metaverse Begins: NVIDIA Omniverse and a Future of Shared Worlds		<b>Richard Kerris</b> Head of VVV Developer Relations and General Manager for Omniverse, NVIDIA
15:00 - 15:30	Quantum Computing for the 21 <sup>st</sup> Century		<b>Norishige Morimoto</b> Vice President, IBM Research and Development, Japan, IBM



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that lets users flex to a new level of AI and HPC performance.

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# Industry leaders provide insights on how artificial intelligence is changing business and the world in general

AI is transforming people’s daily lives and generating massive potential across the entire spectrum of industries

The COMPUTEX Forum began earlier today with guest speakers from several technology industry leaders. The forum is one of the most highly anticipated events of COMPUTEX, the world’s leading information and communications technology trade show, which is organized by the Taiwan External Trade Development Council (TAITRA). Due to the global pandemic, the show is this year being held completely online through the #COMPUExVirtual platform, which uses many of the technologies being discussed over the two-day forum.

In line with the forum’s overall core theme — The New Era of Intelligence — today’s first virtual session examined the future of artificial intelligence (AI) in a panel titled AIoT Evolution. The invited speakers from Micron Technology, Intel, Supermicro and NVIDIA explored the trends related to AI and how it is changing almost every facet of daily life.

“We are absolutely living in a transformative age,” said Sanjay Mehrotra, president and CEO

EXPANSIVE ECOSYSTEM SUPPORT

CLOUD	SCIENTIFIC COMPUTING	EDGE AND ENTERPRISE	MAINSTREAM SERVER	EMBEDDED EDGE
NVIDIA AI NVIDIA DGX-1 NOW	NVIDIA AI NVIDIA HPC	NVIDIA AI NVIDIA DeepStream	NVIDIA AI NVIDIA RTX	NVIDIA AI JETSON SYSTEM ON MODULE
NVIDIA GPU	NVIDIA A100	NVIDIA T4	NVIDIA A100	NVIDIA JETSON
AWS Graviton	NVIDIA BlueField-2	Murvell OCTEON	NVIDIA BlueField-2	
	Ampere Altra		x86	

NVIDIA

of Micron Technology. “Today’s economy is unquestionably based on data, driven by the innovative technologies that make that data more accessible, more effective and more useful.”

Advanced data analytics technologies are forecast to add US\$13 trillion in global economic opportunity by 2030, and “all that

added value is driven by our ability to make better and faster decisions based on the data all around us,” Mehrotra said. “But Timely data insight cannot be achieved with today’s memory and storage architectures.”

Two major trends are accelerating the global shift in how the world acquires, manages and gains insights from data: AI and 5G networks.

AI is being used to solve real-world problems in fields such as smart agriculture and water conservation, offering massive potential to impact the world in a positive way. Meanwhile, 5G is helping create networks fast enough to allow moving data center capabilities to edge applications.

Nash Palaniswamy, vice president and general manager of AI, HPC and data center accelerators solutions and sales at Intel, addressed the tech titan’s partnership with the US-based Montefiore Medical Center, which aims to use AI for screening patients based on imaging to provide earlier warning of illness and allow for preventive treatment. The center has created a system that establishes a “digital representation” of patients based on all data collected from the center’s devices and imaging systems, as well as remote sensing at home. This holistic understanding of the patient is evidence of an AI-healthcare intersection that is redefining medicine.

Jerry Chen, head of business development, manufacturing and industrials at NVIDIA, said: “It might seem like AI is inescapable in our daily life nowadays,” adding that humanity is “really only at the beginning of the age of AI.”

Economists refer to AI as a general-purpose technology, which is transforming civilization and fueling the latest industrial revolution. Thanks to its potential to learn, improve and operate autonomously, AI will get even more



Charles Liang  
President and CEO, Supermicro

powerful over time, providing massive benefits to every industry.

“Simply put, every industrial sector will be transformed by AI. The potential for value creation is enormous,” Chen said.

“We can’t wait to transform the future of the industrial edge, the Industrial AI of Things, with all of you,” he added.

At the edge, AI has quickly changed how people use technology, from improving audio and video in teleconferencing to creating personalized workouts — two examples that are particularly evident amid the pandemic. These advancements have been made possible in part by accelerators and optimization in all parts of the ecosystem.



Sanjay Mehrotra  
President and CEO, Micron Technology, Inc.

“Software and firmware ... are essential to any optimized total solution,” said Charles Liang, president and CEO of Supermicro.

Faster compute at the edge has gone hand in hand with increasingly faster mobile networks, which allow for deployments of devices in even greater numbers, as well as solutions that are more ambitious in their scope.

“We’re starting to see the first 5G standalone network deployments,” said Michael Clegg, vice president and general manager of 5G and embedded/IoT at Supermicro, referring to telecommunications networks built specifically for 5G.

He added that such deployments are where “we get the real benefits of 5G networks” — such as low-latency communications.

# Experts detail how AI is revolutionizing cybersecurity and smart manufacturing

The technology is helping plug holes created by unprecedented remote working and improving efficiency for manufacturers

The COMPUTEX Forum continued today with its second session, titled AI Empowerment. In keeping with the two-day forum's overarching theme — The New Era of Intelligence — COMPUTEX's organizer, the Taiwan External Trade Development Council (TAITRA), invited speakers from industry leaders to share their perspectives on the impact of artificial intelligence (AI) on the technology industry and its potential implications for security.

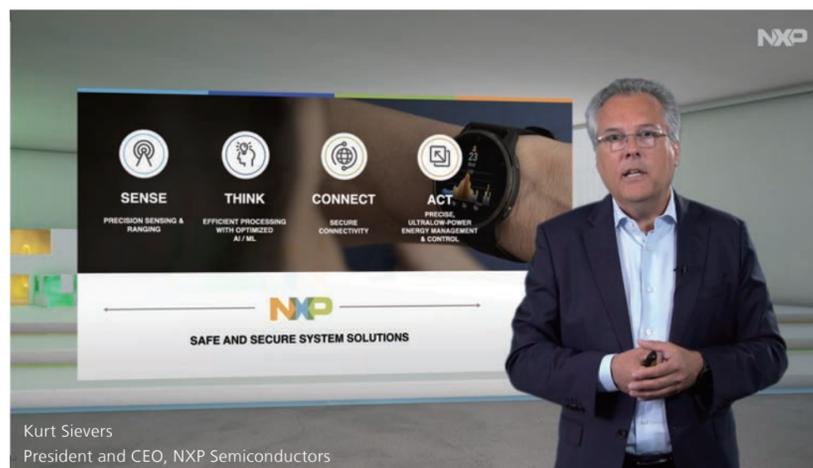
NXP Semiconductors president and CEO Kurt Sievers said that his future vision of technology is "about a world where technology is actually automated, is actually advancing and anticipating what we want."

"It is a world where simple tasks become automatic, and complex tasks are being foreseen by the machines we are interacting with," Sievers added.

The complex task cannot be accomplished by any company alone. Sievers showed the close partnership and collaboration with leading companies such as Advantech, Amazon Web Services, BMW, Garmin, Microsoft, Samsung, and TSMC.

Applications on the edge are changing how people consume, pay, move, interact and work, fueling massive growth in devices. The demand for silicon for edge computing has grown significantly, but wafer supply is constrained. However, the faster that the industry moves to smaller process nodes and newer technologies, the better the availability will be to meet the required capacity, Sievers predicted.

"Rene Haas, the President of Arm's IP Products Group (IPG), expressed confidence that 100 percent of the world's digitally-shared data will soon be securely-processed on Arm-based technology. He cited the Arm-partners' more than 190 billion chip shipments to date



Kurt Sievers  
President and CEO, NXP Semiconductors



Rene Haas  
President, IP Products Group, Arm

and looked to the future with the Armv9 architecture, which will play a critical role in securing our digital future and increasing our trust in intelligent devices that will process our personal or professional data.

Haas also stated that when entering a new era of compute where AI and ML will cut across every computing environment, one-size-fits-all chips designed for general-purpose compute with big single-threaded processors are not enough. Those complex workloads will be enabled by specialized processing. Arm will continue to innovate new ways to enable its partners to differentiate and bring specialized

processors to market faster, and no device will be left behind."

Amid the unprecedented global COVID-19 pandemic, hundreds of millions of people began working from home — and continue to do so today. This has laid bare many cybersecurity shortfalls in corporations across the globe.

For example, "companies have to open up access" to their most sensitive corporate assets "from remote endpoints to ensure business continuity," said Kev Hau, security evangelist at Check Point Software Technologies.

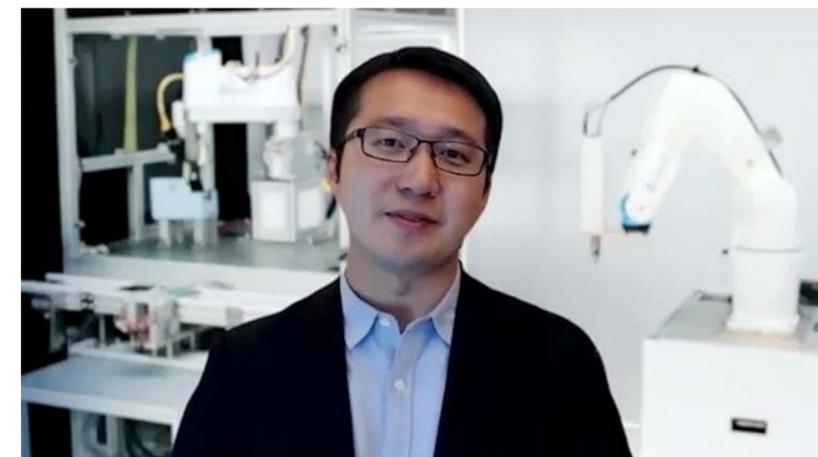


Hau added that this new remote workforce "has never had to develop" a high level of vigilance, as they previously depended on enterprise-grade security for their work. This has left them more susceptible to "phishing scams, malicious emails and data loss incidents."

This increased risk is why firms like Check Point are adopting AI for predictive threat intelligence. Properly trained AI can perform the work of dozens of human analysts in a fraction of the time, all while maintaining a broader scope of analysis, predicting unknown threats and improving the accuracy and precision of responses.

Of course, the expansive capabilities of AI extend beyond security to other areas, such as manufacturing, where an intelligence-driven manufacturing will help factories adapt to "a paradigm shift for the manufacturing industry," said Dr. Steven Chen of Delta Research Center, Delta Electronics, Inc.

"Today's customers are more demanding and diverse. They keep manufacturers busy trying to meet the needs for personalization



Dr. Steven Chen  
Leader, Intelligent Mobile Machine Cluster, Delta Research Center, Delta Electronics, Inc.

and immediacy." The need for high-mix, low-volume production while maintaining utilization means that manufacturers must devise innovative approaches to stay ahead.

To that goal, Delta's industrial solutions include machines that are designed to cope with changes by incorporating standardized, modular and intelligent units, lowering technical barriers for data collection & analysis, as well as AI adoption and upgrade.

Such uses of AI are growing more commonplace, with about 90 percent of enterprise applications forecast to have embedded AI by 2025. The "pervasive growth of AI" has been fueled by the tremendous amount of data available, which is growing on "a daily basis," said Raj Hazra, senior vice

president and general manager of Micron Technology's compute and networking business unit.

Hazra cited some areas where AI will undoubtedly find new uses, such as conversational interfaces and the ability to deal with multiple sources of data to train and make predictions, thus enabling applications including smart manufacturing.

To deal with the massive increases in abilities needed to support such advanced applications of AI, the very nature of memory is changing. It is no longer just a resource directly connected to a CPU and storage. Looking forward, Hazra said that distributed computing would provide the right amount of resources needed for applications, right when they are needed.



# Leaders look to the critical technologies for advancement of the industry

5G Technology the digital artery pumping fresh blood and innovations for all sectors of the industry

Gathered today at the COMPUTEX Forum, guest speakers representing leading figures of the industry talked about the development of critical technologies that would serve to bolster innovations throughout the industry.

The forum is one of the most highly anticipated events of the annual COMPUTEX show, organized by the Taiwan External Trade Development Council (TAITRA). Due to the local pandemic, the show is being held digitally through the #COMPUTEXVirtual platform.

Invited speakers from Qualcomm, Quanta Cloud Technology (QCT), WIN Semiconductors, Siemens Ltd. Taiwan and FarEasTone Telecommunication (FET) spoke on 5G networks and its relevance to technological innovations, both in the present, and in the future.

Qualcomm Technologies Senior Vice President and General Manager of Mobile, Compute, and Infrastructure Alex Katouzian said that the development of the 5G network is starting to change PC user expectations, expecting constant connectivity and a user experience comparable to using a smartphone.



While touching on the development of the millimeter wave tech, which can allocate more bandwidth to deliver higher-quality videos, multimedia content and other services faster, Qualcomm recognized that hardware computation capabilities must also keep up with the pace of 5G network development.

While 5G networks are seeing commercial deployment worldwide, the majority of its growth have been during the pandemic period, a development that underscores the shift in lifestyle of Human society working from home, necessitating faster networks to carry the data

to work offices, school portals, data centers and edge applications.

QCT President Mike Yang opined that this "3rd convergence" of Information Technology (IT) and Communication Technology (CT) brings in new players that provide important elements - open, virtualized, cloud-native and software-defined - to help drive this transformation and build 5G networks.

These elements of change brought about by new players have made the 5G network more adaptable for application to other fields,



Vehicles to everything (V2X), Telemedicine, and more.

Industrial 4.0 and smart manufacturing take advantage of the network's development, using its high bandwidth and low latency to link factory machines together through the Internet of Things (IoT).

"Industrial 4.0, IoT, smart manufacturing, those are the future of manufacturing," Siemens President and CEO Erdal Elver said, adding that the world is changing, and these changes, be it the pandemic or climate change, are forcing us to optimize things through technology.

Siemens' utilization of 5G networks along with the concept of the Grid Edge highlights yet another possibility for 5G application - innovations for the national power grid that could help conserve, or track the usage of national power.

Perhaps most relevant to the times, FET's development of Telemedicine platforms to provide a solution - and also groundwork - bridging the medical gap between urban and rural townships in Taiwan using the 5G network again highlights the network's qualities to bring about technological innovation.

FET President Chee Ching also noted that while the company has laid down solid groundwork to build on with the development of the platform, it would need to collaborate with partners to further develop the platform, especially as more Internet of Medical Things wearables are developed and become connected to the platform.

With more data to be processed, the platform will have to enhance its backend compute capabilities or risk letting the potential of the 5G network go to waste.

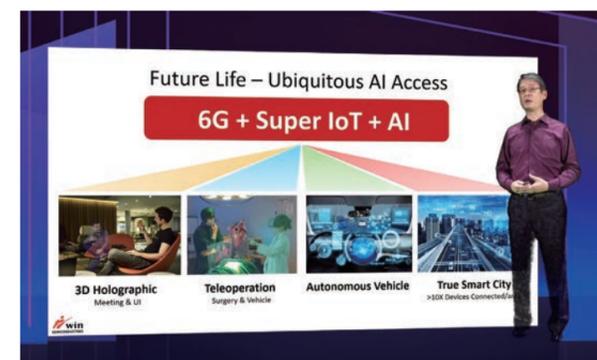
WIN Semiconductors General Manager YC Wang came at the issue of 5G networks from

a different perspective, gauging the network's strength not from its potential for application, but rather from the material make-up of the devices using the network.

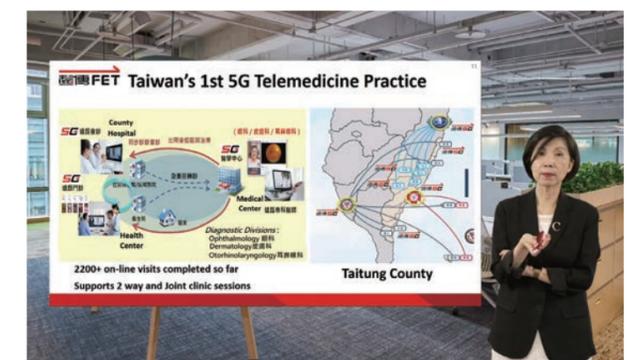
Cisco VNI index shows global mobile data traffic grew at a Compound Annual Growth Rate (CAGR) of 46% (2016-2021). Based on this calculation, ten years from now we would see a 44 times increase of data traffic compared to today.

"This calculation shows an unprecedented stringent performance requirement is needed for the next-gen network, and perhaps requires a sub-Terahertz device to provide sufficient bandwidth," Wang said.

Compound semiconductors are expected to have a large role to play in future tech as innovative emerging applications require enormous frequency bandwidth and high-performance smart sensors, Wang added.



Yu-Chi (YC) Wang, Ph.D. Vice Chairman, WIN Semiconductors Corp



Dr. Chee Ching President, FarEastTone Telecom



# Rethinking what's possible with the technologies of tomorrow

Advances in the metaverse and quantum computing are enabling possibilities unthinkable even a few years ago, with even more rapid changes to come

Although the two-day COMPUTEX Forum concluded today, its last session beckoned toward the future, as NVIDIA and IBM shared technologies at the razor edge of what's possible, already available today.

Council (TAITRA) invited to the virtual stage Richard Kerris, head of WW developer relations and general manager for Omniverse at NVIDIA, and Norishige Morimoto, CTO and vice president of IBM Japan.

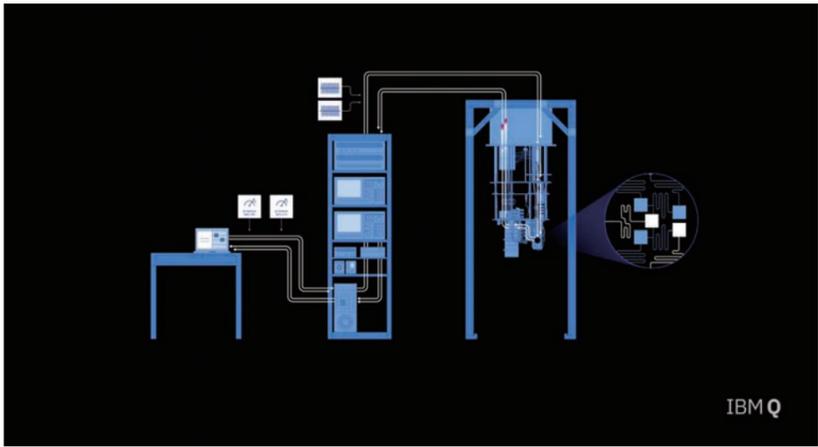
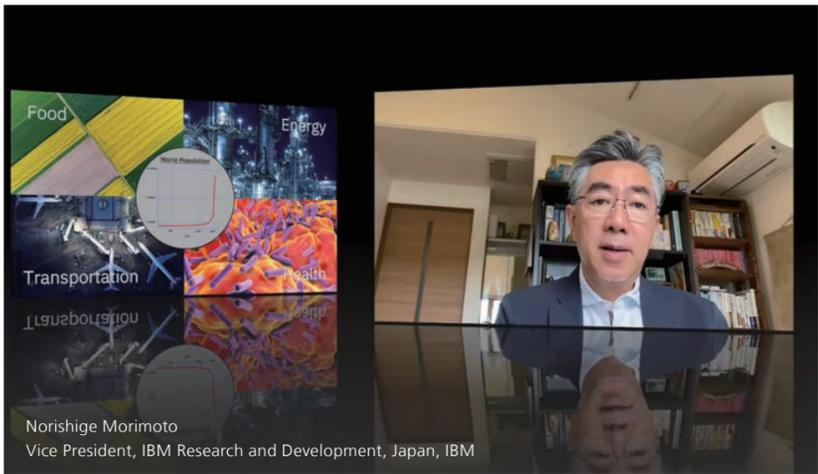
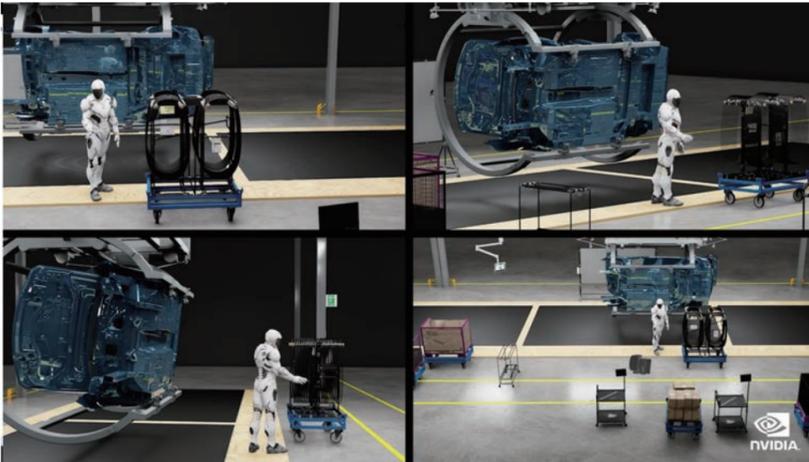
more, Kerris said, with projects getting bigger all the time.

Imagine an animation studio with hundreds of artists, all working on the same project. Some people might be using Maya while others are in Substance Painter, some across the room and others across the world. Every time they want to share between platforms,

"3D workflows have become essential across all sorts of industries," including architecture, robotics, product design and

To speak on their relative advancements in the metaverse and quantum computing, COMPUTEX organizer the Taiwan External Trade Development

Richard Kerris  
Head of Worldwide Developer Relations and General Manager of Omniverse, NVIDIA



they need to export, wasting time and opening the door to frustrating compatibility issues. Add to that the size of the data set they are working with, and the problem becomes exponentially more difficult.

Yet even with these challenges, 3D workflows will increasingly come to characterize the way work is done.

"We believe that anything that will be built will be visualized, anything that moves will be autonomous and anything that's autonomous will be simulated," Kerris said. "Rather than go to the expense of building something in the physical world, why not build it in the synthetic world? Learn what it's going to look like, learn how things are going to affect it," such as the way light hits a building or robots move across a factory floor. Tweaks could be made in the virtual world free of charge, and hundreds of robots trained at once rather than one by one.

To make this ideal a reality, NVIDIA created the Omniverse. This RTX-based platform allows 3D creators to collaborate on projects in real time, regardless of where they are, the size of the data they are working with or what tools they are using.

Numerous partners across industries are already learning the value of the Omniverse. In architecture, Kohn Pedersen Fox (KPF) is testing how weather and sun will affect buildings, while Woods Bagot is simulating how buildings will affect the landscape. Ericsson is modeling the most efficient places to install 5G nodes. Even systems as large as BMW's factories are being simulated in Omniverse, while WPP has digitized entire filming locations.

"In the future, more content and more experiences will be done in the virtual world than in the physical world," Kerris said, with Omniverse offering a connector between them.

The forum then turned to Morimoto from IBM, whose work on quantum computing promises unlimited possibilities that are to be achievable sooner than we think.

Advancements in computing have traditionally been driven by transistor shrinkage, over a half century dwindling from micrometer to nanometer, and now with IBM's new 2nm node, transistors are being produced that are half the diameter of a coronavirus.

"However, that alone is not enough," he said. While powerful, today's machines are only able to process what Morimoto called "narrow AI," meaning deep learning that requires a complete and accurate data set with only one answer. "Instead, we need to focus on much broader capabilities of AI: broad AI" unbounded by these limitations.

Even with continually improving semiconductors, "it's very clear that human beings are going to run out of computation power really soon, so we need to come up with a third element of future computing: quantum," he said.

As opposed to traditional bits, the qubits that power quantum computing are able to present many probabilistic states simultaneously, not just a 1 or a 0, while entanglement can link different qubits together, no matter how far apart they are. Already, quantum computers have more than 20 types of logic gates as compared with seven in traditional computing, enabling far more complex algorithms.

"All this may sound very complicated, but from a user point of view, it's just as simple as running a piece of software," Morimoto said.

However, there is still a lot of work to do, marked primarily by hardware scaling and programming challenges.

The first issue is cooling. At 15 millikelvin, the bottom of the dilution fridge that houses quantum chips is "the coolest place in the universe, ever," Morimoto said.

Yet the core of quantum computing, the chip itself, is developing quickly. IBM in 2019 set out a roadmap to double the number of qubits on a chip every year, but with a jump from this year's 127 qubit Eagle to a 1,121 qubit chip by 2023, the company is far ahead of schedule.

The quantum era is just getting started. As of March, IBM's quantum network had 250,000 users and more than 30 quantum computers, and the network is growing fast, with a 10-year research partnership signed with the Cleveland Clinic, additional Quantum Hubs planned and commercial machines to find homes in Germany and Japan.

"If you can do this with today's quantum computers, what will be possible, two years later, three years later, five years later?" Morimoto said.



Chairman of TAITRA  
Organizer of COMPUTEX

**James C. F. Huang**

# InnoVEX is back, bringing the world's startups together on an all-new virtual platform

The COMPUTEX exhibition for startups this year features global collaborations with the first-ever Taiwan-Israel Innovation Summit, as well as pavilions from France, South Korea, the Netherlands and the EBRD

Every year, COMPUTEX showcases the latest innovations from not only the biggest names in tech, but also small teams just getting their start. InnoVEX, the trade show's exhibit dedicated to startups, has since 2016 been the leading space for creators from around the globe to meet investors, markets and partners, and to get noticed.

After a year put on hold due to the global COVID-19 pandemic, the Taiwan External Trade Development Council (TAITRA) is proud to return stronger than ever with #COMPUTEXVirtual and #InnoVEXVirtual, smart platforms that allow exhibitors and visitors to connect safely online.

This year, #InnoVEXVirtual is welcoming 79 startups from 24 countries in areas ranging from security and IoT to healthcare and EdTech. France,



South Korea and the Netherlands are back with national pavilions, joined for the first time by the European Bank for Reconstruction and Development (EBRD).

In this globalized spirit, the InnoVEX Forum highlighted international collaborations, led by the first-ever Taiwan-Israel Innovation Summit.

"Israel and Taiwan are quite similar in their approach to technology and quality, but very much different in the way each country exercises this," said Shany Kfir,

business development manager of the Taiwan Trade & Innovation Center in Tel Aviv. "This creates complimentary synergies between the countries."

For instance, Taiwan's strength in manufacturing fits perfectly with Israel's strength in innovation. Nowhere is this clearer than with Winbond, which has, since setting up an R&D center in Israel in 2013, created a series of industry-leading security products through the kind of "out-of-the-box thinking" and market sense that characterizes Israeli engineering, vice chairman and deputy CEO Chan Tung-yi said.

MEGA1 CO., LTD., INSPRIDE X ONE



## Israel's 'Innovation Recipe'



**Source of Talent:**  
**Israel Defense Force (IDF)**  
Training professionals that gain real know-how about overcoming cyber threats and attacks.



**Deep Technology**  
Using cutting-edge technologies such as AI/ML and advanced encryption.

**Entrepreneurial and Collaborative Culture**  
A community dedicated to world-leading innovation and advancement.

Source: Start-Up Nation Central



The InnoVEX national pavilions are also bursting with big ideas, even for the smallest of technologies. At the French Tech Pavilion, organized by Business France Taiwan and La French Tech, one company is showcasing its advances in quantum computing that are already being used to solve real-world problems. The 100-qubit quantum processing units (QPUs) developed by PASQAL are being used by French utility EDF to optimize electric vehicle charging, while the firm plans to make the technology widely available to users through the cloud starting from next year.

Over at the Korea Pavilion, a diverse array of innovative products are on display, including customized cosmetics and Q&A optimization through AI. Giving full play to South Korea's strengths in technology and design is GeniRobot, which creates an all-in-one educational robot called GENIBOT that teaches kids of all ages coding concepts with cards, making virtual concepts tactile and fun.

Dutch startup Dimenco is also working to make the digital world more tangible. Users of the firm's simulated reality display module can view any 3D content without wearables, and can even manipulate onscreen items through hand gestures. The startup joins six other innovative companies at the Netherlands Startup Pavilion organized by the Netherlands Office Taipei and Netherlands Enterprise Agency, which bring a show-leading cohort to InnoVEX every year.

The EBRD has come out strong for its first InnoVEX pavilion, featuring 18 startups from seven countries. One of these startups is offering a timely solution to sanitation challenges faced by businesses during the COVID-19 pandemic with its autonomous robot that emits UV light. With the robot designed by Agora Robotics, businesses and hospitals can fully disinfect their premises when no one is present, keeping their customers, employees and patients safe.

Taiwanese incubators Taiwan Accelerator Plus (TACC+) also showcased promising global startups through their respective international programs.

Sponsored by Taiwan's Ministry of Economic Affairs, the TACC+ International Program provides startups entry into Asian markets through support services and soft-landing subsidies. Its InnoVEX pavilion this year features 23 startups offering a range of IoT and healthcare products.

Particularly impressive is GyroGear, which creates a gyroscope-equipped glove that aims to restore independence to people with tremors by stabilizing their hands.

Besides #InnoVEXVirtual, twenty-four of the startups selected through the Garage+ Startup Global Program are included in the incubator's 46 Must-See Startups Pavilion at #COMPUTEXVirtual along with big corporate pavilion to directly infuse innovation into the industry, categorized into rooms for IoT/energy, AI/big data and digital health/EdTech. One AI standout is Singaporean startup CYFIRMA, which provides the world's first predictive cyberintelligence platform that has already caught the eye of Goldman Sachs, Zodiuss Capital and Z3 Partners.

Interested investors and partners are invited to visit these startups and more through the #COMPUTEXVirtual platform, available until June 30!



GYROGEAR LTD., GYROGLOVE



LULULAB INC. LUMINI KIOSK V2

# Bookmark these opportunities at COMPUTEX 2021!

## 46 Must-See startups at the Garage+ pavilion



To global buyers, the startup exhibitions supported by Garage+, Asia's largest zero-equity incubator, have been regarded "must-see" since 2015. This year, Garage+ features 46 thriving startups at COMPUTEX 2021. The pavilion includes 24 international startups

selected out of the 153 Startup Global Program applications from 26 countries.

These deep tech startups, in AI & Big Data, Digital Health & EdTech and IoT & Energy, showcase their market potential during the

post Covid-19 era only at the 46 Must-See Startups pavilion, the largest startup exhibition at COMPUTEX 2021, sponsored by National Development Council and Asia Silicon Valley Development Agency. The startups fit market demands precisely, for instance:

### Rapid digital transformation in traditional manufacturing industry

Since traditional manufacturing companies have to deal with numerous challenges when facing the digital transformation, a rapid and workable total solution seems to be a good idea. ProfetAI, a Taiwan startup, is familiar with operating systems across R&D to Manufacturing, Internet of Things, Machine Learning (ML), DevOps, Cloud Native and Microservice Technologies. ProfetAI is eager to build high value-added & plug and play auto machine learning solutions to solve business and factory management problems, thus helping customers achieve digital and intelligent factories.



### A cybersecurity solution makes protection easier and stronger

Funded by Goldman Sachs, Zodiuss Capital, and Z3 Partners, the Singapore startup, CYFIRMA, is a threat discovery and cyber-intelligence company with the world's first platform that can deliver predictive cyber-intelligence. CYFIRMA combines cyber intelligence with attack surface discovery and digital risk protection to deliver early warning, personalized, contextual, outside-in, and multi-layered insights. CYFIRMA's cloud-based AI and ML-powered analytics platform provides the hacker's view with deep insights into the external cyber landscape, helping clients prepare for impending attacks.

### Tackling the autopilot mobility in new era, innovative technologies that should not be missed

Applied Brain Research, a Canadian startup, makes software tools and algorithms for building very low-power embedded AI & autonomous AI systems for use in devices such as phones, drones, robots, cars, cameras, clothing, wearables and sensors. Applied Brain Research has improved traffic prediction for autonomous cars, made fully autonomous drones, and lowered the power used by edge AI applications, achieving many new state-of-the-art low-power benchmarks in speech and vision applications.

In Addition, the startup from the United States, BlueSpace.ai, has patented its perception and prediction solution for any autonomous driving software stack - for autonomous vehicles (AVs, mobile robotics, and smart infrastructure. BlueSpace.ai's solution allows an autonomous vehicle or robot to instantaneously measure (versus infer) the full motion (6 Degrees of Freedom) and velocity of all objects in all environments without the time and cost of HD maps and training data. This provides a faster reaction time down to milliseconds, ensuring verifiable safety and motion-certainty to enable true driverless for all AV players. BlueSpace.ai is integrating with three electric bus manufacturers globally to demonstrate smarter mobility with AV deployment.

## Garage+ 46 Must-See Startups

COMPANY	Country	Website	Need
<b>AI &amp; Big Data</b>			
AMPPLYFI LTD.	Taiwan	amplyfi.com	Business Partners
APPLIED BRAIN RESEARCH	Canada	AppliedBrainResearch.com	Business Partners/ Funding
BIILABS CO., LTD.	Taiwan	biilabs.io	Business Partners/ Funding
BIROSIGN	Hungary	birosign.com	Manufacturing & Business Partners/ Funding
BLUESPACE.AI	USA	bluespace.ai	Business Partners/ Funding
CANNER INC.	Taiwan	cannerdata.com	Business Partners/ Funding
CYFIRMA	Singapore	cyfirma.com	Business Partners/ Funding
EARTHBOOK INC.	Taiwan	earthbook.xyz	Business Partners/ Funding
GENKITEK	Taiwan	genkitek.com	Business Partners/ Funding
IHH CO., LTD.	Taiwan	ihh.tw	Business Partners/ Funding
MEMORENCE AI	Taiwan	memorence.com	Business Partners/ Funding
MULTIVU	Israel	multivutech.com	Manufacturing & Business Partners/ Funding
NADI SYSTEM CORP.	Taiwan	nadi3docms.com	Manufacturing & Business Partners/ Funding
PROFETAI	Taiwan	www.profetai.com	Manufacturing & Business Partners
QUICKERSIM AUTOMOTIVE	Poland	emobility.quickersim.com	Business Partners/ Funding
RENDERRO	Poland	renderro.com	Business Partners/ Funding
ROBOTAI	Israel	robotai.info	Manufacturing & Business Partners/ Funding
SECOND STATE	Cayman Islands	secondstate.io	Business Partners
WEDGE NETWORKS	Canada	wedgenetworks.com	Business Partners/ Funding
YAJANTECH CO., LTD.	Taiwan	yajantech.com.tw	Manufacturing & Business Partners
<b>Digital Health &amp; EdTech</b>			
ASIAN HUSTLE NETWORK	USA	asianhustlenetwork.com	Business Partners
CARE ACROSS LTD.	United Kingdom	careacross.com	Business Partners/ Funding (including Corporate VCs)
MEANDMINE	USA	meandmine.com	Manufacturing & Business Partners/ Funding
PROTEINQUIRE	Canada	proteinquire.com	Business Partners/ Funding
SEATTLE GUMMY COMPANY	USA	seattlegummy.com	Manufacturing & Business Partners/ Funding
SOTERIA BIOTECH CO., LTD.	Taiwan	soteriabiotech.com	Business Partners/ Funding
TAIWAN REDEYE BIOMEDICAL INC.	Taiwan	redeyebmi.com	Manufacturing & Business Partners
TARGETRUST BIOTECH LTD.	Taiwan	https://sites.google.com/view/targetrust	Manufacturing & Business Partners/ Funding
UPPERMED PTE., LTD.	Taiwan	uppermed.com.sg	Business Partners/ Funding
<b>IoT &amp; Energy</b>			
AGILE ANALOG LTD.	United Kingdom	agileanalog.com	Business Partners
AIELLO INC.	Taiwan	http://aiello.ai	Manufacturing & Business Partners/ Funding
BEELNVENTOR	Taiwan	beeinventor.com/zh-hk	Manufacturing & Business Partners/ Funding
BENANO INC.	Taiwan	benanos.com	Manufacturing & Business Partners
FORCEN INC.	Canada	forcen.tech	Business Partners/ Funding
GOODLINKER CO., LTD.	Taiwan	goodlinker.io	Business Partners
HEX TECHNOLOGY LIMITED	Taiwan	cubepilot.org	Business Partners
INPHOCAL	The Netherlands	inphocal.com	Manufacturing & Business Partners
LAVO	Australia	lavo.com.au	Manufacturing & Business Partners/ Funding
OFFGRIDBOX	USA	offgridbox.com	Manufacturing & Business Partners/ Funding
TRISTAR MULTICOPTERS CORP. (FTEX)	Canada	ftex.ca	Manufacturing & Business Partners/ Funding
TURING DRIVE INC.	Taiwan	turing-drive.com	Manufacturing & Business Partners/ Funding
VACAN, INC.	Japan	tw.vacan.com	Business Partners/ Funding
VERDIGRIS TECHNOLOGIES INC.	Taiwan	verdigris.co	Business Partners/ Funding
WISE-INTEGRATION	France	wise-integration.com	Business Partners/ Funding
MESH TECHNOLOGY TAIWAN LIMITED	Taiwan	meshub.io	Manufacturing & Business Partner
STATHERA	Canada	stathera.com	Business Partners/ Funding

**遇見全球創業之星**

# 46

**OUT OF THIS WORLD STARTUPS**

Powered by

# COMPUTEX d&i awards shine light on world's best innovative technology



The awards recognize the top-notch technologies of today and offer a sneak peek into the technologies of tomorrow

A total of 50 flagship products across nine categories were honored at the 13th COMPUTEX d&i awards this year, highlighting the best in recent technological trends and post-pandemic opportunities.

Presented on May 27, the award-winning products are on display at the d&i awards exhibition and exhibitors' virtual booths through COMPUTEX 2021 Virtual. The leading information and communications technology trade show, organized by the Taiwan External

Trade Development Council (TAITRA), is being held online this year due to the COVID-19 pandemic.

This year's d&i awards featured a new special category, Startups, to fuel new business opportunities and technological breakthroughs.

The panel of judges, including angel investors, collaborating partners, senior news editors from renowned publications and local creative directors, ranked the products based on the two

keywords for the 2021 d&i awards : Remote and zero-contact.

This year, three products received the prestigious d&i Gold Award: a flagship laptop, a forthcoming product, and a cloud rental smart lock solution, while the Specialty Award bestowed upon two top-line gaming devices and a cybersecurity document protection service.

Gaming laptops are no longer clunky beasts that serve double duty as a desktop, they are



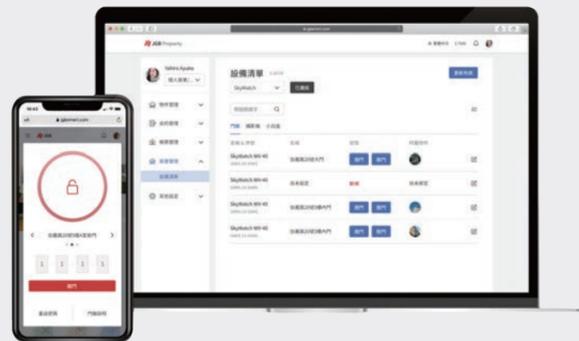
**ROG Zephyrus Duo 15 SE GX551**  
ASUSTeK COMPUTER INC.

The versatile ROG Zephyrus Duo GX551 is a ground breaking dual-screen gaming laptop equipped with a 15-inch primary display and a 14-inch secondary touchscreen display. An innovative hinge design tilts the secondary display up as the lid is opened to give gamers the most comfortable angle for touchscreen interaction, while also creating a large vent behind the screen that increases airflow intake into the slim chassis. This radical cooling design enables desktop-class gaming performance in a dynamic and portable device. No other ultra slim gaming laptop boasts a dual-screen setup of this size, calibre, and functionality.

## All-In-One Cloud Rental Management & Smart Lock Solution

JGB SMART PROPERTY

JGB Smart Property offers software-as-a-service (SaaS) application for residential property management, simplifying housing agents' jobs amidst the rise of the Asian residential leasing market. JGB systems features clear, intuitive and user-friendly interface and multiple functions, providing smoother and more convenient management of rental properties. The system's automatic rental management function reduces 80% of time spent on communication, optimize property listings for clients, while providing better online presence for customer support. E-mails and Facebook message are used to facilitate automatic notices on lease contracts and other finances, removing time and location constraints for clients. The system enables quick repair orders to be made online and can issue digital smart locks for clients. JGB



systems provides multi-lingual, and multi-currency, support to improve service quality for tenants. The system's features online finance analysis support and cash transfers for rental and utilities payment, further cutting the hassle of cashing in checks and the tedium of manual data entry.

instead light and portable, allowing gaming, working, or media streaming on the move. Gone, too, are the days of requiring an external second monitor for your laptop for extra screen real estate.

Take the ASUS Republic of Gamers (ROG) Zephyrus Duo 15 SE GX551, for example. A groundbreaking dual-screen gaming laptop, it features a 15-inch primary display and a 14-inch secondary touchscreen. The secondary screen builds upon the experience from previous generations, featuring an innovative hinge design allowing it to be tilted upwards, giving gamers the most comfortable angle for touchscreen interaction. This design has also allowed two large vents to be installed under

the secondary screen, providing more airflow intake and cooling for the slim laptop.

Aside from PCs, innovative technology has also become a feature of other sectors, as represented by GB Smart Property and DoQubiz Technology products.

JGB Smart Properties' software-as-a-service (SaaS) application offers ease of management for residential properties, utilizing cloud services and the Internet of Things (IoT). The combination of these technologies facilitates the management of residential properties in many ways, such as providing digital smart locks for property entry and exit, virtual reality (VR) tours of available units, electronically generating leases for clients, and arranging maintenance

for the properties. The application also makes managing the financial side of rentals, including notifications for payments, utility bills and the number of security deposits to be returned, less of a hassle.

DoQubiz's data-fractal system offers security for documents. "Data is modern-day gold," as the company advertises, and like gold, it should be securely stored. The system utilizes blockchain technology, with each node on the blockchains associated with a unique fractal part, individually encrypted, using a smart contract. The encryption uses a patented and certified IoT encryption chip built not only for strength but also for smooth connectivity for the modern-day IoT/Cloud environment.



**ZOTAC ZBOX MAGNUS ONE**  
ZOTAC TECHNOLOGY LIMITED

Empower everything in one incredibly powerful, versatile Mini PC. The MAGNUS ONE boasts the ultimate performance in an all-new and compact design. It is the first Mini PC to take advantage of the ZOTAC GAMING GeForce RTX® 3070 graphics card for high-fidelity ray-traced graphics and cutting-

edge AI features with DLSS. Paired with a 10th Gen Intel® Core™ i7 processor, up-gradable memory and storage support, full-range connectivity options with Killer networking, MAGNUS ONE has the do-it-all capability to deliver the best experience for gaming, daily tasks, entertainment, content creation and business.



**ROG Flow X13+ XG Mobile**  
ASUSTeK COMPUTER INC.

The ROG Flow X13 is an ultraportable 2-in-1 notebook combining a 360° convertible form factor with innovative external graphics. The convertible 13" Flow X13 comes with the latest 8-core AMD Ryzen 9 CPU and a dedicated GeForce RTX 3050 Ti GPU for robust portable gaming. The XG Mobile external GPU (eGPU), used in tandem with the GPU, dramatically increase performance and connectivity without compromising bandwidth or mobility, while expanding I/O connectivity on-demand, allowing a 13" and 1.3 kg machine to punch above its weight class.

## Data Fractal System

DoQubiz TECHNOLOGY CO., LTD.

Data is the modern-day gold, giving good cause to secure data, which is generated in massive amounts thanks to today's cloud computing paradigm – availability of storage and computing power available for all at extremely cheap rates due to economies of scale – especially when they transcend space and time meeting data residency and other data governance. DoQubiz Technology developed a Data Fractal System where the document to be protected is sliced into fractal parts and stored in a blockchain format. Every different node in our blockchain is associated with a unique fractal part using a smart contract. Each fractal part is encrypted individually using a patented and certified IoT



encryption chip built not only for strength of encryption but also for power and speed in a modern-day IoT/Cloud environment.

# Cities to become safer as well as smarter



Building smarter cities not only make life more convenient but also offer protection from infectious disease, traffic accidents and tackle climate change

Now that the world is emerging from its pandemic hiatus, technological leaders are back and ready to share their redefinition of a safe and smart future at #COMPUTEXVirtual, the leading information and communications technology trade show organized by the Taiwan External Trade Development Council (TAITRA).

In tomorrow's cities, autonomous cars will zip us between fully integrated buildings

SHUTTLE INC. TEMPERATURE-MASK SAFEPASS KIOSK



that anticipate our every need. However, COVID-19 has exposed other considerations that the people building these systems must keep in mind.

Before this past year, no one spared a second thought when shaking someone's hand or keying into work, but now the dangers hidden in these everyday actions are top of

## ADCU3-100 | eAuto

### Applications



mind. Makers of smart city tech were the first to realize that we already have the solutions, just waiting to be implemented.

Using sensors, facial recognition, e-fencing and more, exhibitors have contactless answers for every need. The Shuttle's kiosk can take a visitor's temperature while simultaneously scanning for a mask. And the smart library system by Gigabyte allows students to check out books by looking into a camera.

Yet, the pandemic also serves as a reminder that this challenge will not be the last. Energy efficiency is no longer just a slogan but a necessary feature, emphasized by everyone

from chipmakers to integrated solution providers. Staggering amounts of power is lost on its way to the user and to "vampire power" by idle devices, compounding the challenges of clean energy generation and storage.

Companies such as Delta envision alleviating these issues by optimizing the grid itself. On a smart grid, all parts of the system would be connected together so that automated managers would know when to supply, store or redirect power as needed. Individual buildings can save energy by utilizing artificial

intelligence to optimize usage, as Singaporean start-up EverComm is already accomplishing in factories and hotels.

Reflecting the complex challenges posed to future cities, transportation took up much of the focus at COMPUTEX this year. From sensors to servers to support architecture, there is a lot to figure out to ensure that autonomous vehicles can operate safely.

WinBus, Taiwan's first self-driving minibus to achieve level 4 "high automation" capabilities, is a testament to the collaborative nature of future technologies. Developed by Taiwan's Automotive Research & Testing Center along with local firms, including Gigabyte, whose automated-driving control unit powers the heart of the vehicle, WinBus has achieved the most stringent safety certification and is already shuttling travelers around tourist attractions in Taiwan.





# The intelligent future - artificial intelligence automating our lives

Evolving AI solutions automate tasks performed manually or by individual machinery and taking us to a smarter, better future

The annual COMPUTEX trade show, organized by Taiwan External Trade Development Council (TAITRA), is devoted to highlighting and bringing to the fore the technology industry's best and most innovative products each year, and 2021 is no different. Due to the global pandemic, the show is being held digitally through the #COMPUTEXVirtual platform.

Industry leaders this year trained their focus on innovations brought to the industry by maturing artificial intelligence (AI), which provides automation of tasks that are otherwise performed manually or by individual machinery today. What used to be science fiction — walking into an empty room, giving orders to an unseen AI assistant — is no longer just imagination. As countries begin to build up smart building capabilities, a vocal order, or a tap on one's smart devices, can perform the intended task.

Aiello's SPOT software-as-a-service (SaaS) program, for instance, brings AI automation of hotelier services to the hotel industry via the installation of AI voice service points throughout the establishment and in hotel rooms as well. The SPOT program significantly reduces the workload of both the front desk and housekeeping staffers, as guests would no longer have to pick up the phone to call the front desk to ask for services, amenities, or room service meals. Checking out from one's room can be as simple as saying so, and the AI can provide services such as cab-calling,



introducing local festivities or sights, as well as ordering local souvenirs.

Following this trend of AI-automated services is the development of facial recognition programs. Gone are the days when one must move to an external display or a Catseye to see who is visiting. AI features enable such functions with just a few swipes on one's smartphone.

Gigabyte's Cloudmatrix facial recognition system, for example, serves to enhance and facilitate the administrative processes for school libraries and make the library area safer for students through access control management and an integrated book check in-out system. The same system, when utilized in surveillance and security, features real-time playback, temperature cameras, auto-recognition and stranger alerts. The system's AI algorithm can identify individuals frequently visiting the establishment and log them as temporary guests, a setting that can later be authorized or removed by the system owner.

The option for real-time playback of footage helps system operators identify false alarms due to images taken under circumstances in which the individual cannot be identified. The temperature camera will allow system owners to identify individuals running a fever, an increasingly sought-after function during the pandemic.

Automation of tasks provided by AI solutions can be applied to cybersecurity functions, helping ensure and guarantee the safety of networks on which the AI is reliant for performing its duties.

Check Point Software Technologies' Check Point Harmony program utilizes AI to monitor and predict threats harming the interconnected network on which AI solutions are plugged into. The AI algorithm learns on the job, increasing response times and the efficacy of measures deployed while maintaining a broader scope of analysis as it supersedes human analysts in performance speeds.

In addition to providing cybersecurity, AI functions also serve to alert users as to how their actions make them vulnerable, such as Cyfirma's DeTCT platform. It utilizes a cloud-based AI analytics platform to help its users understand their digital footprint and possible attack surfaces that they are making themselves vulnerable to while suggesting possible actions to contain or eliminate viruses.

# Performance is king for gamers seeking a lockdown upgrade

Robust laptop offerings and beautiful PC components promise to satisfy scores of new buyers looking for the most powerful home machines

With so many people stuck at home over the past year, gaming has never been more important. Whether as a way to pass the time in lockdown or connect with friends while socially distancing, record numbers are finding solace in virtual worlds — and discovering that their aging gear cannot keep up with the latest titles.

This burgeoning demand is reflected by the offerings on display at #COMPUTEXVirtual 2021, organized by the Taiwan External Trade Development Council (TAITRA). Without flashy booths to draw crowds, traditional ways of standing out are giving way to raw specs, promising top performance for both laptop gamers and the most hardcore DIY enthusiast.

Over the past few years, advances in gaming have been driven by unprecedented improvements in graphics, from blazing-fast GPUs to software marvels such as ray tracing and ML-powered resolution boosts.

Nvidia has long led this charge, as it proved late last year with the release of its latest GeForce RTX 30 series. All of the big players — including ASUS's Republic of Gamers, MSI, Acer's Predator and Gigabyte's Aorus — have designed laptops that make full use of these powerful GPUs for lag-free, high-resolution gameplay.



THERMALTAKE TECHNOLOGY CO., LTD.  
Core P8 Tempered Glass Full Tower Chassis



Yet Nvidia now has a serious contender, as AMD has thrown down the gaming gauntlet with its new Radeon RX 6000M series announced at COMPUTEX. Further underscoring its determination, it simultaneously announced the new AMD Advantage program, which guarantees that laptops by partners meet the highest performance standards. The ROG Strix G15 Advantage Edition is the first laptop to make use of both the high-end Radeon RX 6800M GPU and Advantage, enabling a whopping 120fps at 1440p max settings.

Custom builds have also seen a boost this year among PC enthusiasts looking for the perfect balance between aesthetics and performance. From award-winning chassis to motherboards and lightning-fast SSDs, there are more exciting options than ever for building unique and powerful rigs.

As the most visible part of a build, chassis design is paramount. Minimalism is now taking over from the angular sci-fi trend of a few years ago, with an eye to highlighting the magic inside. No one does this better than Thermaltake, whose Core series of tempered glass cases, including the d&i Award-winning Core P8, puts the build center-stage, perfect especially for RGB fans.

For those who want it all with a rig that is both high-powered and silent, liquid cooling is the way to go. The Zadak MOAB II ELITE water-cooled case by Apacer is the best on the market, with a patented aluminum distribution plate to eliminate the need for most tubes and real-time temperature display.

The newest motherboards are also finding ways to keep up with processor advances, even without the need for cooling. ASRock has found a way to do just that with its latest X570S PG Riptide motherboard, whose fanless design allows for even quieter operation. Paired with the new B550 PG Riptide, which features a similar array of high-end specs, ASRock has a lot to brag about this year.

Lastly, some truly impressive SSD advancements are guaranteed to bring gaming to the next level. Gamers were thrilled last year when Sony announced that the PlayStation 5 would bid farewell to load times with its ultra-fast SSD capable of 5.5GB/s read speeds, yet Addlink promises to blow even this out of the water with its S95 SSD, which boasts shocking read speeds of up to 7.1 GB/s with 2TB of storage.



# A Paradigm shift in work culture — working from home or from anywhere

## Current trends of remote working are pivotal in changing the future definition of “work”

The COVID-19 pandemic unwittingly hastened the development of the concept of remote working. While increasingly accepted, it is still a “hippy” and “new age” trend. The virtualization of COMPUTEX this year as the #COMPUTEXVirtual platform, organized by the Taiwan External Trade Development Council (TAITRA), further demonstrates that this trend is here to stay.

The increasingly blurred edges of the home and workspace are facilitated by technological improvements such as faster servers, greater data storage, and increased network speeds, as well as comprehensive software systems and other inventions that make working at home even more relaxing and productive.

Faster servers, storage, and networks are foundational infrastructure that companies must invest in for their employees to be as productive at home as they are at the office.

For example, companies may choose to utilize Gigabyte servers outfitted with Intel’s 3rd Gen Xeon Scalable Processor series. The processor, based on Intel’s new 10nm process, gives greater performance, which, along with 64 lanes of PCIe 4.0 per slot and topping out at 40 cores, will enable high-speed data processing.

With an established infrastructure facilitating



GIGABYTE TECHNOLOGY CO., LTD.  
R292-4S1  
Rack Server- 2U Quad Processor

connectivity and access, employees can now connect to company servers and retrieve files in their homes. However, every individual is different, and this extends to their technological setup, software preferences, and even technological know-how. Furthermore, some employers may still harbor doubt as to the productivity of their employees outside of the office.

Acer Group’s AEB solution helps bypass this issue by offering software that puts all employees on the same page. Acer’s AEB replicates the office environment for remote workers, allowing them to clock in and out remotely. The Remote Office function allows remote access to office computers, as well as real-time collaboration with colleagues. The software also comes with built-in video conferencing capabilities, removing the hassle

for individual employees to download different programs and the potential for technological difficulties.

While cutting-edge and top-of-the-line laptops are not strictly necessary for working remotely, not having to wait several minutes for a computer to boot up is a quality-of-life improvement that one simply cannot live without once they have experienced it.

Built for gaming, the ASUS Republic of Gamers (ROG) Zephyrus Duo 15 SE GX551 also functions as a killer work laptop. As part of a groundbreaking dual-screen design, a 14-inch secondary touchscreen features an innovative hinge design allowing it to be tilted upwards to facilitate multitasking experiences for both gamers and workers alike.

Other gadgets and appliances also serve to enhance the work-from-home experience, such as Delta Electronic’s Vivitek Projector. Small, lightweight with crystal clear images, it allows individuals at home to conduct meetings away from their computers and perhaps in the comfort of their living room or the privacy of their home office.

While the pandemic fuels the trend of working remotely, technological innovations are making the experience easier. As a result, the experiences of this period could very well be lasting, and businesses could be facing a paradigm shift in the fundamental way of how work is to be conducted in the future.

# Acer launches new Predator Triton gaming notebook

## Predator Triton 500 SE gaming notebook

The Predator Triton 500 SE (PT516-51s) is a “special edition” notebook designed for gamers who want a machine capable of getting through both the latest AAA games and the work day. Powered by up to an 11th Gen Intel® Core™ i9 Processor, NVIDIA GeForce RTX 3080 Laptop GPU and up to 64 GB of 3200 MHz DDR4 memory, the notebook offers more than enough gaming power—but at just 19.9 mm (0.78 in) thin with up to 12 hours of battery life<sup>[1]</sup> and NVIDIA Advanced Optimus technology, gamers can easily slip it into a backpack or squeeze in a bit of work between matches. The notebook’s sleek, clean appearance means that it could even double as a work laptop for professionals that enjoy gaming, and with up to 4 TB of high speed PCIe Gen4 storage, it has plenty of space for games, footage and the odd spreadsheet or two.

“With Acer’s innovation powered by the 11th Gen Intel® Core™ H-series processors, they push the limits on laptop performance for amazing gaming experiences. Supporting frequencies up to 5 GHz, new PCIe Gen 4 for the fastest graphics and storage access, and incredibly fast connectivity based on the latest Wi-Fi 6 and Thunderbolt 4 technologies, Acer has created a stunning platform for gamers,” said Kim Algstam, GM & Director, Enthusiast Laptop Innovation Team, Intel.

Whether playing games or watching films, players will appreciate the Predator Triton 500 SE’s 16-inch 16:10 display with an 87% screen-to-body ratio and three panel options, including a 165 Hz WQXGA LCD display; a 165 Hz WQXGA Mini LED panel with 1,250 peak nits and 100% coverage of the sRGB color gamut; or a 240 Hz WQXGA IPS<sup>[2]</sup> PolarBlack panel with a 3 ms response time and 100% coverage of the DCI-P3 color gamut for an even smoother gameplay experience. Just under the notebook’s all-metal<sup>[3]</sup> chassis, a suite of thermal management technology ensures that everything runs cool. The Triton 500 SE employs Acer’s Vortex Flow cooling design, featuring a triple fan cooling system, including a 5th Generation custom-engineered AeroBlade™ 3D Fan, five dedicated heat pipes for the CPU and GPU, plus strategically placed intake and exhaust vents that continually

draw in cold air and expel hot air.

An Intel® Killer™ E3100 Ethernet Controller, Intel® Killer™ Wi-Fi 6 AX1650, and Killer™ Intelligence Center provide gamers with the low latency and reliable connection necessary to clear out the online competition, while PredatorSense™ allows gamers to monitor their system, overclock the computer’s GPU and adjust fan speed with different modes such as quiet, extreme or turbo. As a final touch, the notebook’s full range of USB 3.2 Gen 2 ports, including dual Thunderbolt™ 4 Type-C ports which support DisplayPort and a SD 7.0 card reader, provides players with plenty of room for all their peripherals.

## Predator Connect X5 5G CPE router

The Predator Connect X5 5G CPE is the first Intel Killer-compatible 5G CPE in the world, capable of providing 5G connectivity at up to an impressive 4.7 Gbps<sup>[4]</sup>. Designed with the needs of gamers in mind, a dedicated onboard GAME Port allows for the fastest uncompromised throughput. Furthermore, users can connect up to 256 devices via the X5’s Wi-Fi 6 capabilities to game, stream and share content without any slowdowns.

Intel® Killer™ Intelligence Center empowers gamers with the ability to fine tune their data downlink and uplink speeds based on their priority preferences, assigning some applications higher network precedence than others. The Intel® Killer™ Prioritization engine can also automatically detect and adjust optimal prioritization settings for many games, apps, and websites to deliver a better online experience. The Predator Connection Manager further allows users to monitor and adjust their 5G data usage to suit their gaming and media consumption needs. Integrated Trend Micro Home Network Security provides enhanced cybersecurity for networked devices by examining and managing network traffic, helping to protect users’ privacy and data.



Powered by a quad-core 2 GHz ARM Cortex processor with 1 GB DDR4 and 1 GB Flash memory, the Predator Connect X5 5G CPE is equipped with a dedicated GAME LAN port, one standard



LAN port, one WAN port, USB, a SIM card port, a set of Main and Div TS-9 Antenna ports, and WPS for added security. An onboard USB port provides an extra level of flexibility, allowing users to store, transfer, and share documents within the local network by attaching external storage drives.

## Predator Connect D5 5G Dongle

Designed for mobile PC gamers, the Predator Connect D5 5G Dongle is an accessory that unleashes the potential of a computer’s built-in Intel® Killer™ Network Solution via a USB 3.1 Type-C port. On top of providing blazing fast 5G speeds<sup>[5]</sup> and enabling a computer to be used as a 5G Wi-Fi hotspot, the dongle prioritizes bandwidth allocation and reduces latency in order to improve a user’s overall gaming experience. Onboard active cooling ensures the device maintains optimal levels of performance. More technically inclined users can utilize the Predator Connection Manager to monitor network connections and modify throughput to suit their needs, and the dongle can be used with Intel® Killer™ DoubleShot™ Pro 5G for dual connectivity.



<sup>[1]</sup> Listed battery life is based on video playback test results. Battery life rating is for comparison purposes only. Actual battery life varies by model, configuration, application, power management settings, operating conditions, and features used. A battery’s maximum capacity decreases with time and use.

<sup>[2]</sup> All brands and product names mentioned herein include trademarks of their respective companies and are used solely to describe or identify the products

<sup>[3]</sup> Only top, base and bottom cover are metal. The frame area is ABS plastic.

<sup>[4]</sup> 5G LTE speed and availability may vary. Check your telecoms provider for details. Actual 5G Speed varies and is dependent on user’s network plan, sold separately

<sup>[5]</sup> Specifications may vary depending on model and/or region.

# Next-Gen DDR5 and patented compact SSDs with cooling fins

Apacer's grand debut at COMPUTEX Virtual 2021 online

With the theme of "Post-pandemic Transformation: Technological Revolution," Apacer launched stunning new products at the COMPUTEX Virtual 2021 Online Exhibition from May 31 to June 30. In addition to spotting groundbreaking developments in SSDs and DRAM for 5G computing, cloud IoT, gaming and entertainment, participants were able to learn about Apacer's latest collaborations with Allxon and Onyx.

Gamers especially wanted to get a peek at gaming brand ZADAK's latest water-cooled PC unboxing webinar. And all this was carried out to the highest safety standards even during this challenging period, thanks to COMPUTEX Virtual's online business negotiation and meeting reservation services. Buyers and manufacturers around the world felt like they were standing in Taipei and interacting safely in real-time.

## Upgrading industrial technology for 5G high-speed computing and cloud IoT applications

In the industrial field, Apacer's latest releases included next-gen DDR5 industrial SODIMM, UDIMM and RDIMM memory modules with transfer rates up to 4800 MT/s and support for Intel Eagle Stream and AMD Zen4 EPYC Genoa server platforms. They appeared alongside Apacer's patented compact M.2 SSD. This incorporated a heatsink with a series

of tiny notches that increased surface area and accelerated heat dissipation.

Amazingly, Apacer's engineers had managed to squeeze this functionality down so that the SSD still conformed to the D5 standard for M.2 drives. Manufacturers focusing on 5G high-speed computing also checked out Apacer's new PCIe Gen 4x4 SSD, the PV930-M280. Boasting up to 7000/5000 MB/s read and write speeds in capacities up to 2TB, it's an ideal choice for the latest AIoT rapid transmission applications.

## Taking professional, personal and gaming technology to the next level

In response to demand from professional photographers, videographers and editors, Apacer also released a high-endurance CFexpress Type B PA32CF memory card with read/write speeds of up to 1700/1200 MB/s. This memory card was optimized for 4K/8K capture and could survive more than 12,000 plug-ins. It appeared alongside the AC732 rugged external hard drive, which had passed a 1.2 anti-drop test created by the US military and is also IP68-rated dustproof and waterproof.

Since it could withstand pressures up to 4,000KG, even the most precious data would remain safe. And with these devices came another blazing-fast option: the AS2280Q4U

M.2 PCIe Gen 4x4 SSD, boasting continuous read/write performance up to 7000/6850 MB/s, which were popular among heavy gamers, video editors and photographers.

Apacer's high-end gaming brand ZADAK also unveiled new products. In addition to the latest ultra-high clock rate 6400MHz DDR5 gaming memory, it also showcased the MOAB II Elite water-cooled chassis. It incorporated a patented CNC-milled aluminum alloy, a capacitive touch switch and addressable RGB lighting. It was accompanied by the SPARK PCIe Gen 3x4 M.2 RGB SSD, which was engineered with an aluminum heatsink and features eye-catching customizable RGB lighting, and by the SPARK AIO 360MM Liquid Cooler, which included high-quality radiator fans for better cooling performance and an optimized graphite pump bearing for better durability and silent operation.

Apacer's presentation at COMPUTEX Virtual 2021 fully embodied the theme of "Adding Value, Enhancing Collaboration." Global buyers and consumers were invited to experience innovative products and technology exhibitions online from May 31 to June 30.

APACER TECHNOLOGY INC.  
www.apacer.com

# Akasa announces new range of component for gamers, PC

## SOHO Series

At COMPUTEX 2021, Akasa introduced and expanded its SOHO line-up with the SOHO H4 CPU Cooler featuring a premium 120mm fan with Addressable RGB, coupled with a heatsink with black fins and 4 copper heat pipes. With superior cooling for one's CPU, they looked incredible for any builds, from gamers to RGB enthusiasts. Akasa also introduced the Soho XL Controller which had a huge number of aRGB connectors, perfect for connecting and syncing more RGB peripherals to one's build.

The series name, Soho, was derived from the famously bustling heart of London, well-known for its vibrant and unique architecture as well as nightlife. Akasa's Soho series tries to recreate the vibrant, colourful, and exciting atmosphere of this famous area in London.

## PC enthusiasts

Also announced in the event was the

T5 series of Thermal Pastes which included the T5 Essential for value conscientious PC enthusiasts and hi-thermal performance. For extreme performance enthusiasts, the T5 ProGrade Plus featured nano-diamond particles to provide the ultra-heat transfer performance from the component to the heatsink.

## Roar of excitement for fanless cases for Intel's Tiger Canyon

Following Intel's release of a new line of Tiger Canyon NUCs under the Pro moniker (NUC 11 Pro), Akasa introduced several compatible cases under the "TN" series. This included the "Turing TN" case that could be used as a statement piece in a home theatre, desktop setup or recording studio. If size was of most concern, Akasa released the "Newton TN" solution. With a volume of less than 1.9L, its small profile made it discreet and great for smaller desktop setups. For more niche applications, specifically for harsher

environments such as the outdoors, there was the "Pascal TN" case which was rated IP65.

## The New "cutting hedge" Maze Pro case

The show also introduced Akasa's new "cutting hedge" Maze Pro case which was perfect to complete any Raspberry Pi 4 setup with a stylish passive cooling case. Featuring a modern design which was also practical, the case acted as a heatsink, and the maze pattern increased the surface area for heat dissipation. Furthermore, the case had a sleek built-in programmable power switch, which integrated easily with the Pi 4 using just one extra script line. A removable GPIO slot was also included with the case, which greatly helped with GPIO pin accessibility to allow for easier bug testing for wiring.

For more information please email us on:  
[marketing@akasa.co.uk](mailto:marketing@akasa.co.uk)

AKASA (EUROPE) LTD.  
www.akasa.co.uk

## Akasa presents new additions from it's full range of products at COMPUTEX 2021 Virtual



Apacer × COMPUTEX  
TAIPEI  
#COMPUTEXVirtual

## Next-Gen DDR5 and Patented Compact SSDs with Cooling Fins

Apacer's Grand Debut at COMPUTEX Virtual 2021 Online Online Expo





## ROG FLOW X13

### Compact is the New Impact

#### Flex Your Power Anywhere

- Ultraslim 13" 1.3kg chassis
- Up to AMD Ryzen™ 9 5900HS CPU and dedicated GeForce RTX™ 3050 Ti Laptop GPU
- 360° gaming laptop to tablet conversion

#### Expansive Views of the Action

- Extended 16:10 aspect ratio
- Choice of 120Hz FHD or 4K UHD panels
- Scratch-resistant Gorilla Glass touchscreen

#### XG Mobile Boosts Graphics on Demand

- Optional XG Mobile eGPU up to a GeForce RTX™ 3080 Laptop GPU
- Plug-in via PCIe® 3.0 x8 with up to 63Gb/s max bandwidth to XG Mobile
- Weighs only 1kg with integrated 280W adapter and multi-port hub

#### Innovative Cooling Outsizes the Competition

- Liquid metal compound on the CPU
- More fan outlets and heatsinks than usual in a chassis under 16mm thin
- Better cooling performance in stand and tent modes

ROG FLOW X13  
ROG XG MOBILE



ProArt Display PA32UCG



ROG Swift PG32UQ

## ASUS launches state-of-the-art monitors with visually immersive graphics

Taiwanese computer hardware company, ASUS, has recently released two new series of advanced monitors, featuring state-of-the-art hardware engineered to introduce consumers to the next generation of immersive graphics.

The ProArt Display PA32UCG is tailored to graphics-based professionals, such as cinematographers, colorists and game developers. With its enhanced hardware, the monitor has the capability to most accurately sample in-development graphics to professionals in the occupations of enhancing and balancing graphics.

Next, the ROG Swift PG32UQ is engineered to present real-time graphics that are both sharp and smooth to professional gamers. Not only does the monitor provide less strain to the eyesight of professional gamers, it arguably increases esports performance as well. In an industry where the difference between losing and winning could come down to a fraction of a second in reaction time, a sudden glitch in graphics could potentially cause a professional gamer his or her victory. The ROG Swift PG32UQ is designed to eradicate the possibility of such mistake, providing gamers with an equipment that acts as the most vital tool of their trade,

by displaying fluid graphics and crystal-clear images.

#### ProArt Display PA32UCG

ProArt Display PA32UCG is the world's first HDR monitor with a peak brightness reaching 1600 nits, and 120 Hz variable refresh rate (VRR). The monitor features a 32-inch backlit mini LED 4K panel with 1152-zone local dimming for a 1,000,000:1 contrast ratio. PA32UCG supports multiple HDR formats — e.g., Dolby Vision<sup>®</sup> [1], HDR10, and Hybrid Log-Gamma (HLG) — and delivers exceptional color reproduction with true 10-bit color depth, quantum-dot technology support, and 98% DCI-P3. It also has the capability of presenting graphics in 100% sRGB/Rec.709, 99.5% Adobe RGB and 85% Rec 2020 color space support. Moreover, it features an industry-leading Delta E < 1 color difference for exceptional color fidelity.

ProArt Display PA32UCG can be calibration via ASUS's proprietary ProArt Calibration 2.0 software, or with Calman and Light Illusion ColourSpace CMS hardware calibration software. The product is also compatible with third-party hardware calibrators from X-Rite, Data Color, and Klein Instruments. Finally, it offers rich connectivity options via a USB hub,

two Thunderbolt™ 3 ports, DisplayPort™ 1.4, two HDMI® 2.0 ports, and an HDMI 2.1 port that supports 4K 120 Hz with true 10-bit visuals. The PA32UCG-K model from the same line, comes with the X-Rite i1 Display Pro monitor calibration device upon purchase.

#### ROG Swift PG32UQ

ROG Swift PG32UQ is a 32 inch 4K UHD (3840 x 2160) IPS professional gaming monitor with 144 Hz refresh rate and 1 ms moving picture response time (MPRT). It features the latest HDMI® 2.1 standard to support up to native 4K 120 Hz visuals on the latest consoles without chroma subsampling. Additionally, Display Stream Compression (DSC) technology and NVIDIA® G-SYNC® compatibility have been incorporated to enable super smooth gaming on PCs. A 98% DCI-P3 color gamut and DisplayHDR™ 600 certification complete the package, ensuring exceptional colors for incredibly immersive, lifelike gaming.

[1] Dolby Vision HDR support will be ready in the second half of 2021.

## DATO unveils ARES SERIES RGB overclocking memory

The esports market has set off an upsurge in the world, driving a vigorous development of esports products. ARES SERIES is the first RGB overclocking memory launched by Dato, with the Greek mythical God of War, ARES, as the brand image. It symbolizes speed, power and efficiency. ARES high-speed DDR4 memory uses carefully selected high-stability particles from major manufacturers and has passed a number of rigorous tests to maximize overclocking memory.

The powerful memory together with the dazzling RGB lighting effect and the high-quality zinc alloy heat sink with strong heat dissipating function all but solve the player's most difficult overheating problem. The powerful performance and brilliant lighting of ARES SERIES promise to bring customers new sensory enjoyment and functional experience.

In view of the gamer's expectations on the aesthetic memory and the RGB lighting effects, the company has found that gamers often get into scrapes with the most special RGB

lighting effects to match their valuable computer equipment to present the most gorgeous gaming experience. Datotek has noticed that consumers have to make a decision between clear crystal light effect or frosted surface light effect while purchasing. In response to this pain point, Datotek let the light guide on the Ares-Armor combine the advantages of the crystal light effect and the frosted surface light effect, to present two effects at the same time. So, the RGB gaming memory can be perfectly matched with the computer peripheral equipment to perform synchronous flashing. Ares-Armor satisfied the gamer's biggest expectation of RGB lighting effect.

Armor RGB gaming memory — an ensemble of newly patented screwless heatsink technology — uses of zinc alloy to present a more solid metal texture and a totem of a warrior's silhouette and simple curved lines that depict a warrior helmet as its emblem creates a strong visual effect of a combat symbol. The precision plate cutting technology highlights the glamorous

horsehair on the warrior's helmet. Moreover, the multiple processes in the use of the state-of-the-art plastic injection technology to create a perfect LED light effect through the V-shaped light guide combined with diamond cut light guide and frosted surface support the RGB lighting in producing glaring colors and multi-level RGB light effects. Armor has been certified by the top five motherboard manufacturers with their support software that synchronizes the LED lighting effects with the motherboard to allow gamers to enjoy both the performance and the visual impact.

Datotek created "delight your life" with persistence. It has continually adhered to this motto. Only when its customers are happy and the products can improve the quality of their lives will DATO prove its value. Dato understands that having a stable and convenient data storage is very important to customers.

DATOTEK INTERNATIONAL CO., LTD.  
www.datos.com.tw



More than just a game, to be part of it



## Delta introduces compact and powerful AC MAX EV chargers at #COMPUTEXVirtual

Delta is a global provider of power and thermal management solutions. As an energy-saving solutions provider with core competencies in power electronics and automation, Delta's business categories include Power Electronics, Automation, and Infrastructure.

Delta offers a highly versatile portfolio of EV charging solutions, including DC chargers, AC chargers, and charging site management systems. To meet the increasing prevalence of EVs, our smart-charging infrastructure solutions combine EV charging and distributed energy resources to optimize charging service and energy efficiency.

### Delta AC MAX - An aesthetically designed EV charger with high performance and adaptability

This innovative wall-mount EV charger boasts leading power output, supporting up to 17.6kW charging output. In addition, Delta's AC MAX offers extremely low stand-by power, over-the-air remote upgrade capability, lightweight design (about 3.8kg), networking capabilities, OCPP protocol support for back-end integration, as well as RFID reader for user identification. The aforementioned features provide a valuable proposition to charging

point operators (CPO) in office buildings, retail facilities, hotels, parking lots and residential communities.

### MAX. performance

The high power output of the 17.6kW AC MAX helps EV drivers to enjoy reduced charging time. Its remarkably low stand-by power consumption also contributes to energy conservation. In addition, its over-the-air remote upgrade capabilities allow CPOs to improve the charger's firmware, eliminating the need for on-site maintenance and thus, improving management efficiency.

### MAX. interoperability

Integrating peripheral devices and back-end systems is easy thanks to the design of the AC MAX. The CPOs can choose to identify EV owners by using either an RFID reader or ISO 15118 user identification mechanism. The AC MAX Charger's support of the OCPP communication protocol and wireless networking communications allows the device to transmit related information to a back-end management system or Delta's EV Charging Infrastructure Management System for remotely managing chargers and monitoring their on-site charging status via a dashboard in a central control room.

### MAX. adaptability

The AC MAX Charger supports SAE J1772, IEC 62196-2, and GB/T 20234 charging interfaces, making it compatible with charging standards employed in most countries. The device is compact, lightweight, and provides wall/pedestal installation, bottom-fed and rear-fed wiring options, IP55 protection against dust and water, and IK08 protection against impact. The hardware design makes it convenient for users to configure the charger to suit either indoor or outdoor conditions.

Delta continues to advance the development of product portfolio of AC and DC chargers to liven up charging experience everywhere and anytime. To learn more about the Delta AC MAX EV charger, please visit Delta Official Website.

DELTA ELECTRONICS, INC.  
www.deltawww.com





## EBRD supports small business' access to new markets at COMPUTEX 2021

The European Bank for Reconstruction and Development (EBRD) led a delegation of companies from its regions to take part in COMPUTEX 2021 — a global trade show targeting leaders in the Information and Communications Technology (ICT) industry — which opened on May 31. Within the remit of Star Venture program, the EBRD also mobilized a cohort of start-ups, which participated in the trade show for the first time.

The group comprised up to 30 small and medium-sized enterprises (SMEs) and high-potential start-ups from 38 economies where the EBRD invests. They had the opportunity to attend the event thanks to the support

from the TaiwanBusiness - EBRD Technical Cooperation Fund.

Organized by TAITRA (The Taiwan External Trade Development Council) the COMPUTEX exhibition took place from May 31 to June 30 in a virtual format, powered by artificial intelligence. The event was dedicated to the global technology ecosystem and included topics such as artificial intelligence, the internet of things, 5G, edge computing and cyber security.

The EBRD visitors had a chance to connect with other entrepreneurs and exchange industry insights. In addition, ten start-ups selected from a pool of ICT pioneers showcased their

businesses at the EBRD's virtual pavilion and pitched their technologies to manufacturers and prospective buyers.

Facilitated by the EBRD's Business Matching and Development program which promotes international business exchange and knowledge transfer, the global exhibition aims to raise the profile of SMEs that are embracing the digital wave and are poised to become the next tech-disruptors.

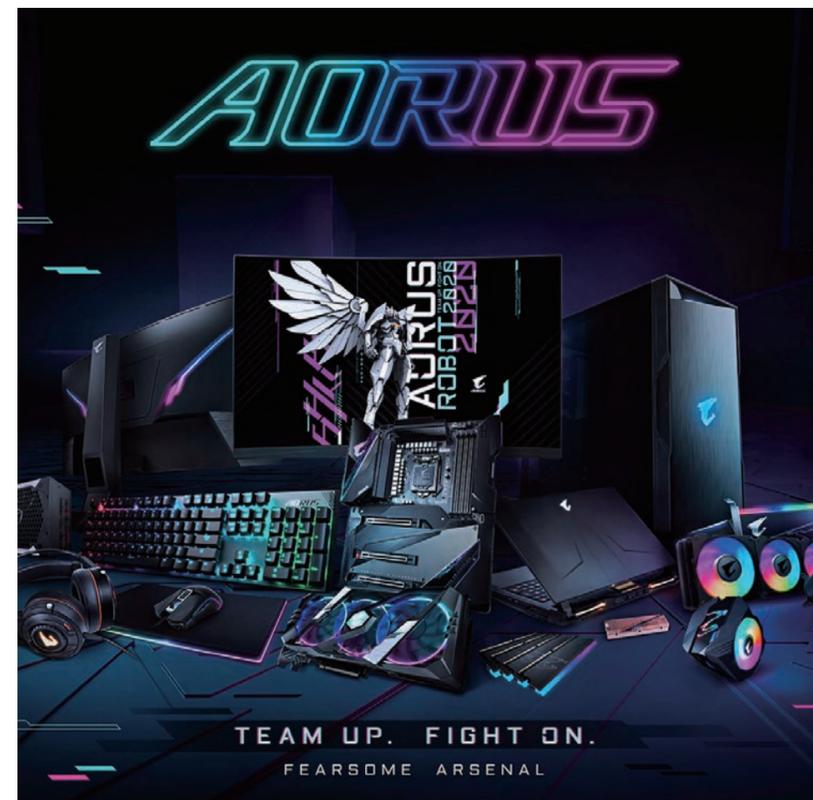
The program helps SMEs access international know-how and connect with like-minded executives with whom they will share best practices and catch up on the latest ICT trends. The Bank aims to create new business opportunities for SMEs and start-ups to cooperate and trade in order to establish cross-regional partnerships for growth and become more competitive.

ICT, a rapidly growing sector in the EBRD's regions, presents strong business development opportunities for SMEs. High-tech enterprises drive innovative solutions to emerging global challenges and have an important role to play in fostering a diversified, sustainable economy that encourages competitiveness and access to foreign markets.

**THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD)**  
www.ebrd.com



## GIGABYTE “Brings Smart to Life” with high-tech innovations at COMPUTEX 2021



solutions, visual recognition solutions, and deep learning-based AI training and inferencing programs. Notable exhibits included Industry 4.0 factory automation and smart retail solutions, in-vehicle ECU and AI edge computing platforms, and AI facial recognition systems.

PC consumers were treated with AORUS and AERO premium laptops, powered by Intel's latest 11th Gen Tiger Lake-H series processors pairing with the full-power RTX 30 series graphics cards and 4K OLED panels respectively; new AORUS 4K gaming monitors equipped with exclusive tactical game-enhancement features and HDMI 2.1-ready for full support of the new-gen gaming consoles; and two prebuilt AORUS flagship systems that are the world's first factory-tuned gaming desktops, with the most powerful component to date, and tuned and tested to ensure impeccable stability and performance out of the box.

**GIGABYTE TECHNOLOGY CO., LTD.**  
www.gigabyte.com

GIGABYTE Technology, a leading brand of computer innovations, continued its strong presence at COMPUTEX, joining the “#COMPUTEXVirtual” platform as the exhibition took place online due to global pandemic situation. From May 31st to June 30th, GIGABYTE orchestrated 10 different sections in a dedicated “GIGABYTE Pavilion” to exhibit a series of products and solutions that could expand on its “Bring Smart to Life” concept, from the data center to personal computer, and 5G to edge AI computing.

GIGABYTE is known for having the most extensive portfolio of **AMD servers** for demanding workloads, and has readied a comprehensive lineup of servers supporting the 7nm processor, unlocking its incredible performance of up to 64 cores and 128 threads to enable developers and scientists to tackle challenges in HPC and cloud computing. Correspondingly, GIGABYTE was primed to present **Intel servers** based on the latest 3rd

Gen. Intel® Xeon® Scalable Processors suited for enterprises looking to upgrade their IT infrastructure.

At the forefront of server development was an NVIDIA Arm HPC Developer Kit, a system that included an Ampere Altra processor, two NVIDIA A100 Tensor Core GPUs, and two NVIDIA BlueField®-2 DPUs, all contained in a leading-edge GIGABYTE **G242** server. In addition, GIGABYTE showcased four **Arm server** products, all of which could leverage the power of the 80-core (250W) Ampere Altra processors to provide outstanding efficiency, performance, and throughput.

Smart cities benefited from the computing power of data centers through GIGABYTE's industrial motherboards, embedded systems, automotive electronics, 3D depth sensing



# Zonerich launches smart rugged alloy terminals

Rugged computers are necessary tools for modern law enforcement agencies. They bring the department's full range of data resources right into patrol cars, and onto the tablets used by officers on foot.

To combat potential physical hazards to on-the-go computing, Zonerich introduces a smart rugged terminal series that can resist the bumps and bruises of mobility better than standard-issue portables. Along with that, Magnesium-Aluminium body protects it from severe weather conditions and unforeseen circumstances.

Nowadays, there's a growing trend towards faster processors in rugged computers to offer better and broader use, and the ability to bring desktop functionality out into the field. The new computers of today are much lighter and have much better functionality overall, including better displays and improved ergonomic design – all contributing to an improved user experience.

Zonerich has offered so many modules in a single compact device that makes it a perfect fit for any kind of organization. Starting from citizens' verification by using top notch facial recognition cameras, fingerprint scanning, voice recognition to documents authenticity or printing out any particular document, this



device can be one's smart assistant anywhere and anytime.

Rugged computers are specifically developed for use in all kinds of tough environments where the user is working outside a protected office environment, such as the geomatics industry, logistics, forestry, public transportation, construction, mining, field service, utilities, maintenance, public safety, military and security.

Zonerich's philosophy is to market those products that customers want at the right price while at the same time applying solid business sense to ensure that its applicability will be around for decades to come. Even during the toughest year of the latest COVID-19 pandemic crisis, Zonerich's R&D team has developed two new products and has continued to grow.

These types of devices can be widely used by entry-exit administration department of any country, airports, police, arm forces, traffic police or for any department that requires a highly

secured, rugged and easily portable device. Any kind of customization can be done by Zonerich according to its esteemed customers' requirements.

Following number of modules are the main advantages that makes Zonerich's device unique:

- Dual touch rotatable screens with stylus
- Long-lasting battery for backup
- High end camera with facial recognition
- Document scanner with multiple lights in order to scan every kind of documents even can scan from mobile screen
- Fingerprint scanner for biometric verification
- Integrated Bluetooth keyboard
- ID card reader
- Numerous communication ports and much more

**Click the link down below for more details:**

Dual-screen Rugged Portable Magnesium Alloy Laptop [ZQ-NT1110](#)  
Rugged Portable Magnesium Alloy Laptop [ZQ-NP1180](#)

**GUANGZHOU ZONERICH BUSINESS MACHINE CO., LTD.**  
[www.zonerich.com](http://www.zonerich.com)



ZQ-T9256



ZQ-A1160

ZOTAC® ZOTAC GAMING

# THE NEW FLAGSHIP ARRIVES

ZOTAC'S LATEST INNOVATIONS REPRESENT 15 YEARS OF EXCELLENCE



## THE ULTIMATE GRAPHICS CARD

ZOTAC GAMING GeForce RTX™ 3090 AMP EXTREME HOLO

Redesigned with function over form, the AMP Extreme Holo is the culmination of all current 30 Series features and design for the absolute gaming experience. Get Amplified with the ZOTAC GAMING GeForce RTX™ 30 Series graphics card featuring the unique HoloBlack Design.



## AWARD-WINNING MINI PC

ZOTAC ZBOX MAGNUS ONE



The ultimate performance comes from an Intel® Core™ processor and a ZOTAC GAMING GeForce RTX™ 30 series graphics card powered by the NVIDIA Ampere architecture. MAGNUS ONE has the do-it-all capability to deliver the best experience for daily tasks, gaming, entertainment, content creation and business.



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ZOTAC.COM

# Intel introduced its first 5G product for the next generation of PC experiences, Intel® 5G Solution 5000

Intel introduces its first 5G M.2 solution with worldwide carrier certification. The Intel 5G Solution 5000 delivers nearly five-times speed increases over Intel® Gigabit Long-Term Evolution (LTE) from anywhere.<sup>1</sup> Intel partnered with MediaTek on product definition, development, certification and support of 5G modem solutions for the next generation of PC experiences and Fibocom to supply 5G M.2 solutions (FM350-GL).

Acer, ASUS and HP are among the first OEMs expected this year to enable modern connected laptops with the Intel 5G Solution 5000 based on 11th Gen Intel® Core™ U- and H-series processors. The momentum continues in 2022 with over 30 designs expected.

The combination of swift, 5G connectivity paired with Intel Wi-Fi 6E (Gig+) enable seamless experiences across all network



types. As Intel sets a new standard for mobile computing, Wi-Fi and 5G will be the main pillars supporting the pervasive connectivity needs of the future.

The Intel 5G Solution 5000 builds on two recently announced collaborations with ecosystem partners, [China Mobile](#), [HP and](#)

[MediaTek](#) and [DoCoMo](#) and HP, to usher a new generation of fully connected PCs.

<sup>1</sup> Performance varies by use, configuration and other factors. Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See [www.intel.com/computex21](http://www.intel.com/computex21) for configuration details.



## World's Best Processor for Thin-and-Light Windows Laptops Just Got Better

Intel announced two new additions to the lineup of [11th Gen Intel® Core™ processors](#). These new processors, combined with Intel's co-engineering work with independent software vendors (ISVs) and original equipment manufacturers (OEMs), continue Intel's leadership in mobile compute — delivering the world's best processors for thin-and-light Windows-based laptops.<sup>1</sup>

Widespread pandemic-driven requirements for working and studying at home have proven that mobility, performance and connectivity are essential to modern PC experiences. As the world embarks on the next stages of hybrid work-learn-play models, advancements in mobile computing support the evolution of how and where people use their devices.

About the New 11th Gen Intel Core Processors: The 11th Gen Intel Core processor family continues to deliver real-world productivity, collaboration, creation, gaming and entertainment on thin-and-light laptops.

Now 11th Gen Intel Core processor-based laptops<sup>2</sup> deliver:

- Up to 5 gigahertz (GHz) in high-volume thin-and-light designs — an industry first.
- Up to 25% overall application performance advantage over the competition.
- Designs with Intel® Wi-Fi 6E (Gig+) for improved connectivity.
- ISV optimizations for up to eight times faster transcoding and up to

twice the video editing speed over the competition.

- Impressive 1080p gameplay on new and popular titles, such as *Valheim*, with up to a 2.7 higher frame rate than that of the competition.

More than 60 designs based on the Intel Core i7-1195G7 and Intel Core i5-1155G7 are expected by this holiday season, with laptops from Acer, ASUS, Lenovo and MSI available this summer. Nearly 250 designs powered by 11th Gen Intel Core U-series processors are expected by this holiday season.

Intel's Continuing Innovation: Intel's innovation and leadership with the 11th Gen Intel Core family and Intel® Evo™ platform-verified designs continues with leading storage and connectivity technologies that are critical to delivering amazing PC experiences.

Wi-Fi 6E is the most significant update to consumer Wi-Fi in 20 years. Intel delivered the first Wi-Fi 6E solutions for the PC market in early 2021. Select new 11th Gen Intel Core designs will continue to accelerate this industry leadership with best-in-class Intel Wi-Fi 6E (Gig+) products that enable gigabit+ speeds, lower latencies and enhanced reliability via unencumbered Wi-Fi performance in new 6 GHz bands (where available).

11th Gen Intel Core processor-based platforms combined with the recently [launched](#) second-generation Intel® Optane™ memory H20 with solid state storage (SSD) accelerate everyday tasks to management of large media,

gaming files and applications with a new level of responsiveness and large storage capacity. SSDs with Intel Optane memory are the fastest, enabling the ability to launch applications, such as Adobe Photoshop, up to 49% faster.<sup>2</sup>

Intel is continuing to advance PC experiences beyond pure performance as well. With a combination of key platform technologies and system optimizations, [Intel Evo](#) platform-verified laptop designs are co-engineered to ensure exceptional responsiveness, long battery life, instant wake and impressive connectivity.

To date, more than 85 Intel Evo designs have launched from top OEMs including Acer, ASUS, Dell, HP, Lenovo, MSI and Samsung, and Intel expects to verify more than 100 designs from over 15 OEMs by the end of this year. Intel has partnered with more than 150 ecosystem partners to create a deeper level of premium mobile computing with plans to invest more than \$50 million in Intel Evo ecosystem innovation this year.

<sup>1</sup> In thin & light Windows-based devices, based on unique features and performance testing (as of May 21, 2021) on industry benchmarks and Representative Usage Guides across 5 key usages: productivity, creation, collaboration, gaming and entertainment of Intel® Core™ i7-1195G7, including in comparison to AMD Ryzen 7 5800U. Visit [www.intel.com/performanceindex](http://www.intel.com/performanceindex) for details. Results may vary.

<sup>2</sup> Performance varies by use, configuration and other factors. Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See [www.intel.com/computex21](http://www.intel.com/computex21) for configuration details.





SYS-220BT-HNTR

# Supermicro offers the power to handle today's increasingly growing compute needs

The global technology industry landscape is rapidly changing due to growing adoption of artificial intelligence (AI) and 5G telecommunications, in addition to massive increases in the amount of data used by everyday consumers. These developments have created the greatest need for high-performance computing capabilities ever seen in the data center and at the edge. Information technology infrastructure giant Supermicro is leveraging its decades of expertise to offer customers tailored solutions crafted from the firm's comprehensive product portfolio.

The Supermicro BigTwin series of servers packs high-performance components into compact 2U form factor systems that can support two or four nodes with up to 20 DIMM slots. For example, the SYS-220BT-HNTR supports four hot-pluggable nodes. Powered by dual third-generation Intel Xeon Scalable processors or third-generation AMD EPYC processors, the systems also support up to 12 hot-swappable 2.5inch NVMe, SAS or SATA drives.

BigTwin servers are optimized for virtualization and cloud-computing workloads, which have become especially critical due to a massive uptick in remote work due to the global health crisis. Thanks to its scalable nature, the BigTwin line is ideal for solutions such as all-flash NVMe hyperconverged infrastructure, container-as-a-service, application accelerators, high-performance

file systems and diskless high-performance computing clusters.

The Supermicro Hyper SuperServer range consists of highly configurable, high-performance servers for data centers, enterprise environments and the 5G edge. These systems are optimized for the cutting-edge workloads of telecommunications operators, such as data crunching at the 5G core and edge, micro data centers, network function virtualization and cloud computing.

All Hyper SuperServer systems, such as the SYS-220HE-FTNRD, are powered by third-



AS-2124GQ-NART



SYS-220HE-FTNRD

generation Intel Xeon Scalable processors, meaning that they are also suitable for AI inference and machine learning operations. These systems are available with rear and front I/O configurations, as well as telecom-optimized configurations including short-depth, carrier-grade (NEBS Level 3) Hyper-E servers.

Supermicro GPU Systems are comprehensive multi-GPU servers designed to tackle the AI workloads of modern data centers. Built to maximize the potential of NVIDIA's Ampere-based GPUs, these servers feature thermal designs optimized for high performance and reliability in multi-GPU configurations. For example, the AS-2124GQ-NART supports four NVIDIA HGX A100 GPUs with either 40GB or 80GB of second-generation High Bandwidth Memory and features dual AMD processors in a compact 2U footprint.

Supermicro's GPU servers also support advanced GPU interconnect architectures, such as NVIDIA's NVLink, Dual-Root Complex or Single-Root Complex PCI-Express. These features make the systems ideal for high-performance and cloud computing, as well as the AI inference and deep learning training needed for scientific research in fields such as autonomous vehicle technology development and molecular dynamics simulations.

**SUPER MICRO COMPUTER, INC.**  
www.supermicro.com



# TAcc+ International Program: Entry point into Asian markets for startups

Taiwan Accelerator Plus (TAcc+) International Program is an initiative by Taiwan's Ministry of Economic Affairs. It aims to provide business support to select ambitious international startups in the Healthcare and IoT fields, opening a channel for them to enter Asian markets through Taiwan's uniquely mature supply chain & manufacturing resources, and robust entrepreneurship ecosystem.

For European startups aiming to develop their business in Asia, or aiming to source for Asian supply chain / manufacturing partners, the TAcc+ International Program is an ideal opportunity.

The International Program consists of two sections. First, the Top 24 selected startups will be guaranteed booth space in the virtual edition of the month-long InnoVEX exhibition in June 2021. They will have ownership of a virtual display spot and access to networking events plus matching-making services.

Second, the Top 10 selected startups will have access to a one-month intensive startup bootcamp in Taipei. The package includes corporate innovation tours, strategic consultancy services focusing on expanding to the Asian markets, key supply chain linking, potential strategic partner and client



matchmaking, investor introducing, local business development services and demo-pitch events, as well as one free flight ticket per team, one month of free accommodation in Taipei, and one month of free co-working space at the TAcc+ Linkou location.

Taiwan has long been a tech industry leader in Asia, especially in the semiconductor, ICT, and health sectors. With the resources available within Taiwan's tech entrepreneurship environment, as well as the resources

specifically provided by TAcc+'s corporate partners (including NVidia, Wistron, LITE-ON Technology, Hi-Clearance Inc. and more), European startups participating in the TAcc+ International Program will have a strong chance in making a successful start in their Asian expansion strategy.

**TAIWAN ACCELERATOR PLUS (TAcc+)**  
taccplus.com

# NXP ramps automotive processing innovation with two processors on TSMC 16nm FinFET technology

NXP Semiconductors N.V. (NASDAQ: NXPI), a world leader in automotive processing, and TSMC (TWSE: 2330, NYSE: TSM) today announced the release of NXP's [S32G2](#) vehicle network processors and the [S32R294](#) radar processor into volume production on TSMC's advanced 16 nanometer (nm) FinFET process technology. This marks the migration of NXP's S32 family of processors to increasingly advanced process nodes as automobiles continue to evolve into powerful computing platforms. NXP's continued innovation in the S32 family is designed to help carmakers simplify vehicle architecture and deliver the fully connected and configurable car of tomorrow.

The S32G2 vehicle networking processors enable service-oriented gateways for secure cloud connectivity and over-the-air updates that will unlock a multitude of data-driven services such as usage-based insurance and vehicle health management. S32G2 processors also serve as domain and zonal controllers to enable next-generation vehicle architectures and as high-performance ASIL D safety processors in advanced driver assistance and autonomous drive systems. The move to TSMC's 16nm technology has allowed S32G2 to consolidate multiple devices into one, creating a powerful System-on-Chip (SoC) that reduces the processor's footprint.

The S32R294 radar processor's implementation in 16nm provides the performance carmakers need to enable scalable solutions for NCAP and advanced corner radar as well as long-range front radar and advanced multi-mode use cases like simultaneous blind-spot detection, lane change assistance and elevation sensing.

TSMC's 16nm technology enables NXP's automotive processors to harness the power of advanced FinFET transistors for the first time, combining improved performance and rigorous automotive process qualifications to deliver safe next generation computing power. Backed by TSMC's extensive

roadmap for automotive processes, NXP's 16nm automotive processors pave the way for a wider migration to TSMC's 5nm process for the NXP S32 family of vehicle processors.

"NXP's release of 16nm processors for radar and vehicle networking is the next milestone in turning cars into intelligent, connected robots on wheels that are safe, secure and enjoyable. Both processors are ready for volume release," said Kurt Sievers, President & CEO of NXP Semiconductors, at the Computex CEO Forum. "We have a long history of partnership with TSMC and appreciate their support during this extraordinary period of shortage. We value our collaboration in both technology and volume manufacturing that has enabled this key step in broadening NXP's 16nm FF portfolio and paves the way towards our future high-performance S32 processing platform with harmonized software infrastructure in TSMC's 5nm process."

"Vehicles have become sophisticated computing platforms with semiconductors controlling a wide range of sensors, digital cockpits, wireless connectivity, and more. TSMC's comprehensive portfolio of automotive process technologies and services enable

our customers to innovate to make cars safer, smarter, and greener," said TSMC Chief Executive Officer Dr. C.C. Wei. "TSMC is dedicated to supporting NXP's longstanding automotive excellence in design, quality and functional safety at the 16nm node and well into the future with our leading logic technologies and automotive-grade manufacturing quality."

#### Availability

NXP's [S32R294](#) radar processors and [S32G2](#) secure gateway processors have started volume production in Q2 this year and are available.

**NXP SEMICONDUCTORS**  
www.nxp.com



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# The 3 best highlighting products of 2021 InnoVEX TYC startup pavilion!

Taoyuan City Government uses "Startup@ Taoyuan" as a symbol to show various entrepreneurial resources. Taoyuan City Government is working with each startup hub to show the development and result of Taoyuan's innovation and entrepreneurship. Additionally, it promotes various types of startup businesses to create a more friendly startup ecosystem.

The goal of the six major entrepreneurial policies is to promote entrepreneurship-assisted programs, establish startup hubs and shared spaces, integrate entrepreneurial resources, connect with Asia Silicon Valley, link local entrepreneurship institutions and cultivate new social enterprise teams so as to make Taoyuan the capital of entrepreneurship.

Department of Youth Affairs creates a paradise for youth and assists youth in entrepreneurship, participation in public affairs, and the development of diverse talents.

**TYC STARTUP PAVILION**  
tyc.tycg.gov.tw

## TOP 1: Mbranfiltra Portable Water Purifier

PES hollow fiber membrane portable filter is an industry-leading product that is unique in its ability to block out bacteria and microplastics. The water flow rate of the membrane is 3 times faster than its competitors. Due to our portable and electricity-free design, you can get clean, drinkable water anywhere and anytime. Mbranfiltra lets you discover the unknown without fear.

### Selling Points:

- Electricity-free
- Block out bacteria and microplastics
- High flow rate

**MBRANFILTRA CO., LTD.**  
<http://fb.me/MbranFiltra>



## TOP 2: LUFTQI Air Purifier

LUFT Duo is envisioned future for air purifier. It has been invented and designed as smallest to enjoy filterless air purification that combines two technologies: "Electro-static dust collection" and "Photocatalysis" to clean the air we breathe.

**RICE EAR LTD.**  
[www.luftqi.com](http://www.luftqi.com)

## TOP 3: iTemp

BlueBeard Studio introduces iTemp Smart Mug and Bowl that allows drinkers of all things hot to enjoy their drinks and food at their own personalized temperature. It's not just a heating machine, it is the world's first temperature-regulating Smart Mug and Bowl. This innovative product was selected by Taiwan Tech Arena (TTA) as one of the 100 featured Taiwanese startups to showcase at CES 2021.

Now, even tableware can be smart and personal with your ideal preferences.

**BLUEBEARD STUDIO CO., LTD.**  
[www.itemp-bbs.com](http://www.itemp-bbs.com)



# MAKEN new arrivals draw eyeballs

MAKEN has been a professional manufacturer and exporter in this field for 15 years. Being a COMPUTEX's old friend, MAKEN brought a new 2021 arrival to join in the COMPUTEX Cloud Exhibition this year.

The company presented four main product series' new arrivals in the show: POS cash drawers, tablet stands, digital signage and self-service terminals.

### MAKEN POS Cash Drawers: MAKEN trump product

MAKEN cash drawers are state-of-the-art designed and manufactured in high reliable quality, with rich sizes and styles for choices.

### MAKEN Stands: Fashion design & support flexible custom service

MAKEN provides tablet stands, POS stands and commercial display stands. Tablet stands cover flooring, desktop or wall mounted applications. POS stands are used for POS terminals, such as the company's PS-3010 multi-functional integrated stand, equipped with flexible hardware designed for display

screen, printer and card reader. And rich commercial display stands combine touch screens in different sizes ranging from 21.5" to 55", and supporting flexible custom services at appearance, structure, color and material.

### MAKEN Digital Signage: Gorgeous visual feast

The digital signage combined screen with stand, is easy for installation and transportation. The LG original HD commercial screen offers fantastic visual enjoyment.

Wall mounted series, the screens are available from 21.5", 27", 32", 43", 49" and 55", with touch and non-touch options.

### MAKEN Self-service Terminal: Good business assistant

The company's self-service terminals include self-ordering kiosk, self-checkout kiosk, self-information kiosk and self-queue kiosk series.

Its popular KH-2100 self-ordering kiosk, compatible for 21.5" and 27" screens, is of compact structure and small space occupied.

KH-3200 self-ordering kiosk, designed with front opening door and side opening door options, applications can be wall mounted, flooring mounted with single screen or double screens.

KF-2100C, 21.5" self-information kiosk, desktop installation, exquisite design, is suitable for limited application space such as library, reference desk, reception center etc.

KR-1900 integrated checkout kiosk, combines 19" HD touch screen, vertical dual windows scanner, dual storage platforms, and payment solution equipped with rotatable payment device holder, printer holder and more. It is very suitable for chain supermarkets, shopping malls and so on.

There are more products from the company and MAKEN is open to discussion of potential cooperation with anyone interested.

**XIAMEN MAKEN TECH CO., LTD.**  
www.maken.com

**MAKEN**  
Make It Happen

## MAKEN PRESENTS FOUR MAIN PRODUCTS SERIES' NEW ARRIVAL AT COMPUTEX TAIPEI 2021



Cash Drawers

Stands & Mounts

Digital Signage

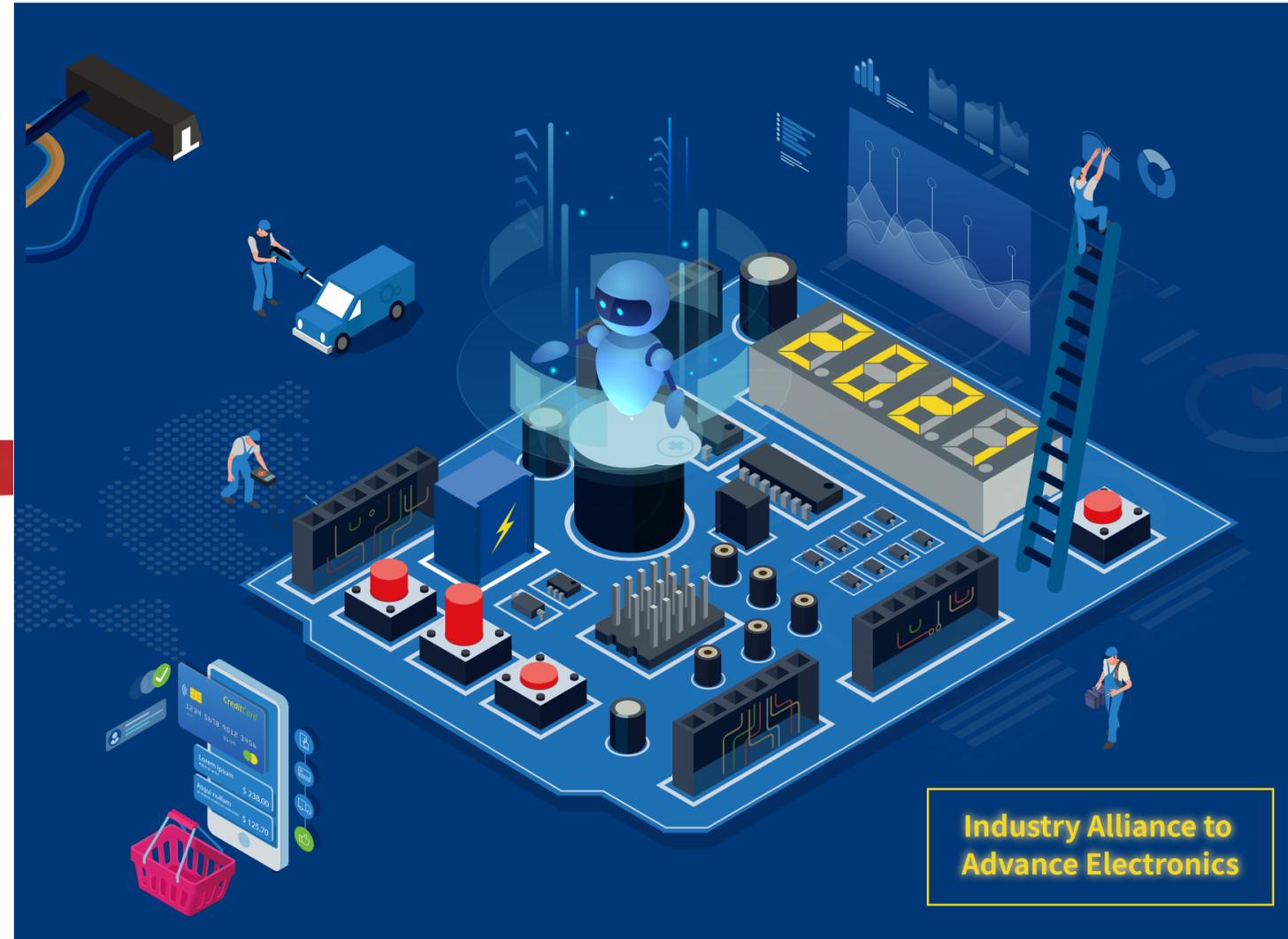
Kiosks



**TAITRONICS**  
Taipei International Electronics Show



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Industry Alliance to Advance Electronics

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Organizers: Taiwan External Trade Development Council Taiwan Electrical and Electronic Manufacturers' Association



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\* Persons under 18 years of age  
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