CES 2017: Latest in Technology and the World of Displays

This year, Consumer Electronics Show (CES) is celebrating 50 years of innovation and opening “a new millennium of whoa,” as the organizers say. The very first CES was held in New York City in 1967 and showcased transistor radios, stereos, and black and white televisions. Black and white! Display technology has come a long way since then - looking back half a century we can easily say that we are now living in the future.

Over the course of the years, this annual exhibition has grown tremendously to include tech far beyond audio-visual innovations. It has become a place where new tech developments and ideas are introduced. CES 2017 featured around 3,800 exhibitors with over 200,000 people attending from across the globe. As another year is in the books, let’s reflect on the main developments in display technology introduced this year in Las Vegas and recap the trends that will drive the world of displays forward.

CES 2017 - advancements in display technology

CES is an invigorating event for the display industry where manufacturers showcase their very best products and latest innovations, outing “displays on display.” 2017 exhibit was no exception and lived up to the CES reputation!

Technologies presented at this year’s show are indicative of the exciting times ahead for the display realm. As display tech enthusiasts, we were pleased to see that the spotlight was on the image quality and hardware design aesthetics. Here is the summary of the most important trends we saw:

Quantum dots take LCD technology to a whole new level

A number of manufacturers have introduced quantum dot enabled technologies, bringing new heights to LCD display performance. These displays support HDR (High Dynamic Range) and come with a lower price tag than OLEDs. As the conference’s leading display technology, quantum dots have completely redefined what is possible in the TV world.

QD displays deliver unprecedented levels of brightness, tremendous color fidelity and color volume, deepest blacks, and wider color gamut – ultimately resulting in the best, true-to-life picture quality ever available in a display.

Interested to learn more about how quantum dot technology works in displays? Read on.

HDR and the ever-widening color gamut

High dynamic range (HDR) displays were ubiquitous at CES 2017 - with every major player presenting HDR models. HDR sets produce excellent color accuracy and saturation by substantially expanding contrast and color range and yielding deeper blacks – resulting in true colors with high visual impact. While most HDR displays come with 4K resolution, the difference between SDR and HDR is far more impressive than change in pixel mass itself. HDR image is the most vibrant yet, with major improvement in brightness output, elevating peak luminance levels up to 2,000 nit.
In addition, Quantum dot advancements and expanded color range in many high-performance 4K displays are bringing display technology unbelievably close to Rec. 2020 color volume target, delivering over 90% of DCI-P3 color space.

In 2017 displays, expect stronger, dynamic image and stunning realism delivered by higher contrast ratio and increased color volume.

**Design for modern spaces**

Displays’ form factor and aesthetics are getting increasing attention by the manufacturers. Aspiring to better fit in our homes, a number of developments have been introduced at CES.

New designs included:

- TVs that are thinner than smartphones; such as **Xiaomi’s Mi TV 4** that is only 4.9mm thick. Dell
is also promising the world’s ultra-thinnest monitor.

- **Curved displays** providing 360-degree experiences and widest viewing angles, making the largest splash in gaming. Check out Samsung CH711 and ViewSonic VP3268-4K monitors.
- Novelty sizes and configurations – from 27 to 98 inch there is a display to every taste. CES also unveiled a number of non-standard aspect ratios such as 21:9 and ultra-wide 24:10 in monitors.
- Monitors easily transforming from landscape to portrait orientation changing the way designers work by effortlessly pivoting from one mode to another, such as this Samsung model.
- All-around looks improvements for TVs, including innovative zero-gap wall-mount systems, nearly invisible clear optical cables and cable management systems.

Screen-free options such as 4K laser projectors were also represented – unfortunately at current price points they are unrealistic to the average consumer. Depending on manufacturer, the latest 4K projectors are priced from $13,000 to $25,000.

The industry has shifted to products that are not only delivering superior visual performance, but are also easy to install and match interior design perfectly. Displays have never looked better!

**Conclusion**

At CES we were proud to see our customers shine with the latest in consumer display technologies. As a core technology supplier nothing gladdens our heart than seeing our customers win accolades for their products. CES 2017 unveiled a wide range of display technologies clearly demonstrating the leaps made in recent past.

Today’s users demand immersive, lifelike experiences when they engage with digital content. Let your imagination run wild to envision outstanding display performance in digital applications - we are ready with the latest tech to support all your signage endeavours. Check out our PID product portfolio to see how we are pushing the boundaries of innovation.