

Plessey demonstrates microLED-based AR and VR HUD Concept to industry leaders during CES 2018



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Plessey Semiconductors, a leading developer of award-winning optoelectronic technology solutions, has successfully demonstrated how its monolithic microLED technology can be used to deliver the next-generation of Head-Up Displays (HUDs), enabling new AR and VR applications.

MicroLEDs are emerging as the only technology that can provide high luminance in a small format. All leading manufacturers of wearable technologies are currently pursuing manufactures that can deliver an ideal microLED solution. With this demonstrator, Plessey has confirmed it is ready to enable its partners to move into

production of a monolithic display based on microLEDs using the company's proprietary GaN-on-Silicon approach.

Commenting at CES 2018, **Dr Keith Strickland, Chief Technology Officer at Plessey, stated:**

“Monolithic microLED technology is the only viable solution that can enable products that are not only compact enough to be worn without restricting the overall experience for AR and VR applications and in HUDs, but also provide the size, weight, power and luminance needed.”

The demonstrator, which has been produced in collaboration with Artemis Optical, combines Plessey's monolithic display, based on an array of microLEDs integrated alongside an active matrix backplane, with the patented film technology and a single lens arrangement from Artemis. The combination of technologies removes ambient light in the wavelength matching the microLED display output, resulting in a HUD that delivers very high display brightness with low power consumption, in a format that is considerably smaller than existing HUD designs, yet still offers significant cost savings.

During CES 2018, Plessey Semiconductor and Artemis Optical presented the demonstrator to many leading companies developing VR and AR electronics. Headsets and eyewear outfitted for AR and VR applications are set for record sales this year of \$1.2 billion in the US market alone, according to the Consumer Technology Association (CTA).

Plessey's was recently announced as 'Company of the Year' at the Elektra Awards 2017, a prestigious annual awards programme organised by the publisher of UK-based Electronics Weekly magazine. The highest accolade was awarded to Plessey for its achievements and innovation in the development LEDs using it's GaN-on-Silicon technology.

For further information, please

visit: <http://www.plesseysemiconductors.com/microled-displays>

About Plessey

Plessey is a leading expert in the development and licensing of technologies that are revolutionising the solid-state lighting sector. With its in-depth understanding and breadth of patents relating to GaN-on-Silicon, the company has established itself as a valued IP partner to OEMs producing the next generation of photonics solutions. Plessey has been successfully licensing its pioneering sensor technology solutions within the healthcare and automotive sectors for many years.

For further information and datasheets, please visit www.plesseysemiconductors.com or email sales@plesseysemi.com.

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