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## **JDI Develops World’s Highest Resolution (>2500 ppi) Ultra High-Resolution VR Display on Glass Substrate**

**– Awarded DIC International Display Technology Innovation Award –**

JDI has developed the world’s highest resolution ultra high-resolution display on a low-cost glass substrate (2.15 inches, 2527 ppi) for use in virtual reality head-mounted displays (VR-HMDs). JDI’s technology breakthrough makes possible affordable VR displays with the extraordinary imaging and highly realistic, immersive user experiences that were previously only available on high-cost silicon substrates.

Recognizing the importance of this technology, JDI was awarded the DIC International Display Technology Innovation Award on June 18, 2024, ahead of the July 3, 2024 start of Display Innovation China EXPO 2024 (DIC EXPO 2024, Shanghai), China’s leading display technology exposition.



Current Display Technology (1227 ppi)



JDI’s New Ultra High-Resolution (2527 ppi)

In order to enhance the immersive experience when using a VR-HMD, it is important to secure a wide field of view (FOV) and eye-box (the range of eye movement where the screen can be viewed without distortion) in addition to a clear and natural image. JDI’s newly developed 2.15 inch, 2527 ppi ultra high-resolution display combines JDI’s world-leading LTPO (Low-Temperature Polycrystalline Oxide) and COA (Color Filter on Array) technologies to achieve a resolution of 3840×3840 pixels per eye, thus allowing for a wide FOV within a compact 2 inch display.

JDI’s ultra high-resolution LCD also minimizes the “screen door effect” problem with conventional VR-HMDs (in which pixel patterns become unintentionally visible to the

user), thus providing a cleaner and more realistic visual experience. The significant cost advantages of using glass substrate for JDI’s ultra high-resolution display will cater to a broad range of needs within the high-resolution display market.

JDI will continue to leverage its world-leading technology capabilities to build upon its lead in the global VR display market.

JDI Ultra High-Resolution Display Product Spec

Display Technology	LCD IPS
Display Size	2.15 inches
Resolution	3840 × 3840 pixels
Pixel Density	2527 ppi

Related News Releases:

[JDI to Participate in Display Innovation China 2024](#)

[JDI Wins Three DIC International Display Technology Innovation Awards](#)