

FOR IMMEDIATE RELEASE

Aledia unveils breakthrough microLED technology paving the way for the most immersive augmented reality experience ever conceived at CES 2025

- *Aledia has redefined innovation with the smallest and most efficient microLEDs ever designed for AR applications. Powered by groundbreaking 3D nanowire GaN-on-Si technology, these microLEDs set new benchmarks in brightness, efficiency and directivity*
- *Aledia unveils today a new \$200M state-of-the-art microLED production line in Grenoble, France, in the heart of Europe's "Display Valley," positioned to revolutionize and accelerate the next generation of smart glasses for the consumer mass market*

LAS VEGAS (January 7, 2025) – At CES 2025, [Aledia](#), the leader in microLED display technology, today unveiled the availability of its game-changing microLED technology set to redefine the future of hardware for augmented reality and to power the next generation of displays for vision applications.

Tech giants have recently doubled down on microLED for smart glasses, releasing prototypes and targeting commercial launches as early as 2027. While AI-powered use cases for AR have emerged over the last year, critical hardware challenges — power consumption, bulkiness and manufacturing costs — remain significant barriers to mass adoption.

After 12 years of relentless R&D, a portfolio of nearly 300 patents and \$600 million in investment, Aledia has shattered these barriers. With its groundbreaking microLED-based microdisplay – the most efficient, monolithically grown with Red, Green and Blue microLEDs on the same substrate that are natively directive – the company can solve the toughest hardware challenges, paving the way for the most immersive, AI-powered AR vision experiences ever conceived.

“Immersive technologies such as AR haven’t reached their full potential as the industry has yet to design screens that are both slick and highly functional,” said Pierre Laboisie, president and CEO of Aledia. “At Aledia, we’ve created a nanowire technology that makes microLED displays thinner, more power efficient and easier to produce for mass adoption. By next CES, OLED and LCOS will already be phased out in favor of our superior microLED technology.”

Aledia’s unrivaled microLED platform for Augmented Reality

Aledia’s microLED technology based on 3D gallium nitride (GaN) on silicon nanowires opens the way to the next generation of smart displays – unrivaled by any companies on the market today:

- **Difference you can see:** Aledia's 3D GaN nanowire technology delivers enhanced brightness and energy efficiency compared to 2D LED, along with superior pixel density and resolution. The 3D structure allows precise and directive light emission, making Aledia’s displays highly efficient and perfectly suited for advanced applications like AR. During R&D testing, [Aledia’s nanowires improved directivity and light efficiency](#) in real-world settings, which are crucial for immersive AR experiences.
- **Superior battery life in a compact package:** Aledia’s hybrid bonding technology combines microLED and driver electronics into the smallest and smartest chip on the market, resulting in thinner displays and superior power efficiency for longer battery life.
- **Cost-effective manufacturing that scales:** Aledia's advantage lies in its over \$200 million in-house pilot production line at the center of Europe’s “Display Valley,” enabling faster iteration without initial volume constraint. By utilizing semiconductor-grade silicon in 8-inch and 12-

inch formats, Aledia lowers production costs for large-scale production of microLEDs, accelerating widespread adoption in a wide range of displays. Aledia is ready and able to support customer demand ramp up to nearly 5,000 wafer starts per week.

“Our Champagnier factory is a key milestone for European innovation, and we are proud to represent it at the Auvergne Rhône-Alpes Pavilion at CES,” added Laboisie. “We are redefining global standards of display technology with our efficient and high-performing chips, positioning Grenoble as the global center of microLED production.”

To experience Aledia’s state-of-the-art technology at CES 2025, visit **Booth 60711-04 at Eureka Park, in Hall G at the Venetian**. Exclusive interviews with company executives can be arranged upon request, and private meetings will be hosted at **the Venetian Resort**.

For more information on Aledia, visit <https://www.aledia.com/en/>.

About Aledia

Founded in 2011, Aledia is the market leader in 3D nanowire-based microLED technology, pioneering the next generation of displays. Its proprietary, patented technology powers display that are brighter, thinner and more energy-efficient for complex experiences such as augmented reality, smartwatches, automotive and more. Headquartered in the heart of Europe’s “Display Valley” in Grenoble, Aledia is at the forefront of blending the digital and physical worlds for more immersive experiences. For more information visit us at www.aledia.com, and follow us on [LinkedIn](#).

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