

The Global Market for MiniLED and MicroLED Displays 2023-2033

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Abstracts

This report analyses the market for Mini-LEDs and Micro-LEDs, covering technology and market developments. The displays market is constantly advancing, with new technologies allowing for greatly improved brightness, HDR, and colour reproducibility. Recently, mini-LED and micro-LED have attracted major attention in the displays market and are being implemented in products by consumer electronics giants such as Samsung and Apple.

The market is projected to explode in the next few years, taking a significant chunk of the displays market and pushing into wearables, transparent display, flexible display, stretchable display for skin-integrated devices, AR/VR, smartphones automotive lighting such as active headlights, and projector applications. MiniLED backlights are utilized in large-screen TVs, monitors, automotive and industrial applications. Improvements MiniLED offer over incumbent display technologies include:

High brightness.

High contrast ratio.

Low power consumption.

Higher efficiency.

MicroLED started to gain market traction in 2022. MicroLEDs are targeted at direct view displays. Improvements they offer include:

high efficiency

high brightness-readable under sunshine (>10,000 nits)

high colour saturation

ultra-high resolution (>2000 dpi with Si backplane)

ultra-low power consumption

flexibility

quick response rate (on/off switching within nano-seconds).

long lifetime (>80,000 hours).

These properties make them attractive for application in very large TVs, AR/VR and automotive applications. Other applications include wearable/implantable optoelectronic devices, light communication/light interconnection, medical treatment, spatial imaging etc.

Report contents include:

Latest technology and supply chain information.

Industry trends and growth drivers.

Assessment of technology challenges.

Industry developments in the past 18 months.

Current and planned mini-LED and micro-LED products.

Analysis of markets and applications for mini-LED and micro-LEDs. Markets covered include

65" TVs and video walls

AR/VR projectors

Heads-up displays (HUD)

Smartphones,

Automotive displays

Wearables and smartwatches

Laptops, monitors and tablets

Medical displays

Flexible, stretchable and foldable displays

Transparent displays.

Analysis of non-display markets including lighting and LiFi communications.

Latest information on novel LED growth, transfer techniques, manufacturing and scale up.

Ten year forecasts for mini-LED and micro-LED market, by revenues, units and applications to 2033.

Assessment of competitive landscape.

Profiles of 84 companies in the mini-LED and micro-LED market. Companies profiled include Aledia, ALLOS Semiconductors GmbH, AU Optronics Corporation, Foxconn Electronics, GI?, iBeam Materials, Inc., Innolux Corporation, Industrial Technology Research Institute (ITRI), Japan Display Inc. (JDI), Royole Corporation, Konka Group, LG Display Co., Ltd., MICLEDI Microdisplays, Mikro Mesa Technology Co., Ltd., Nichia Corporation, PlayNitride, Inc., Rohinni LLC, Samsung, San'an Optoelectronics Co., Ltd., Seoul Semiconductor/Seoul Viosys Co., Ltd., Sony, Vuzix Corporation. TCL Electronics, Tianma Microelectronics Co., Ltd., VueReal and more.

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