Global Micro-LED Display Market Research Report — Forecast till 2023

Market synopsis
Global micro-LED display market is expected to grow from USD 90.7 million in 2017 to USD 2,782.5 million by 2023, at a compound annual growth rate (CAGR) of 82.7% during the forecast period. Increasing demand for brighter and more power-efficient display panels for consumer electronic devices such as smartwatches, mobile devices, and AR/VR devices is enhancing the growth of the market. Also, as compared to LEDs and OLEDs, the power consumption by micro-LED display is less and thus has longer life span. Moreover, growing demand of wearable displays for smartwatches and head mounted displays (HMDs) is expected to create great opportunity for this market. However, lack of standard procedures for manufacturing these components is hampering the growth of this market. Additionally, low yield, high cost, and need for improving micro-LED production and mass transfer processes are some of the challenges faced by manufacturers of this product. Key players such as Apple Inc. (LuxVue), Oculus VR (InfiniLED), Sony Corporation, Samsung, X-Celeprint, Epistar Corporation, GLO AB among others are continuously focusing on developing cost effective & high-quality display component and are adopting inorganic strategies such as mergers and partnerships to expand their geographic presence and broaden their customer base.

Micro-LED display is an emerging technology consist of tiny LED devices having the potential to create highly efficient and bright pictures than OLEDs. It provides high wavelength uniformity that is suitable for fine pitch panels. These features of micro-LED are encouraging the manufacturers of handheld devices to increasingly implement this component in the devices. Thus, growing preference of consumers towards micro-LED display is boosting this market. Moreover, key players such as Apple Inc., Samsung, and Sony have demonstrated their rising interest in micro-LED display technology. Furthermore, it is expected that by the end of 2019, there would be high-end products entering the market and micro-LED has the potential to become the next generation display technology. For instance, LG Electronics is planning to bring a new series of micro-LED displays to the market that can be used in various electronic devices such as smartphones, laptops and tablets.

Micro-LED Display Market

Source: MRFR Analysis
Segmentation
Micro-LED display market is segmented based on application, panel size, vertical and region.

Based on the application, the market is segmented into smartwatch, NTE devices, television, head-up display, smartphone and tablet, monitor and laptop and digital signage.

On the basis of panel size, the market is segmented into microdisplay, small- and medium-sized panel and large panel.
Based on vertical, the market is segmented into consumer electronics, entertainment & advertisement, automotive, aerospace & defense and others.

By region, the market is segmented into North America, Europe, Asia-Pacific and the rest of the world.

Regional analysis
The global market for micro-LED display is estimated to grow at a significant rate during the forecast period from 2018 to 2023. The geographical analysis of micro-LED display market is done for North America, Europe, Asia-Pacific, and the rest of the world.

Asia-Pacific is expected to be the fastest growing market owing to the presence of major leading LED component and display panel manufacturers in this region. North America is expected to dominated the market owing to increasing demand for electronic devices such as smartphones, tablets, and smartwatches. Also, the use of micro-LED in wearables is enhancing the growth of this market.

Competitive Analysis
Major players in this market are focusing on vertical integration to enhance the development of Micro-LED technology. Since second half of 2018, many LED manufacturers and panel makers such as Lextar Electronics Corporation and Epistar Corporation are mainly producing mini-LED products and have begun shipments of this products. Moreover, In March 2018, NationStar Optoelectronics Co.Ltd, Chinese LED packaging company, inaugurated its new research center focusing on the research and development of Mini-LED and Micro-LED. The company is manufacturing and have shipment many of its mini-LED products and is planning to expand its capacity according to market demand.

Key players
The prominent players in the micro-LED display market are Apple Inc. (LuxVue) (US), Oculus VR (InfiniLED) (US), LG Electronics Inc. (South Korea) Sony Corporation (Japan), Samsung (South Korea), X-Celeprint (Ireland), Epistar Corporation (Taiwan), GLO AB (Sweden), VerLASE Technologies (US), JBD (China), and Aledia (France), among others.

Intended Audience
- LED manufacturers
- Sapphire makers
- MOCVD suppliers
- Display panel manufacturers
- Brand customers/OEMs/ODMs
- OSAT and foundries
- Display-related service providers
- Display-related associations, organizations, forums, and alliances
- Venture capitalists, financial and strategic investors, and start-ups
- Semiconductor component suppliers
- Distributors and sales firms of display panels and devices
- Technology standards organizations, forums, alliances, and associations
- Universities and research organizations

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