Press Release

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Tianma showcasing wide range of new display products and prototype technologies at Display Week 2024

Demos include AMOLED, LTPS, Mini-LED, Micro-LED, and smart sensor technologies for the automotive, consumer and industrial market segments

San Jose, CA, May 14, 2024 – Tianma, a leading global manufacturer of flat panel displays, is exhibiting a wide variety of new display technologies and solutions at Display Week 2024, Booth #516, San Jose, California, May 14-16.

Tianma will be showcasing approximately 50 display demonstration units, including new prototypes and recently introduced products. In addition, Tianma has entered several new cutting-edge products and technologies into SID's annual People's Choice Awards competition, honoring the best products at Display Week.

Tianma's featured products at Display Week 2024 will include:

AUTOMOTIVE – Smart Cockpit 5.0 (OLED + Micro-LED)

13" Dynamic Flexible OLED – Tianma has successfully completed the technical development of the first dynamic bending OLED screen for vehicles in China, using flexible OLED screen technology and Corning Living Hinge technology. The surface curvature of the screen has a minimum bending radius of R200mm with a dynamic flex capacity of over 200,000 bends, while still meeting the mechanical strength requirements for in-vehicle regulations.

13" Slidable OLED – The slidable OLED display has an external bending radius of 4.5mm and a sliding distance greater than 70mm. The product adopted TPOT (Touch panel on thin-film encapsulation) technology, which facilitates the creation of even thinner and lighter overall device designs.

8.07" Octagon Micro-LED – The 8.07" Micro-LED display by Tianma boasts a transmittance rate exceeding 55% at 167PPI, positioning it as a leader in the industry. This display incorporates a cutting-edge pixel design and a sophisticated TFT stacking process. It successfully navigates the complexities of deep hole etching, culminating in exceptionally fine image quality with high levels of transparency.

15.6" LTPS QD Mini-LED – Tianma Quantum Dot (QD) Mini-LED automotive displays are at the forefront of display technology, offering a new level of visual experience in the automotive industry. And this 15.6" LTPS QD Mini-LED is first to market for automotive use. These displays combine the high dynamic range and power-saving capabilities of Mini-LED with the vibrant color enhancement of Quantum Dot technology.

12.3" LTPS High Transmittance, InvisiVue, Textured, Mini-LED – This display features a high-transmittance decorative layer that looks and feels like brushed-metal in the non-operating state, while the active area of the display is invisible to the user. When the display is turned on, only the image content emerges through the 50% transmissive decorative layer. The combination of Mini-LED backlight and high-transmittance decorative layer yields a high-quality image for improved visual perception and user experience.

MICRO-LED

7.6" IRIS-HUD – The 7.6 inch HUD display uses Micro-LEDs to achieve a high brightness of 5000nits, and the display image is projected on the reflecting glass, and then reflected by the reflecting glass to the human eyes to achieve the projection display.

1.63" Full-color Active-matrix LTPS Micro-LED Display – (People's Choice Award Nominee) - High PPI Micro-LED for wearable applications.

IT (INFORMATION TECHNOLOGY)

Ultra-Low Reflection – 12.45" EyeFun Display 2.0 – The Tianma EyeFun technology utilizes a high-performance anti-glare / low reflectivity surface treatment, backlight viewing angle optimization, and adaptive gamma correction for enhancing image quality while reducing eye strain.

High Frequency – 14" WQ NB 300HZ – This display is the first oxide LCD display from Tianma's new Gen 8.6 (TM19) production line.

Ultra-Low Frequency 15GHz LTPS for Tablet (10.99") and Laptop (16") – These products are the world's first LTPS notebook and laptop displays capable of 15Hz low-frequency VRR (Variable Refresh Rate) mode for reduced panel power consumption while still able to achieve 120hz refresh when high image quality is needed. Tianma's VRR technology supports the LPDT 4.0 standard, with a measured Flicker value of -62dB

to -65dB at 15Hz. Measured logic power consumption at 15Hz is only 0.8W @ 550nits, down 32% year-over-year.

12.45" EyeFun – The Tianma EyeFun technology utilizes a high-performance anti-glare / low reflectivity surface treatment, backlight viewing angle optimization, and adaptive gamma correction for enhancing image quality while reducing eye strain. This combination of ultra-low reflectivity and ambient light gamma technology maintains consistent contrast and color purity over a wide range of lighting conditions.

SMART PHONE

7.92" HTD (Magic V2) – inward foldable OLED, LTPO design with 1.5mm folding radius

7.92" LTPO Outer +POL – outward foldable OLED, LTPO, 402PPI, 91% BT2020 YIR 1.5mm

9.94" Multiple Foldable OLED – The new triple-fold G-shaped OLED screen has many more new application scenarios compared to traditional bar-type phones. The specific structural design consists of two inner water droplet folds with R2.5mm and a module thickness of 0.42mm.

MFD Multi-Frequency Drive – LCD multi frequency drive technology - first introduced by Tianma - can achieve a 25% reduction in module display power consumption proportional to screen area utilizing low power mode. This display represents a new LCD design concept by adopting a panel and driver design to achieve partition frequency function. The result is a display that can change refresh rate on different areas on the screen based on the image content.

SENSORS

4.7" Liquid Crystal RIS – Liquid Crystal RIS (Reconfigurable Intelligent Surface), using a liquid crystal phase shifter, applies a different voltage to each antenna unit, regulating the phase of the antenna unit by controlling the angle of the liquid crystal deflection, resulting in 2D RF wave scanning. LC-RIS adopts a passive array structure to control electromagnetic waves-without additional high-cost / high-power components - realizing low-cost green communication with low power consumption. LC-RIS will be one of the key technical flashpoints in the coming years as LEO satellite communications becomes a strong competitor in the field of consumer electronics.

More information about the innovative new display solutions being displayed by Tianma is available at Booth 516 at Display Week and in the Tianma press kits, accessible online at www.macrovis.net/tianma-press

Additional information can be found at usa.tianma.com.

AUTOMOTIVE: Tianma's Smart Cockpit 5.0

CONSUMER: EyeFun

Caption: 1.63" Full-color Active-matrix LTPS Micro-LED Display (People's Choice Award Nominee)

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About Tianma America, Inc.

Tianma America (TMA) is the leading provider of small- to medium-size display solutions to the Americas market utilizing advanced technologies and manufacturing resources of the Tianma Group Companies, which includes Tianma Micro-electronics (Shenzhen and Shanghai) and Tianma Japan, Ltd. (formerly known as NLT Technologies Ltd.), as well as manufacturing locations in Chengdu, Wuhan, Xiamen, Shenzhen and Shanghai China. Tianma America technologies can be found in smartphones, tablet PCs, industrial and medical instrumentation, wearables, home automation, household appliances, office equipment, and automotive and rear seat entertainment devices. Additional applications include test and measurement systems, instrumentation equipment, point-of-sale and ATM systems, gaming systems, global positioning systems, radio-frequency identification devices and barcode scanners.

Tianma America's technology portfolio comprises TFT, LTPS, Oxide-TFT, AM-OLED, flexible, transparent, 3D, PCAP and In-cell/On-cell integrated touch. With a network of best-in-class distributors and value-added partners, Tianma America provides complete display module solutions for a broad base of customers and applications.

The content in this press release, including, but not limited to, product prices and specifications, is based on the information as of the date indicated on the document, but may be subject to change without prior notice.

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