

Tianma showcasing over 50 new display products and prototype technologies at Display Week 2018

Demos include touch, automotive, outdoor viewable, true FHD, flexible/foldable AMOLED, and HDR

Los Angeles, CA, May 22, 2018 – [Tianma](#), a leading global manufacturer of flat panel displays, will be exhibiting a wide variety of new display technologies at [Display Week 2018](#), Booth 1005, Los Angeles, California, May 22-24.

Tianma will be showcasing more than 50 display demonstration units, including new prototypes and recently introduced products. In addition, Tianma has entered three new cutting-edge products and technologies into [SID's](#) annual [Best in Show competition](#), the winners of which will be honored at a luncheon on Wednesday, May 23, honoring the best product, component, and application of the preceding year as well as the best products at Display Week.

Tianma's featured products at Display Week 2018 will include:

Multi-Modal Tactile Touch Technology (Best-in-Show Nominee): A new tactile touch technology with two different stimulus sources, allowing for both friction and click sensations to be felt by the user. Tianma will demonstrate a prototype 10.4-inch size LCD module utilizing the technology at the show.

HDR LCD (Best-in-Show Nominee): A new 6.46-inch HDR (high dynamic range) LCD, ideal for smartphone applications. Based on LTPS technology, the prototype's performance in contrast ratio, response time, resolution and brightness put it on-par with today's AMOLED displays. Developed by Tianma Micro-electronics Co., this HDR display is the industry's first WQHD full-screen display for smartphones, generating real resolution of 498PPI and utilizing mini-LED technology to achieve multi-zone local dimming.

TED Plus Technology: Tianma has developed three displays featuring the company's new TED Plus Technology, which integrates piezoresistive sensors into the display panel to achieve new levels of touch and sensing performance. Developed by Tianma Micro-electronics, the three new TED Plus modules (all 5.99 inch) are an FHD LTPS LCD, a WQHD Curved Flexible AMOLED, and a WQHD Foldable/Flexible AMOLED (**Best-in-Show Nominee**). Owing to the integrated piezoresistive sensors, the TED Plus technology has not only made the force touch modules more compact, but also greatly eased the manufacture of modules with the force touch function. Cost has also been improved, addressing one of the market's biggest barriers to the widespread application of force touch.

True FHD Flexible AMOLED: A new 5.99-inch True FHD AMOLED Flexible Display for curved mobile applications. This prototype achieves high resolution and full-screen imaging using an innovative pixel arrangement that allows for better manufacturability of flexible, curved-edge FHD displays.

Freeform Display for Automotive: A new 12.3-inch "freeform" display module, designed to allow for greater flexibility and creativity in integrating digital display technology with established analog elements. Tianma's freeform display is achieved using VGIA (Virtual Gate Inline Pixel Array) technology to create a gate fan outline in the display active area without circuits added to the left and right borders of the display. By applying these technology advances, Tianma can create displays in virtually any shape a customer requires. Tianma will demonstrate a freeform automotive module with inner holes and ultra-narrow border at the show.

5.0-inch True Circular Display: A true circular 5.0-inch LCD for smart home and high-end medical applications. The full active display features resolution and contrast ratio performance that rivals that of OLED displays. Tianma developed this true round LCD prototype as the ultimate expression of the freeform display design style, featuring a super-narrow 3mm concentric border and ultra-thin construction (2.1mm).

Ultra-High Bright Displays: Two new LCDs: a 10.1-inch WXGA (1000 cd/m²) and 15.6-inch WXGA (1250 cd/m²). These modules are ideal for industrial applications needing superior viewing in outdoor or other high ambient light environments such as ATMs and payment terminals. The ultra-high luminance of these models results in displays with vivid colors and excellent visibility, even in direct sunlight, and further expand Tianma's extensive offering of industrial, outdoor viewable products.

Along with the display prototypes and new product introductions, Tianma will be exhibiting a variety of products from their standard line-up. Technologies featured include: PCAP, In-Cell touch, LTPS, OLED, high resolution, wide viewing angle, outdoor viewable, wide format and high bright a-Si TFT display products, including products specifically designed for key display applications such as: mobile, wearable, automotive, avionics, home automation, HMI, FA, POS and medical.

Individuals from Tianma Micro-electronics and Tianma Japan will be involved in the Display Week 2018 technical sessions as follows:

Session 50: TFT Manufacturing Trends (Display Manufacturing)

Thursday, May 24, 2018 / 9:00 - 10:20 am / Room 518

50.2: Accelerating Advanced Display Fab Yield Ramp with Innovative Autonomous Inline Electron-Beam Review System, by SoonShin Choi, Tianma Micro-Electronics Co., Ltd., Wuhan, China

Session 68: OLED Displays (OLEDs) *Co-Chair: Vincent Tseng, Tianma Micro-electronics*

Thursday, May 24, 2018 / 3:10 - 4:30 pm / Room 502B

68.2: Invited Paper: Challenges for High-Resolution AMOLED Displays D.Z. Peng, Tianma Micro-electronics Group, Shanghai, China

Session 74: High-Ambient Contrast Ratio I (Liquid-Crystal Technology)

Friday, May 25, 2018 / 9:00 - 10:20 am / Room 502A

74.5: Late-News Paper: High Dynamic Range In-cell LCD with Excellent Performance Zhuo Deng, Xiamen Tianma Micro-electronics Co., Ltd., Xiamen, China

Session 83: Interactive Displays (Touch and Interactive Displays)

Friday, May 25, 2018 / 10:40 am - 12:00 pm / Room 501

83.2: LCD Panel with Integrated Piezoresistive Sensors

Feng Lu, Shanghai Tianma Micro-Electronics Co., Ltd., Shanghai, China

83.3: Capacitive-Touch-Screen-Integrated Electrostatic Tactile Display with Localized Sensation, Hiroshi Haga, Tianma Japan, Ltd., Kawasaki, Kanagawa, Japan

Poster Session, Thursday, May 24 / 5:00 - 8:00 pm / Petree Hall

Active-Matrix Devices: OLED Displays with a Specialized Pixel Circuit for Automotive Applications, Yoshihiro Nonaka, Tianma Japan, Ltd., Kawasaki, Kanagawa, Japan

Automotive/Vehicular Displays and HMI Technologies Posters: New Narrow-Border Freeform LCDs for Automotive Application, Wenjun Dai, Tianma Micro-electronics Co., Ltd., Shanghai, China; Improvement of the Corner Mura in Curved Display by the Method of Internal Stress Dissipation, Chuanzhi Xu, Tianma Corp., Shanghai, China; Light Leakage Improvement in SFT Mode Curved Display, Chuanzhi Xu, Tianma Corp., Shanghai, China

Display Electronics: Research on Full-Screen Notch of LTPS LCD, Huimin Xie, Xiamen Tianma Micro-electronics Co., Ltd., Xiamen, China; Image Flicker Improvement in LTPS TFT-LCD with Low-Frequency Driving, Bozhi Liu, Xiamen Tianma Micro-electronics Co., Ltd., Xiamen, China

Display Manufacturing and Applications: Analysis and Validation of TFT-LCD RGB Mura Mechanism, Tianfu Chen, Tianma Micro-electronics Co., Ltd., Shanghai, China

Viewing Angle Control: Novel SFT Mode Pixel Design for High-Viewing Angle of Contrast at Automotive Applications, Zhou Jun, Tianma Micro-electronics Co., Ltd., Shanghai, China

More information about the innovative new display solutions being displayed by Tianma is available at Booth 1005 at Display Week and in the Tianma Group press kits, accessible online at <http://sid.vporoom.com/Tianma>

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

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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.

Additional assets available online: [Photos \(3\)](#)

<http://sid.vporoom.com/Tianma/Tianma-showcasing-over-50-new-display-products-and-prototype-technologies-at-Display-Week-2018>