Display Week 2020 and
New Technology promotion event

- **Tianma at Display Week 2020**
- **New Technology Promotion Live Event**
- **New Technologies and Demo Products**

Tianma at Display Week 2020

Display Week, held by SID (the Society for Information Display), is the most influential, professional and authoritative global platform for the display industry.

Due to the situation related to COVID-19, Display week 2020 has been postponed and reformatted into an all virtual event, finally held during the week of August 3 to 7. It has created a very different experience for everyone, including presenters, exhibitors and all other attendees. One benefit has been the ease of attending and the ability to avoid the limitations of conflicting time zone and physical location.

Welcome to our booth. Learn more about our technologies

To visit our virtual booth please register and login:

1.Register on the SID official website   2.Login the Virtual Exhibition website

New Technology Promotion Live Event

During Display Week 2020, TIANMA also held our first ever, live "New Technology" promotional event. The theme, "A Vision Beyond the Future", started at the Beijing time of 15:00, on August 4th and was live streamed WW.
The event was divided into five key sections, promoted on four different platforms, and included two hours of presentations for our global audience.

MKT Director ,Tone Wu, hosted the event

Tianma Europe and Tianma Japan branch locations

Special guest, SID President Dr. Helge Seetzen, offered his congratulations to Tianma
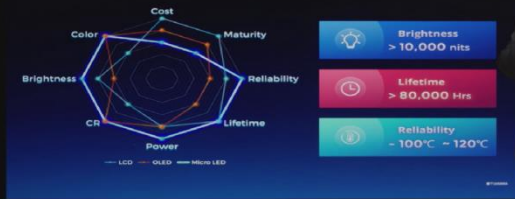

Chairman ,Hongliang Chen , provided a special welcome speech to all

Executive Vice President ,Xuhui Peng , helped to introduce Tianma and provided an overview of key technologies

The R&D Directors provided a more detailed overview of our Micro-LED, Foldable AMOLED, CUP (*Camera Under Panel*), TFP (*Touch embedded display Finger Print*), and True-Black Automotive display technologies

Slide 1

Cost
Color
Maturity
Brightness
Reliability
CR
Lifetime
Power

— LCD — OLED — Micro LED

Brightness
> 10,000 nits

Lifetime
> 80,000 Hrs

Reliability
~ 100°C ~ 120°C

Slide 2

Foldable Product

Information	Inner Folding		Outer Folding
Figure			
Bending Direction	Inner Folding		Outer Folding
Folding Radius	V shape: 02mm / Y shape		U shape: 05mm

Size: 8.05"

Resolution: 2176(X)*2592(Y)

TFT: PMOS LTPS TFT

PPI: 420

Pixel Configuration: YYG

Touch: On-Cell Touch Sensor

Slide 3

DIFFRACTION SUPPRESSION TO IMPROVE CAMERA EFFECT

140%
Photo Clarity

Slide 4

NO BLING BLING , JUST BE CLEAR

OBVIOUS DIFFRACTION

Gen.04 Gen.01 Gen.01

Conventional Overdesign

Camera

Camera + CUP

Slide 5

Curved Display for Better Viewing Perception

Light leakage suppression by ACRUS technology

Flat Color Panel
Dark uniformity
60%

Curved Color Panel
Dark uniformity
45%

ACRUS-CURVE Panel
Dark uniformity
Beyond human visual range

New Technologies and Demo Products

Below products and technologies are shown at our booth.

Micro-LED

Micro LED has the advantages of providing excellent display performance for high resolution, high contrast and wide color gamut needs, with high reliability, fast response times, long lifetime, and with ultra low power consumption.

Jointly developed with PlayNitride , Tianma showcased our new technology demos including Curved, Ultra-Slim border and high transparency features, which can not only be applied in consumer products but can also help to address emerging needs in Automotive and some of its more diverse display applications, such as interactive windshields for driver information and side windows for passenger entertainment

Curved	Narrow Border	Transparency
R50mm	<0.03mm	>60%

Flexible AMOLED

5G networking is coming and Foldable smartphones will be a critical segment for next generation devices. Foldable Displays are getting more and more attention. Based on industry research, demand for foldable displays are expected to explode, with some projections as high 100x the current demand by 2025.

Tianma showcased our latest technology, with demos including a right-left internal folding, a right-left external folding, an up-down internal folding, a new "waterfall" curved display, plus a transparent AMOLED, as well as a sliding and rolling flexible AMOLED.

Internal Fold
R2mm

External Fold R5mm	Internal Fold R3mm

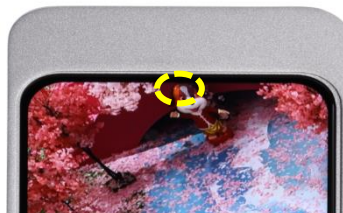| R70mm Transparency35%	R5mm	R7.5mm	TED Plus® Waterfall

LTPS

In order to enhance the display to front-surface ratio, smartphone manufacturers try their best to develop various types of notched displays to deal with features such as speaker, camera and fingerprint recognition sensor.

To help address these needs, Tianma showcased our latest technology to demonstrate how best to achieve a real, full-screen smartphone display, with our TED Fingerprint (TFP) and Camera Under Panel (CUP) technologies.

- Real Full Screen
- High PPI camera function
- Switchable display and camera function

- Display/Touch/FPR 3 in 1
- Full Screen recognition
- Multi-Points

Automotive

With the merging of NEV (Neighborhood Electric Vehicle) and the commercialization of 5G， the development of self-driving， autonomous， connected and shared vehicles have been key issues for the Automotive market. The traditional car, as a primary mode of transportation between home and the workplace, will soon be redefined.

How to increase the safety and entrainment features was the focus of our 3rd segment, where Tianma showcased our latest automotive display products and technologies

Smart Car Cockpit

- C sharp and Ultra-large front display
- OLED interior side mirror displays with faster response time
- Steering wheel with integrated FPR on display to identify the approved driver
- Navigation, entrainment and other features like connected smart home, on- line shopping, etc. can be achieved

True Black

Direct type
3456 segments

Mini LED

ACRUS-CURVE

Super Low Reflection

SCI:<0.7%

Seamless

△E:1

Industrial

With the explosive growth and greater adoption of IOT, AI and now 5G, there is increased demand for displays in smart factory, healthcare and home applications. This means more and more devices need to be equipped with displays, as devices upgrade and become more interactive to meet performance requirements. Tianma showcased our latest professional solutions to help address various customers needs .

Reflective

- Reflectance 16%
- Black / White / Red
- Overlay Touch film

- Reflectance 7%
- R15mm

- Reflective/ Transmissive Switchable

Tactile

Texture sensation with 10-point touch PCAP

Multiple-material tactile textures

Non-Display

Finger Print Recognition Two Fingers at same time

NFC

To learn more about these demos please visit our virtual booth at:

https://sid.6connex.com/event/Displayweek/login?