



Trend and Opportunities of Automotive Display in Smart Cockpit

Simon WH Hsu Ph.D. | Head of Automotive Solution Business Unit | Oct 26th, 2021

AUO at a Glance

Founded in
1996

Display Expertise
25 Years

People
38,000

Named to DJSI World
11 Consecutive years
Since 2010

2020 Revenue
US\$ 9.67 B
(NT\$ 271.0B)

Over 1,000
Customer Base Worldwide

AUO CSR – Global Acknowledgments



Proactively developing high value-added displays in niche markets

Corporate Governance

Social Concern

Environmental Sustainability

Member of
**Dow Jones
Sustainability Indices**
Powered by the S&P Global CSA

DJSI World (US)



Bloomberg GEI



Leadership Level (UK)

Sustainability Award
Bronze Class 2021
S&P Global

Bronze Class(US)



《Forbes》
World's Best Employers List

ecovadis

Gold Medal (France)



Top 5% in Corporate
Governance



《HR Asia》Best Company



ESG Leaders (US)



Taiwan Top 10 Sustainability
Exemplary Enterprises Award



《Global Views》CSR Award



Prime Status (German)

CSR 天下企業公民
Excellence in Corporate Social Responsibility

《Common Wealth》CSR Award

《Buying Power》Social Innovation Products
and Services Procurement



Low Risk Rating
(Netherlands)

AUO Display is Everywhere



Proactively developing high value-added displays in niche markets

1,040+

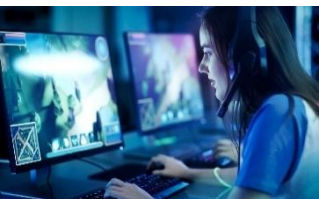
panel models

50+

panel sizes
from 0.8" to 86"

25,550,000

square meters
total panel area shipment in 2020



Gaming /
Professional



Commercial
Application



**Automotive
Display**



Medical



Industrial
Application



Wearable



Innovative Capacity



Applied for 27,900 patents and obtained 20,900 patents, with 99% invention ones

Patents Applied

27,900

Patent figures as of
April 2021

Ranking in Taiwan

Top 2

439 Invention Patents
Granted in 2020

R&D Professionals

80%+

Master's Degree+

AUO Around the Globe

 : Automotive Related



● HQ

● Manufacturing Base

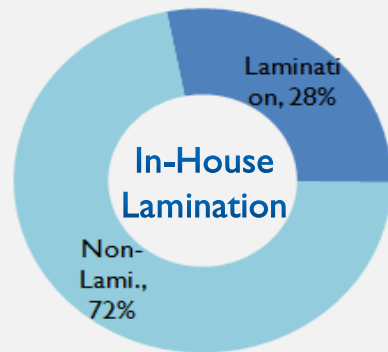
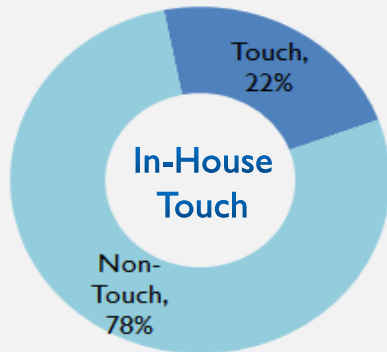
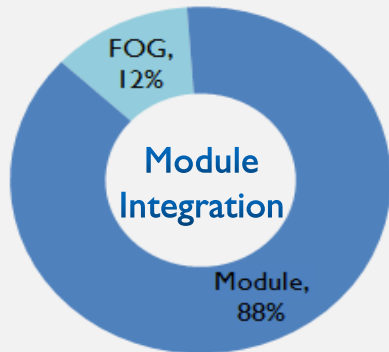
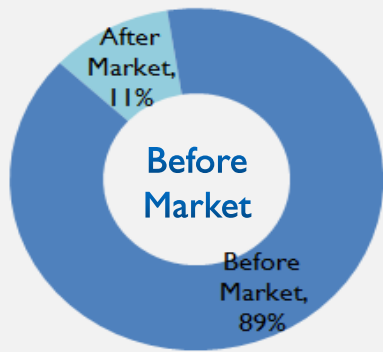
● Business Office

AUO Automotive Display – Our Growth



We've here in automotive field for more than 10 years.

Automotive Display Shipment



AUO Automotive Display – Our Product



- As the key enabler for future digital cockpit, we are **WW Top-3 automotive display** supplier with **WW No.1 leading position for CID** (Central Information Display).



AUO Automotive Display – Our View



➤ Trend-1 : Large-Size & Stylish-Design Display

Opportunity

- More interior space by electrification
- More entertainment by autonomous driving
- More expectation from consumer electronics

➤ Trend-2 : New Way of Information Display

Opportunity

- Projection (HUD + AR)
- Reflection (Windshield Display)
- Display on Demand (Transparent / Rollable)

➤ Trend-3 : Display as Main Human-Machine Interface (HMI)

Opportunity

- Touch becomes mandatory
- Integration of sensor, camera, lighting, voice, etc.

Multi-Screen Integration



Excellent Picture Quality & Darkness



Augmented Reality Head-up Display



Transparent Display



Driver Monitoring System



Car Control thru Display (HMI)



AUO Automotive Display – Our Technology

Technology

Quality

Sustainability

Integrity



AUO
Automotive
Display
Solution

Large Size FIDM
with Lamination



Large Size



Curved



Narrow Border

Human-Machine
Interface



HUD



E-Mirror

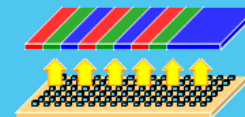


Sensor Integration
Touch & More

Superior Display
Performance



Ambient Contrast



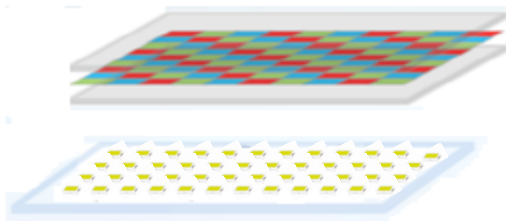
Mini-LED



Micro-LED

Automotive Display Evolution

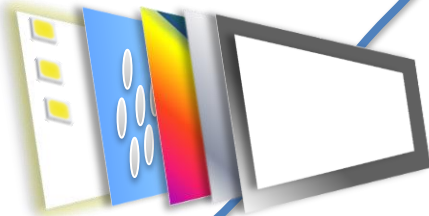
Reliable
True Dark
Power Saving
High Dynamic Range



Mini-LED Backlight LCD

Inorganic, with Backlight

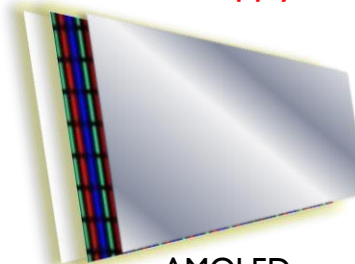
Mainstream Display



Normal LCD

Inorganic, with Backlight

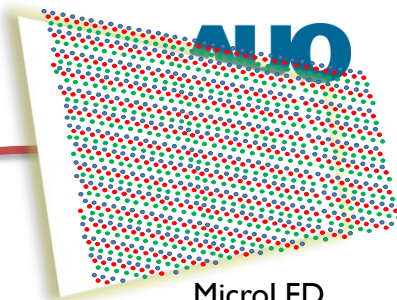
Less Reliable
Flexible
True Dark
Limited Supply



AMOLED

Organic, Self-Emitting

ALIO



MicroLED

Inorganic, Self-Emitting

Reliable
Flexible
True Dark
High Brightness
Transparent Friendly

AUO Automotive Mini-LED – AmLED



Long Lifespan & Automotive Reliability



Power Saving (~50%)



High Brightness for Moving Environment

Mini LED luminance >2000nits
OLED ~400nits



High Dynamic Range

Black luminance <0.05nits, high dynamic luminance and contrast ratio. Detail, clearer and close to natural.

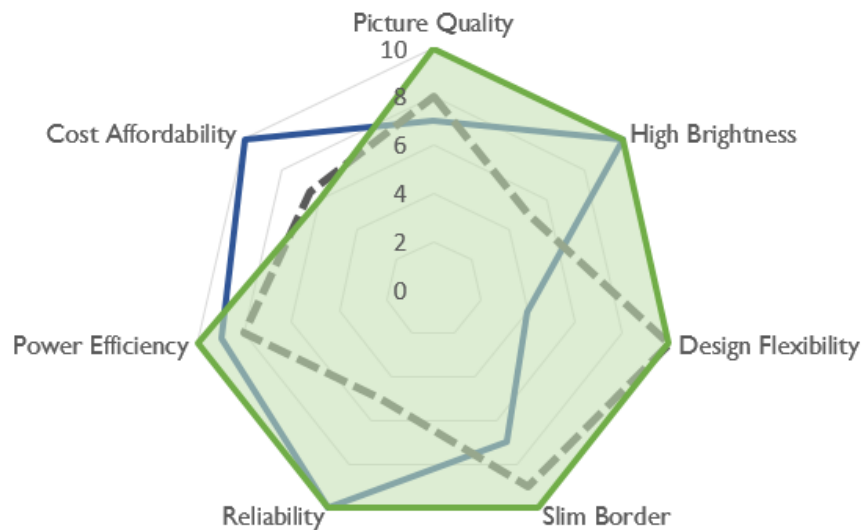


High Ambient Contrast Ratio

AUO Automotive Micro-LED



□ LCD with Local Dimming ■ AMOLED ■ μ LED

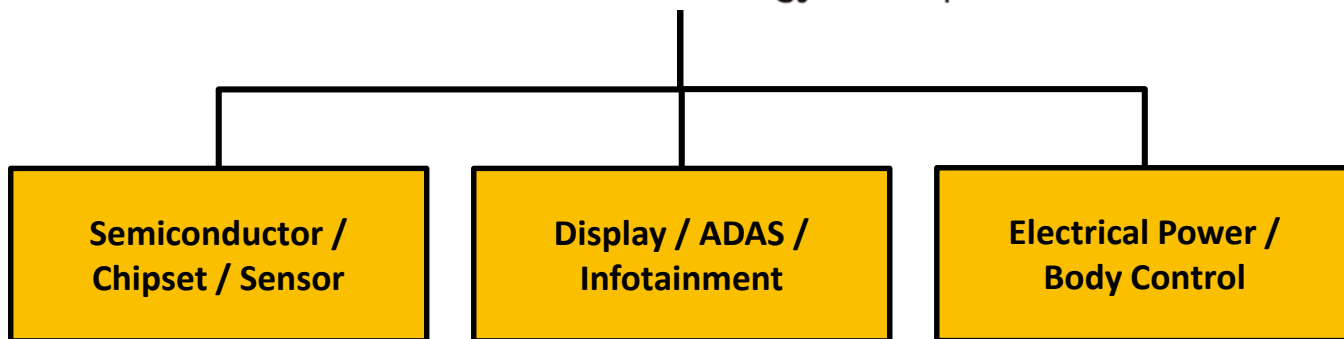


Collaboration Platform



台灣先進車用技術發展協會

Taiwan Advanced Automotive Technology Development Association



- AUO is one of TADA founding members with its purpose to gather Taiwan ICT competency & ecosystem for the mega trend of automotive evolution.



AJO

Innovating Life