



**Welcome !**

LCD Module/ EMS/ SMT/ DIP  
Manufacturer/ Design  
in Taiwan



晶發科技股份有限公司



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## Basic Information

Company Name	GI FAR Technology co., Ltd. 晶發科技股份有限公司
Establish	Since 1998
Capital	USD1,130,000
Employees	About 50 persons (In AUG. 2020, growing up)
Core Business	EMS & LCM Design/Manufacturing (COB, COG, TAB, TFT, Optical Bonding Service, SMT, DIP Process)

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## Gi Far Milestone

- 1998 ● Established in New Taipei City, Taiwan
- 2000 ● ISO Certification passed, Launch  
R&D interface: USB, RS232, Wi Fi System module
- 2002 ● R&D interface: USB, RS232
- 2004 ● Gi Far invested in TFT technology and start TFT LCD business
- 2005 ● Start to develop LCM solution:  
USB/RS232/RS485/Wireless system
- 2007 ● R&D TFT LCD Control, interface: MCU/RS232/USB
- 2009 ● LCD Module release: FSC  
Produce Monochrome LCD Module
- 2010 ● Purchase owned new factory, land: 3,300m<sup>2</sup> in Taiwan  
The total capital increase to US\$4KK
- 2012 ● Launch process for interface: TFT RS232/SPI/I2C,etc...
- 2013 ● Expand production lines, Construct new factory
- 2016 ● Move to the New factory
- 2018 ● SMT / DIP lines finished
- 2020 ● OCA Optical Bonding Service (Equipment moved in since Nov. 29, 2020)

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 **Module Category**





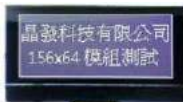





**Product Technology**

**COB / COG / COF / TAB  
/TFT OLED LCM  
/EMS / SMT/ DIP**

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 **Gi Far Modules**

 <b>TFT Solution</b> JD7 series: 3.5, 4.3, 7.0"	 <b>RS232/RS485 UART Display</b>	 <b>USB UART Display</b>	 <b>RS232/RS485 UART Display</b>
	 <b>晶發科技有限公司</b> 156x64 模組測試 <b>Custom Design</b>	 <b>COG Character Display</b>	 <b>COG Graphic Display</b>
 <b>TFT LCM</b>	 <b>TAB LCM</b>	 <b>COB Graphic Display</b>	 <b>COB Character Display</b>

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## Module Application

Industry field Manufacturer equipment field	Industry auto controller, Car, Industrial PC (1U/2U), etc....
Medical device field	Sporting, Industrial, Medical equipments, etc...
Home appliance field Consumer electronics field	Printer, Calculator, Translator, Gaming device, Databank, MP3, POS system, etc....
Communication field	Cellular phone, Wireless phone, Fax machine, Pager, Navigator, etc...

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## Facility – Clean room

- ✓ Clean room 10,000 class
- ✓ Humidity Control



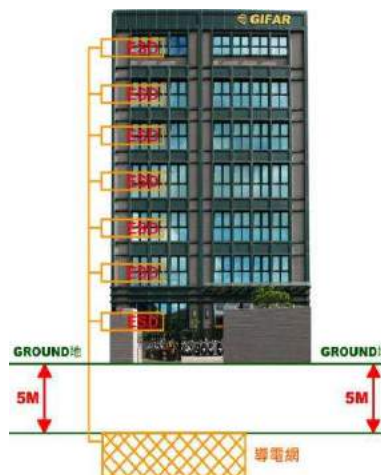
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## Facility – ESD protection

- ✓ Whole building ESD Protection
- ✓ Discharge to underground 5M
- ✓ ESD protection
- ✓ Relative equipment, using ESD slippers

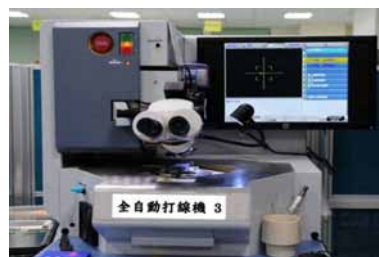
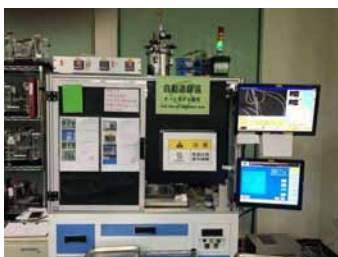


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## Facility – Wire bonding line



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## PCB SMT

### PCB SMT · DIP · Assembly

PCB SMT · DIP	PCB SMT · DIP	PCB SMT · DIP	PCB Assembly

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## FPC SMT

### FPC SMT

FPC SMT	FPC SMT	FPC SMT

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## Module Capacity

### ➤ COB 16x2 Character LCM

**18000 pcs / 24H**

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## OCA Optical Bonding Service

### • Features of Optical Clear Adhesive (OCA)



OCA Film Roll



- 1.Reduce reflection rate, reduce LCD or AMOLED display Luminous loss, increase display brightness, provide high transmittance, and reduce power consumption.
- 2.Increase contrast ratio especially under strong light.
- 3.Higher strength in combined surface connections.
- 4. Avoid the Newton Ring.
- 5.Surface more smooth and seamless without wrinkle, bubble, partial.  
The displaying image is almost not affected by OCA optical adhesive.
- 6.No boundary, extended view area, excellent air bubble removing result,  
Touch Panel high yield rate, no yellowing, repairable after delivery.

#### Advantage:

- High Transparent
- High Transmittance
- Low Haze Rate
- High Adhesive
- No Defective Pixel
- No bubble
- Water resistance
- High Temperature resistance
- Anti-UV

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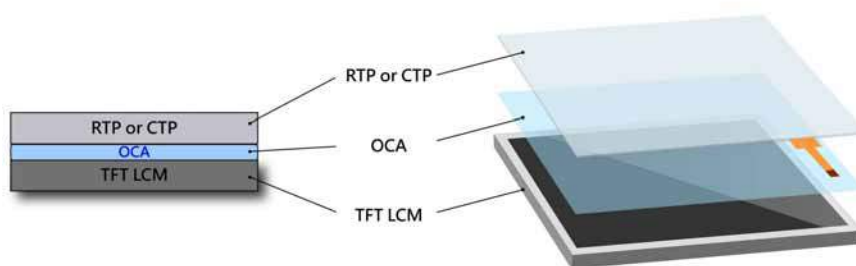
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## OCA Optical Bonding Service

- OCA Optical Bonding

  - 1. Hard to Hard: G2G



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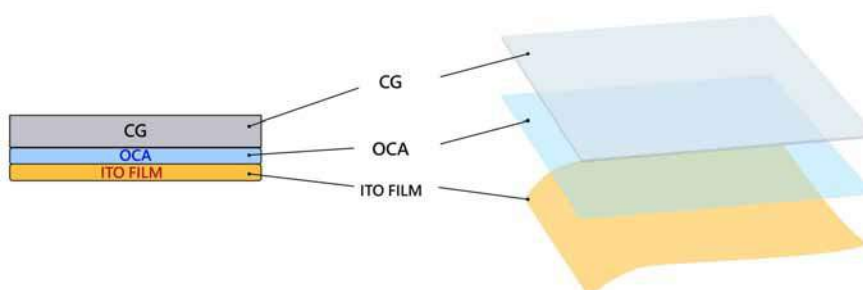
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## OCA Optical Bonding Service

- OCA Optical Bonding

  - 2. Soft to Hard: S2G



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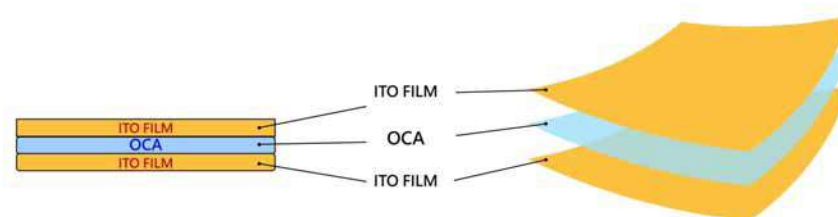
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## OCA Optical Bonding Service

- OCA Optical Bonding
  - 3. Soft to Soft: S2S



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## OCA Optical Bonding Process

### **Type 1: Ambient Lamination**

Lamination Speed : Tack Time 30sec~60 sec

Lamination Accuracy :  $\pm 0.1$ mm

Lamination Dimensions (mm) : 500x600 (max.)

Lamination Gap : 0~10mm

Lamination Pressure : 35 ~ 130Kg

### **Type 2: Vacuum Lamination**

Lamination size: max. 27-inch (Diagonal)

Lamination speed: It depends on case by case basis.

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## OCA Optical Bonding Process Facility

### Ambient Lamination & Vacuum Lamination Equipments



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## Quality Policy: Only Customer Satisfaction

### Satisfaction in Quality 、 Lead time 、 Cost 、 Service

#### ✓ Quality:

IQC/ IPQC/ FQC to ensure the quality  
100% IQC/FQC for some specific projects

#### ✓ Lead time:

Safe stock & forecast schedule to make shorter lead time.

#### ✓ Cost:

Forecast materials purchase to get the best cost.

#### ✓ Service:

Customer orientation/Global service  
Strong technical support/Quick response.

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## Reliability Assurance (For Monochrome)

Condition Test Items	Test	Standard Temperature Type	Wide Temperature Type
Thermal Shock		-10°C (30min) → 25°C (5min) → 50°C (30min), 10 cycles	-20°C (30min) → 25°C (5min) → 70°C (30min), 10 cycles
High Temperature Storage		60°C, for 120 hours	80°C, for 120 hours
Low Temperature Storage		-20°C, for 120 hours	-30°C, for 120 hours
Operation at High Temperature		50°C, for 120 hours	80°C, for 120 hours
Operation at Low Temperature		-10°C, for 120 hours	-20°C, for 120 hours
High Temperature/High Humidity		40°C 90% RH	40°C 90% RH

Notes:  
The table above is applied to LCD size: 40\*20mm  
The value may be different by LCD size.

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## Reliability Assurance (For TFT)

Condition Test Items	Test	Standard Temperature Type	Wide Temperature Type
Thermal Shock		-10°C (30min) → 25°C (5min) → 50°C (30min), 10 cycles	-20°C (30min) → 25°C (5min) → 70°C (30min), 10 cycles
High Temperature Storage		60°C, for 240 hours	80°C, for 240 hours
Low Temperature Storage		-20°C, for 240 hours	-30°C, for 240 hours
Operation at High Temperature		50°C, for 240 hours	80°C, for 240 hours
Operation at Low Temperature		-10°C, for 240 hours	-20°C, for 240 hours
High Temperature/High Humidity		40°C 90% RH	40°C 90% RH

Notes:  
The table above is applied to LCD size: 40\*20mm  
The value may be different by LCD size.

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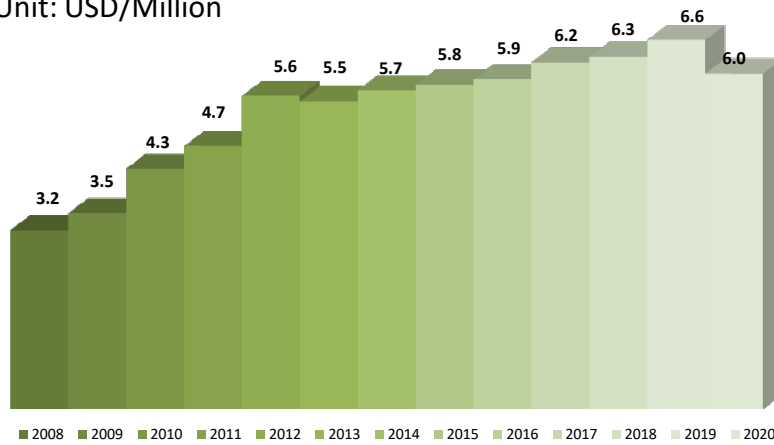
**Quality Assurance**



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**Sales Turnover**

Unit: USD/Million



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## Business Partners

Inspire the Next

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## Win-Win Partnership

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