

Jiangxi Tongtai Visual Display Technology Co., LTD.

Intelligent Vision Touching Future

2025.11



Global One-Stop Human-Machine Interface Display Solutions Provider

- Tongtai is an integrated enterprise specializing in the full-chain production of LCD display, touch display, and smart terminal products. Combining product development, design, manufacturing, and sales, we offer one-stop product manufacturing and solutions for our clients.
- Our product range includes monochrome LCD and LCM modules, TFT LCD display modules, AMOLED display modules, CTP touch modules, RTP touch modules, and fully integrated touch-display modules with full lamination or frame lamination assembly. The company's products are widely used across various fields, including industrial control, retail digital signage, consumer electronics, white goods, smart home systems, automotive applications, medical and healthcare devices, outdoor equipment, and more.



G1 MD
18,526m²



G2 MD
10,300m²



G3 MD
10,000m²

Number of Production Lines

3 Front-End Lines
16 Pin Assembly Lines
4 COG (Chip-On-Glass) Lines

12 CFOG (Chip-On-Film-On-Glass) Lines
3 COF (Chip-On-Film) Lines
14 Full Lamination Lines
11 Module BLU (Backlight Unit) Assembly Lines

1 RTP line
2 CTP lines
1 large-size TP line (27")

Monthly Capacity **17.5KK/M**

5.5KK/M

3.6KK/M

Products

Monochrome LCD & LCM Modules
Focus on high-end products like dot-matrix COG, energy meters, light valves, VA, etc.
Applications: Industrial Control, Home Appliances, Elevators, Electricity/Water/Gas Meters, etc.

OLED Modules
In-Cell / On-Cell Touch Display Modules
Color TFT Modules
External attachment, frame sealant lamination / full lamination modules.

CTP / RTP Touch Modules
G-SENSOR, Screen Printing & Laser Etching, FF (Film-Film) Exposure + Laser Etching.
GFF (Glass-Film-Film), GG (Glass-Glass) full lamination, PMOLED lamination.



No.	Process Capability	Description
1	LCD Cell (White Glass)	Covers the full front-end process capability from the bare glass substrate to the LCD panel (Cell).
2	LCM Monochrome LCD Modules	Capability to assemble monochrome LCD panels (Cells) into complete display modules.
3	TFT-LCD / AMOLED Modules	Capability to assemble TFT-LCD panels (Cells) / AMOLED panels into complete display modules.
4	CTP Modules (Capacitive Touch Panel Modules)	Manufacturing capability for capacitive touch panel modules.
5	RTP Modules (Resistive Touch Panel Modules)	Manufacturing capability for resistive touch panel modules.
6	Integrated Full Lamination / Air-Gap Lamination Modules	Provides module manufacturing capabilities utilizing both Full Lamination and Air-Gap Lamination processes.



Monochrome LCD/LCM - Product Development Structure



Product Category	Subcategory	Composition
Mono LCD Products	Segment Type	Size: 0.8" – 19" (Resolution: Up to 1000 segments; Display mode: TN/HTN/STN/FSTN/DFSTN/VA/Wide-view VA&TN; Composition: Glass, Glass Panel, Single LCD,LCD+PIN,LCD+HS)
	Character Type	Size: 0.8" – 6" (Resolution: 8 characters * 1 line ~ 40 characters * 4 lines; Display mode: HTN/STN/FSTN/DFSTN/ASTN ; Composition: Glass, Glass Panel, Single LCD)
	Dot Matrix Type	Size: 0.8" – 5.7" (Resolution: 64*18 dot matrix~320*240 dot matrix; Display mode: HTN/STN/FSTN/DFSTN/ASTN ; Composition: Glass, Glass Panel, Single LCD)
	Light valve	Size: ≤24"; (Composition: LCD+PIN,LCD+FPC; Grades: From none to CE1111; Color Code: 4#~16#)
	3D	Size: ≤24" (Composition: LCD+PIN,LCD+FPC)
Mono LCM Products	Segment Type	Size: 0.8" – 7.0" (Without IC) (Resolution: Up to 1000 segments; Composition: LCD+PIN+BLD,LCD+FPC etc.)
		Size: 0.8" – 7.0" (COB LCM) (Resolution: Up to 1000 segments; Composition: LCD+BLD+Metal Frame+Conductive Rubber Strip+PCB+IC etc.)
	Character Type	Size: 0.8" – 7.0" COG LCM: (Resolution: Up to 1000 segments; Composition: LCD+IC+PIN+BLD etc.)
	Character Type	Size: 0.8" – 4.0" (COG LCM) (Resolution: 7 characters *2 lines~16 characters *4 lines; Composition: LCD+IC+PIN+BLD, LCD+IC+FPC etc.)
		Size: 0.8" – 6.0" (COB LCM) (Resolution: 8 characters * 1 line~40 characters *4 lines; Composition: LCD+BLD+Metal Frame+Conductive Rubber Strip+PCB+IC etc.)
	Dot Matrix Type	Size: 0.5" – 5.7" (COG LCM) (Resolution: 64*32 dot matrix~320*180 dot matrix; Composition: LCD+IC+PIN+BLD, LCD+IC+FPC etc.)
		Size: 0.8~5.7" (COB LCM) Resolution: 64*18 dot matrix~320*240 dot matrix; Composition: LCD+BLD+Metal Frame+Conductive Rubber Strip+PCB+IC etc.)

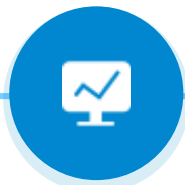
Remark:
Mono products are primarily customized products and can be developed according to different customer requirements.



Monochrome LCD/LCM



- With over two decades of deep expertise in monochrome LCDs, Tongtai is driven by profound technological accumulation and continuous innovation. We have established core competitive advantages characterized by highly mature technology, strong customization capability, and exceptional product reliability.



Economies of Scale

We ensure sufficient capacity through scaled production. Our automated lines include: one 450mm*550mm front-end line (52k pairs/month), two 370mm*470mm front-end lines (81k pairs/month), two pin assembly lines (6M units/month), and four module bonding lines (1.56M units/month). This setup enhances efficiency and reduces unit costs.



Rapid Response

We guarantee swift delivery to accelerate your time-to-market:

- LCD Cells (White Glass): Samples in 5-7 days; production orders in 7-10 days.
- LCD Displays: Samples in 7-10 days; production orders in 14-20 days.
- LCM Display Modules: Fastest delivery for both samples and production orders: 14 days.



One-Stop Supply

We offer a complete product portfolio—from LCD cells and white glass to finished displays and modules—providing long-term enterprise clients with comprehensive one-stop service solutions.

➤ Product Range

Includes segment type, character type, dot matrix, light valve, and other varieties; display modes cover TN, HTN, STN, FSTN, DFSTN, VA, and light valve; sizes range from 0.8 inches to 24 inches.

Advantages



- Diverse display structures, supporting customized development
- High-precision display, low power consumption design, strong compatibility
- Ultra-wide temperature range, wide viewing angle, stable quality
- High reliability, capable of meeting harsh conditions (85°C/85%RH × 1000H); maximum product design lifespan up to 16 years

Structure	Dimensions (mm)	Transmissive Type	View Area (mm)	Viewing Angle	Type	Application
LCD+PIN	64*38	Positive, transflective	60*30	6 O'clock	Segment	State Grid single-phase
LCD+PIN	90*59	Positive, Refcective	85*50	6 O'clock	Segment	State Grid three-phase
LCD+PIN	64*36.5	Positive, transflective	60*30	6 O'clock	Segment	Southern Grid single-phase
LCD+PIN	89*59	Positive, transflective	85*50	6 O'clock	Segment	Southern Grid three-phase
LCD+PIN	40*25	Positive, Refcective	37*17	6 O'clock	Segment	Water meter
LCD+FPC	58.09*33.7	Positive, transmissive	53.69*31.33	10:30'clock	3D	3D glasses
LCD+PIN	105*56	Positive, transmissive	98*53	7:30'clock	1111 light valve	Welding mask
LCD	40*45	Positive, Refcective	33*42	6 O'clock	Segment	Remote control
LCD+PIN	54*38	Positive, transflective	52*32	6 O'clock	Segment	Electric vehicle
LCD+PIN	68*27	Positive, Refcective	64*19	6 O'clock	Segment	Gas meter



Monochrome LCM Modules

➤ Product Range

Covers a wide range of product types including segment, character, and dot matrix displays.

Display modes include TN, HTN, STN, FSTN, DFSTN, ASTN, VA, etc. Structures encompass COG, COB, SMT, and more. Sizes range from 0.8 inches to 7 inches.

Advantages

- High-precision display, low-power consumption design, strong compatibility
- Excellent anti-interference capability against ESD, burst pulses, etc.
- Ultra-wide temperature range, broad viewing angles, stable quality
- Capable of producing high-pin-count products (up to 240 pins)



Structure	Dimensions (mm)	Transmissive Type	View Area (mm)	Viewing Angle	Type	Application
LCD+IC+FPC	29.86*18.72	Positive, transflective	27.86*14.42	6 0'clock	Dot Matrix	U type shield
LCD+IC+FPC	38.6*20.0	Positive, Reflective	34.6*15	6 0'clock	Dot Matrix	ETC
LCD+IC+FPC+BLD	79.2*42	Positive, transflective	63.46*23	6 0'clock	Dot Matrix+ICON	Telephone
LCD+IC+FPC	53.4*25.5	Positive, Reflective	50.4*17.20	6 0'clock	Dot Matrix	Printer
LCD+IC+FPC+BLD	93*38.8	Negative, transmissive	88*29.5	12 0'clock	Segment	Home Appliance
LCD+IC+FPC+BLD	74.3*56.3	Positive, transmissive	68.8*45.8	12 0'clock	Segment	Thermostat
LCD+IC+FPC+BLD	66.55*72.20	Positive, transflective	60*60	6 0'clock	Dot Matrix	Meter Concentrator
LCD+IC+PIN	65*34*2.85	Positive, transflective	60*25	6 0'clock	Dot Matrix	Single-phase IoT Device

Monochrome LCD/LCM - Product Showcase

Mono LCD Products



Smart Meter
(Single-phase / Three-phase)



Gas Meter



Water Meter



3D Glasses



Optical Valve



E-bike Display



Remote Control



Automotive Display



Medical Device



Elevator Display

Mono LCM Products



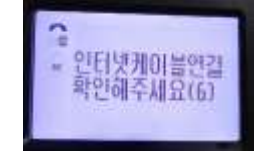
U-Shield Token



ETC Device



POS Terminal



IP Phone



Intercom Device



Printer



Elevator Display



Home Appliance Display



Control Panel
(Thermostat)



Meter Concentrator



IoT Device



Automotive Display

Monochrome Display Modules - Application Cases



Metering

Electricity
Meter



- Resolution: 126 segments
- Dimensions: 64.0×38×2.8 (mm)
- VA: 60*30 (mm)
- Temperature: OPERATING: -40°C~+80°C, STORAGE: -45°C~+85°C
- Reliability: 85°C/85%RH × 1000 hours

Gas Meter



- Resolution: 148 segments
- Dimensions: 48.5×22.5×2.85 (mm)
- VA: 44.5*14.5 (mm)
- Temperature: OPERATING: -40°C~+85°C, STORAGE: -40°C~+90°C
- Reliability: 85°C/95%RH × 1000 hours

Water Meter



- Resolution: 88 segments
- Dimensions: 40×25×2.85 (mm)
- VA: 37*17 (mm)
- Temperature: OPERATING: -30°C~+80°C, STORAGE: -40°C~+80°C
- Reliability: 60°C/90%RH × 240 hours

Monochrome Display Modules - Application Cases



Metering

COG Electricity
Meter



- Resolution: 168 segments
- Dimensions: 74.0*24.0*2.80 (mm)
- VA: 65.0×21.0 (mm)
- Temperature: OPERATING: -25°C~+80°C, STORAGE: -30°C~+85°C
- Reliability: 85°C 85%RH*1000 hours

Data
Collector



- Resolution: 160 × 160 dots (Dot Matrix)
- Dimensions: 72.2×66.55×4.3 (mm)
- VA: 60.0×60.0 (mm)
- Temperature: OPERATING: -40°C~+70°C, STORAGE: -40°C~+80°C
- Reliability: 85°C 95%RH*1000 hours

IoT



- Resolution: 208 × 80 dots (Dot Matrix)
- Dimensions: 65.0×34.0×2.85 (mm)
- VA: 60.0×25.0(mm)
- Temperature: OPERATING: -40°C~+75°C, STORAGE: -40°C~+80°C
- Reliability: 85°C 85%RH*500 hours

Monochrome Display Modules - Application Cases



Financial

POS



- Dimensions: 60.26*42.72*3.4(mm)
- Resolution: 128*64 dots
- VA: 49.76*34.62(mm)
- Temperature: OPERATING: 0°C~+50°C STORAGE: -10°C~+60°C
- Reliability: 40°C 90%RH*96 hours

ETC



- Dimensions: 38.6*20.0*2.85 (mm)
- Resolution: 96*32 dots
- VA: 34.6*15(mm)
- Temperature: OPERATING: -15°C~+70°C STORAGE: -30°C~+80°C
- Reliability: 40°C 90%RH*96 hours

U type shield



- Dimensions: 32.56*22.41*2.2(mm)
- Resolution: 128*64 dots
- VA: 27.86*14.42 (mm)
- Temperature: OPERATING: -10°C~+60°C STORAGE: -20°C~+70°C
- Reliability: 40°C 90%RH*96 hours

Monochrome Display Modules - Application Cases



Communication

Walkie talkie



- Dimensions: 35.75*31.65*2.6(mm)
- Resolution: 128*64 dots
- VA: 28.78*20.97(mm)
- Temperature: OPERATING: -20°C~+70°C, STORAGE: -30°C~+80°C
- Reliability: 60°C 90%RH*120 hours

Conference terminal



- Dimensions: 79.2*42*8.5(mm)
- Resolution: 131*64+ICON
- VA: 63.46*23(mm)
- Temperature: OPERATING: -20°C~+70°C, STORAGE: -30°C~+80°C
- Reliability: 60°C 90%RH*96 hours

Home appliances

Water heater



- Dimensions: 93*38.8*8(mm)
- Resolution: 41 segment
- VA: 88*29.5(mm)
- Temperature: OPERATING/STORAGE: -30°C~+80°C
- Reliability: 40°C 90%RH*1000 hours

Oven



- Dimensions: 168.5*45.5*12(mm)
- Resolution: 108 segment
- VA: 161*35.5(mm)
- Temperature: OPERATING/STORAGE: -30°C~+80°C
- Reliability: 65°C 75%RH*3000 hours

Monochrome Display Modules - Application Cases



Industrial control	Temperature controller 	■ Dimensions: 108.8*73.3*4.45 (mm) ■ Resolution: 320*180 dots ■ VA: 98*56 (mm) ■ Temperature: OPERATING: -10°C~+60°C, STORAGE: -20°C~+70°C ■ Temperature: 60°C 95%RH*500 hours
Light Valve	Welding Mask 	■ Dimensions: 96.5*38 (mm) ■ Structure: LCD+PIN ■ Viewing Area (VA): 89.5*35 ■ Viewing Angle: 10:30'clock ■ Transmissive Type:Positive, transmissive
Automotive	Instrument Panel 	■ Dimensions: 96.5*38 (mm) ■ Structure: LCD+PIN ■ Viewing Area (VA): 89.5*35 ■ Viewing Angle: 10:30'clock ■ Transmissive Type:Positive, transmissive
Medical	Blood glucose meter 	■ Dimensions: 46.60*56.40*3.3 (mm) ■ Resolution: 47 segment ■ VA: 44.20*46.7 (mm) ■ Temperature: OPERATING:-10°C~+60°C, STORAGE:-20°C~+70°C ■ Temperature: 60°C 90%RH*240 hours



Monochrome Display - Line Production Capacity



Workshop	Glass Size	Equipment		Daily Capacity (per shift)	Monthly Capacity (2 shifts)	Main Product Structure
1st Floor Front	370MM*470MM	Fully Automated Lines	2 units	1,800 pairs / shift	93,600 pairs	COG, VA, Elevator Modules
2nd Floor Front	450MM*550MM	Fully Automated Line	1 unit	1,000 pairs / shift	52,000 pairs	Meters, Water Meters, Gas Meters, Optical Valves

Workshop	Stage	Equipment	Daily Capacity (per shift)	Monthly Capacity (2 shifts)	Main Product Structure
1st Floor	Mid	Glass Cutter	1,300 pairs	67,600 pairs	COG, VA, Elevator Modules
		Crystal Breaker	1,300 pairs	67,600 pairs	
		Grain Breaker	1,300 pairs	67,600 pairs	
	Rear	Automatic Die Bonder	18K	936K	
		Automatic Pin Inserter	5K	260K	
	Module	Automatic COG Line	30K	1560K	
		Combined Line	30K	1560K	
2nd Floor	Mid	Glass Cutter	2,500 pairs	130,000 pairs	Meter Products, Water/Gas Meters, Optical Valves
		Crystal Breaker	2,000 pairs	104,000 pairs	
		Grain Breaker	2,000 pairs	104,000 pairs	
	Rear	Automatic Die Bonder	130K	6760K	
	Assembly	Automatic Pin Inserter	150K	7800K	

Remark:Monthly Incoming Stock Data (Double Shift):LCD Glass: 6KK;LCD Display: 10KK;LCM Display Modules: 1,500K;Total: 17.5KK

Monochrome Display - Customer

Water, Electricity, Gas Meter



Industrial / Home Appliance / Medical



Elevator



Optical Valve



Overseas customer





Color Display - Product Development Structure



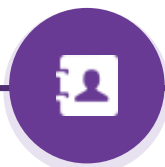
Product Category	Subcategory	Components
LCM Products	Single Module	0.95~11" TFT LCM
	Single Module with Cover Lens	0.95"~11" TFT LCM (including water drop type, hole type) + COVER GLASS (full lamination, frame lamination)
TLCM Products	Full Optical Bonding	0.95"~11" TFT LCM + CTP MODULE (full lamination, up to 13.3")
	Foam Frame Lamination	0.95"~11" TFT LCM + CTP MODULE (frame lamination, up to 32")
AMOLED Products	Full Optical Bonding	0.95"~7.0" AMOLED + COVER GLASS / CTP MODULE (full lamination, frame lamination) (Note: over 3.5" requires additional equipment)
ONCELL Products	Full Optical Bonding	0.95"~11" ONCELL + COVER GLASS (full lamination, frame lamination)
INCELL Products	Full Optical Bonding	0.95"~11" INCELL + CTP GLASS (full lamination, frame lamination)

- Tongtai Vision Display leads in technological innovation and production capacity upgrade for color modules, offering full-scenario solutions—from classic small-size screens to high-end automotive displays—for smartphones, wearables, industrial control, smart home, and commercial display applications.



Economies of Scale

Operates China's most comprehensive TFT module production lines for wearables and industrial control, with a monthly capacity of 5.5 million units. Equipped with 12 fully automated COG lines and 3 fully automated COP lines to ensure efficient delivery and cost optimization.



Market Differentiation

Focuses on optical component design optimization, process innovation, driver technology upgrades, and interface compatibility improvement—balancing cost and performance.



One-Stop Supply

Supports multiple technologies including traditional external TP modules, On-Cell modules, and OLED. Features three industry-leading high-precision COF lines (equipment accuracy: $\pm 4\mu\text{m}$), providing customers with integrated hardware and technical support.

Future Roadmap

- 🏗️ Invest in in-house backlight production lines for 7–12 inch sizes.
- 🏗️ Expand into medium-to-large size segments: 13.3 inch tablet panels, 14–15.6 inch automotive displays.
- 🏗️ Drive industrial collaboration: develop EPD lamination services.

➤ Covers TFT LCD display modules (including air-gap/optical lamination with Touch Panel) from 0.9" to 15.6". Possesses full-process manufacturing capabilities including LCD cutting, COG, FOG, COF, FOF, TFOG, TFOF, backlight assembly, and fully laminated modules.

Advantages

- Supply Chain: Strong integration capability
- Comprehensive Product Range: Integrated product lines including TN, TFT (On-cell/In-cell), OLED, LCM, and TLCM
- Strict Quality Control: Utilizes information-based application management platform and international quality system standards



Description	LCD AA (mm)	Dimensions (LWT, mm)	Interface	Brightness (with/without TP)
2.4" 240x320 TN	36.72*48.96	42.72*60.26*2.24	16位MCU	300cd/m ² (MIN), 350cd/m ² (TYP)
4.3" 480X272 TN	95.04*53.856	105.5*67.2*3.00	RGB	300-350cd/m ²
5.5" 720x1280 IPS	68.04*120.96	70.04*131.61*1.8	31PIN MIPI	240cd/m ² (min)
7" 800x480 TN	153.84*85.63	164.9*100*5.65	RGB	800cd/m ² (MIN), 900cd/m ² (TYP)
7" 1024x600 TN	154.21*85.92	164.9*100*2.8	30PIN MIPI	250ccd/m ² MIN, 300cd/m ² TYP
10.1" 800X1280 IPS	135.36*216.58	142.88*228.54*2.66	MIPI	350cd/m ² MIN, 400cd/m ² TYP
15.6"1920*1080 IPS	344.16*193.59	363.8×215.98×9.6	LVDS	800cd/m ² MIN, 1000cd/m ² TYP

- Covers AMOLED touch display integrated modules from 0.95" to 7". Utilizes internationally advanced management models and business processes. Applications include smart wearables and smartphones.

Advantages

- Supply Chain: Strong integration capability
- Comprehensive Product Range: Covers complete product lines including LCD displays and OLED touch display integrated modules
- Strict Quality Control: Employs an information-based application management platform adhering to international quality system standards



Description	Structure	LCD AA (mm)	Temperature	Brightness
1.3" 240x240 IPS	TFT+CTP	23.4*23.4	OPERATING TEMP: -20 °C ~70 °C STORAGE TEMP: -30 °C ~ 80 °C	530cd/m ² Typ
1.32" 466x466	AMOLED	CircleØ33.5	OPERATING TEMP: -20 °C ~ 70 °C STORAGE TEMP: -30 °C ~-80 °C	600cd/m ² Typ
1.43" 466x466	AMOLED	CircleØ36.35	OPERATING TEMP: -20 °C ~70 °C STORAGE TEMP: -30 °C ~ 80 °C	500cd/m ² Typ
1.6" 320x360	AMOLED +CG	27.02*30.40	OPERATING TEMP: -20°C ~60°C STORAGE TEMP: :-30°C ~ 65°C	400cd/m ² Typ
1.78" 368x448	AMOLED	28.70*34.94	OPERATING TEMP: -20°C~70°C STORAGE TEMP: -30°C~80°C	500cd/m ² Typ
1.85" 390x450	Oncell+CG	30.75*35.48	OPERATING TEMP: -20°C ~ 70°C STORAGE TEMP: -30°C ~ 80°C	500±50cd/m ² Typ
1.952" 410x502	AMOLED	31.37*38.4	OPERATING TEMP: -20 °C ~70 °C STORAGE TEMP: -30 °C ~80 °C	550cd/m ² Typ



Color Display - Product Showcase

Smart Wearable Products



0.95" 120×240 OLED
Smart Band (on-cell)



1.19" 390×390 OLED
Smartwatch



1.22" 240×204 IPS
Touch (2-point)



1.3" 240×240 IPS Full
Lamination Touch (on-
cell)



1.44" 128×128 Touch,
Full Lamination (2-
point)



1.39" 454×454 OLED
Smartwatch



1.47" 194×368 OLED
Smartwatch



1.54" 240×240 IPS Touch
(2-point)



1.6" 320×360 OLED
Smartwatch



1.78" 368×448 OLED
Smartwatch (3D)



1.952" 410×502 OLED
Smartwatch

Industrial Control Products



POS Terminals CTP+TFT
2.4" 2.8" 5.0" 5.5" ...



Video Intercom CTP+TFT
5.0" 5.5" 7" 8" 10.1" ...



Refrigerator Panels CTP+TFT
7.0" 7.26" 8.0" 10.1" 15.6" ...



Washing Machine Panels CTP+TFT
2.4" 5.0" 7.0" 7.26" 7.84" ...



Air Conditioner Panels CTP+TFT
2.25" 3.5" ...



Range Hoods CTP+TFT
2.4" 4.3" 5.0" 7.26" 10.1" ...



Small Home Appliances CTP+TFT
2.25" 2.4" 3.5" 3.97" 4.3" 5.0" 7.0"
8.0" 10.1" ...



Magic Mirrors CTP+TFT
5.0" 8.0" 10.1" ...

Color Display Modules - Application Cases

Financial	Financial POS 	 68.04mm 120.96mm	• Display & touch modules ranging from 2.4" to 15.6" • Full product line layout • Interface: 31PIN MIPI • Resolution: 720×1280 • Brightness: 240 cd/m² (min)
Commercial	Printer 	 49.56mm 74.04mm	• Clear step-by-step display • Reduces probability of misoperation • Interface: ZIF • Resolution: 320×480
Home appliances	Refrigerator 	 114.15mm 196.61mm	• Supports multi-dimensional information display • Highly durable structural design • Interface: 40PIN ZIF • Resolution: 1024×600
Smart wearables	Smart Watch 	 1.32" ø33.552mm	• Reduces power consumption by over 60% when displaying minimalist time interface • Ultra-thin design with scratch and abrasion resistance • Temperature Range: Operating: -20°C ~ 70°C Storage: -30°C ~ 80°C • Resolution: 466×466

Color Display - Line Production Capacity



Stage	Process	Product Type	Operating Size	Quantity	Daily Output per Shift (K)	Monthly Output (KK/M)	Product Description
Front-End Bonding	CFOG Line	Small Size	0.95-3"	7 lines	56	2.9	Smart wearable products
	CFOG Line	Medium Size	3-7"	4 lines	32	1.7	Visual control / Smart home / Industrial / Automotive
	CFOG Line	Large Size	5-11"	1 line	2.5	0.13	
	COF Line	Small & Medium Size	0.95-7"	3 lines	15	0.78	Smart wearables (bands/watches) (OLED/on-cell type)
	Subtotal: Front-End Bonding Monthly Capacity (15 lines)					5.5	
Full lamination	Full lamination line	Small Size	0.95~3"	10 lines	55	2.86	Visual control / Smart home / Smart wearable / Industrial / Automotive
		Medium Size	3~7"	2 lines	13.5	0.70	
		Large Size	7-11"	2 lines	4.8	0.25	
	Full Lamination Monthly Capacity (14 lines)					3.8	
BLU Assembly	BLU Assembly	Small Size	0.95-5"	6 lines	48	2.50	Smart wearable / Industrial control
		Medium Size	3-7"	3 lines	24	1.2	
		Large Size	7-11"	2 lines	5	0.3	Visual control / Smart home / Industrial control
	BLU Assembly Monthly Capacity (11 lines)					4.0	

Remark: Total monthly front-end bonding capacity: 5.5KK; Total monthly optical bonding capacity: 3.8KK; Total monthly BLU assembly capacity: 4KK

Color Display - Customer

Wearable – End Customer



HONOR



amazon



POLAR

Wearable – ODM Manufacturers

BOE



zomai



Industrial Control



GARMIN

Simand

Whirlpool

Honeywell

JABIL
捷普集团

HIKVISION
海康威视

dahua
TECHNOLOGY

uniview 宇视

Hisense
海信

Panasonic
松下电器



Midea美的

Verifone

魔点科技

新大陆
Newland



TP - Product Development Structure



CTP (Customized)

Product Category	Subcategory	Composition
CTP Products	G+G(SITO)	Glass cover + optical adhesive + glass sensor (single layer) + FPC + IC + auxiliary material (protective film / foam / double-sided adhesive, etc.)
	G+G(DITO)	Glass cover + optical adhesive + glass sensor (double layer) + FPC + IC + auxiliary material (protective film / foam / double-sided adhesive, etc.)
	G+G+G	Glass cover + optical adhesive + glass sensor + optical adhesive + glass sensor + FPC + IC + auxiliary material (protective film / foam / double-sided adhesive, etc.)
	P+G	PMMA cover + optical adhesive + glass sensor (double layer) + FPC + IC + auxiliary material (protective film / foam / double-sided adhesive, etc.)
	G+F	Glass cover + film sensor (single layer) + FPC + IC + auxiliary material (protective film / foam / double-sided adhesive, etc.)
	G+FF	Glass cover + film sensor (double layer) + FPC + IC + auxiliary material (protective film / foam / double-sided adhesive, etc.)

RTP

Product Category	Subcategory		Composition
RTP Products	(4-wire, 8-wire)	F+G	ITO film + double-sided adhesive + ITO glass + FPC + auxiliary material (protective film, backing adhesive, etc.)
		P+F+G	PET + OCA + ITO film + double-sided adhesive + ITO glass + FPC + auxiliary material (protective film, backing adhesive, etc.)
		P+F+F+G	PET + OCA + ITO film + double-sided adhesive + ITO film + OCA+Tempered glass+FPC + auxiliary material (protective film, backing adhesive, etc.)
	(5-wire)	F+G	ITO film + double-sided adhesive + ITO glass + FPC + auxiliary material (protective film, backing adhesive, etc.)
		P+F+G	PET + OCA + ITO film + double-sided adhesive + ITO glass + FPC + auxiliary material (protective film, backing adhesive, etc.)

- **CTP:** Provides product support covering the full size range from 0.96 to 23.8 inches, spanning from micro portable displays to mainstream desktop sizes.



Advantages

- Complete Process Coverage: Full-process capabilities including exposure, screen printing, assembly, FOG, and lamination (air-gap/full lamination using OCA/OCF, liquid adhesives, etc.)
- One-Stop Service: Integrated product lines for CTP (GG, GFF) and TLM.
- Certified Production: IATF 16949 certified production lines, suitable for automotive product manufacturing.
- High Stability

- **RTP:** Offers a wide size coverage from 1.3 inches to 21.5 inches to match diverse device requirements.



Advantages

Rich selection of core circuit configurations to meet different application needs:

- 4-Wire Series: Supports three structural configurations: (F+G), (P+F+G), (P+F+F+G)
- 5-Wire Series: Supports two structural configurations: (F+G), (P+F+G)
- 8-Wire Series: Supports three structural configurations: (F+G), (P+F+G), (P+F+F+G)



TP - Parameter List



CTP							
Application	Structure	Size (inch)	CG Thickness (mm)	Support Structure (mm)	Dimensions (mm)	Interface	
POS Terminal	G+FF	5.5	1.1	5-side	149.7*76.05*1.45	I2C	
		4.0	0.7	5-side	115.13*60.38*0.95	I2C	
	Access Control	G+F	4.3	1.1	Single-side	115.6*115.6*1.35	I2C
		G+F	7	0.7	Single-side	173*111.5*0.95	I2C
		G+FF	4.3	1.1	5-side	115.6*115.6*1.43	I2C
		G+G	7	0.7	5-side	173*111.5*1.3	I2C
		G+G	10.1	1.8	10-side	254*166*2.55	I2C
		G+FF	9	3.2+0.7	10-side	217.41*138.75*4.45	I2C
		P+G	7	0.25	5-side	164.8*99.8*1.55	I2C
		Smart Home	G+FF	9	3.2+0.7	10-side	217.41*138.75*4.45
	G+G		8.6	1.1	5-side	198.4*128.9*3.65	USB
	G+G		12.1	1.8	5-side	265.50*208*3.95	USB
	P+G		7	0.25	5-side	164.8*99.8*1.55	I2C
	Medical Instrument	G+G	10.1	1.1	10-side	239.56*163.56*2.0	I2C
		G+G	13.3	0.7	10-side	305,35*178,11*1.45	I2C
		G+G	15.6	2.0	10-side	368.3*227.77*2.75	USB
	Automotive	G+FF	15.6	1.6	10-side	373.63*233.34*2.1	I2C
		G+G	7	1.1	10-side	187.06*115.07*2.0	I2C
		G+G	8	0.7	10-side	212.8*116.9*1.93	I2C
	Commercial & Education	G+FF	27	3.2	10-side	755.36*542.60*3.7	USB
		G+G	21.5	2	10-side	520*312*2.95	USB
	Smart Wearable	G+F	0.92	0.7	Single-side	26.4*25.81*0.88	I2C
		G+F	1.3	2	Single-side	44.69*44.69*2.25 (round)	I2C
		G+FF	1.2	1.3	5-side	39.7*39.7*1.55 (round)	I2C
	Other industrial control	G+F	4	0.7	Single-side	114.4*61.2*0.95	I2C
		G+FF	10.8	0.55	5-side	253.8*159.8*1.0	I2C

RTP						
	Product Type	Application	Structure	Dimensions (L×W, mm)	Active Area (mm)	Interface
	4-wire	Office	F+G	47.85*42.37	39.10*31.90	FPC
			F+G	82.15*53.40	74.10*46.20	FPC
			P+F+G	99.20*75.40	72.50*55.00	FPC
	5-wire	POS	F+G	495.00*291.60	477.64*269.11	FPC
	4-wire	EV Charger	F+G	164.20*99.10	153.50*85.40	FPC
	4-wire	Medical Instrument	F+G	164.50*99.65	152.90*84.75	FPC
			F+G	183.00*141.00	162.00*121.50	FPC
			F+G	228.20*175.40	212.20*159.40	FPC
	4-wire	Industrial control	F+G	68.80*49.60	58.60*44.20	FPC
	4-wire		F+G	105.50*67.20	97.04*55.86	FPC
	4-wire		F+G	120.20*74.80	110.80*63.80	FPC
	4-wire		P+F+G	164.90*100.00	155.08*86.92	FPC
	5-wire		F+G+LCM	168.00*109.00	151.35*84.35	FPC
	4-wire		F+G	182.50*140.00	162.20*121.80	FPC
	4-wire		F+G	235.00*142.50	222.72*125.28	FPC
	4-wire		F+G	261.00*204.50	246.50*185.00	FPC
	5-wire		F+G	271.27*205.74	246.00*184.50	FPC
	4-wire		F+G	324.50*251.00	304.10*228.10	FPC
	5-wire		F+G	322.00*245.50	303.50*227.50	FPC
	5-wire		F+G	348.00*273.60	302.40*226.90	FPC
	5-wire		F+G	356.00*286.50	337.60*270.00	FPC
	5-wire		P+F+G	382.40*323.40	339.92*272.34	FPC
	4-wire		F+G	68.80*49.60	58.60*44.20	FPC
	4-wire		F+G	105.50*67.20	97.04*55.86	FPC
	4-wire		F+G	120.20*74.80	110.80*63.80	FPC
	4-wire		P+F+G	164.90*100.00	155.08*86.92	FPC



TP - Product Showcase

CTP



10.1" Security Terminal



7.0" Washing Machine



4.0" POS Machine



1.44" Kids Smartwatch Phone



65.0" Interactive Whiteboard



55.0" Commercial Display



7.0" Printer



10.1" Industrial Display

RTP



2.4" MPOS Device



2.0" Printer



7.0" Nurse Call Terminal



10.4" Oximeter



8.0" Charging Pile Terminal



8.0" HMI



10.4" HMI



15" Blood Analyzer



TP - Product Showcase



DVD&GPS



Instrument Panel



Instrument Panel



Rearview Mirror



Air Conditioning &
Audio Display



Rear-Seat
Entertainment Display



Co-Driver (Passenger)
Information Display

Touch Display Modules - Application Cases

Automotive	Central control 	68.04mm 12.3" 120.96mm	■ Provides dedicated display solutions for different functional areas such as central control screens and rear-seat entertainment screens. ■ Highly adaptable professional display solutions. ■ Connection: 50PIN BTB ■ Resolution: 1920×720 ■ Structure: TLMC
Financial	POS 	68.04mm 5.5" 120.96mm	■ Integrated structural design from touch panel to complete device. ■ Supports highly customized products. ■ Connection: ZIF ■ Resolution: 720×1280
Home appliances	Central control 	114.15mm 9" 196.61mm	■ Provides Dedicated Display Solutions for Functional Areas ■ Highly Adaptable Professional Display Solution ■ Connection: ZIF ■ Resolution: 1024*600
Security	Access control 	85.92mm 154.21mm	■ Screen utilizes full lamination process. ■ Backlight module employs long-life LED beads with slow brightness decay. ■ Temperature Range: Operating: -20°C ~ 70°C Storage: -30°C ~ 80°C ■ Resolution: 1024×600 ■ MP



TP - Line Production Capacity

Product Type	Working Size (inches)	Quantity	Daily Capacity per Shift (K)	Monthly Capacity (KK/M, Two Shifts)
CTP	0.96-5	500K/M	250	500
	5.0-10.0	300K/M	150	300
	10-21.5	200K/M	100	200
	21.5-86	20K/M	10	20
RTP	1.3-5	600K/M	300	600
	5-10	300K/M	150	300
	10.-21.5	150K/M	75	150

Remark:

RTP total monthly capacity: 2.4KK; CTP total monthly capacity: 1.2KK



TP - Customer



Medical

yarward

FOXCONN



clover

Kayto 雷杜



Smart Wearables



SONY

flex.



Security, POS, Industrial control



Verifone

FLEXEM



DAWAR



Home appliance, Office

Haier

Panasonic

brother

TOSHIBA
Leading Innovation

AUCMA
澳柯玛



Canon

lenovo 联想

acer

TESCOM

Commercial, Education

Hisense

MINDHUB



SHARP



CVTE
视源股份



Automotive



HSAE 航盛
科技 服务 通行天下



ADAYO

FOXCONN
鸿海科技集团

faurecia Coagent

clarion

BICV 智联科技
make auto smart
北斗星通旗下企业



THANKS!

Intelligent Vision Touching Future