

亚世光电（集团）股份有限公司

YES OPTOELECTRONICS (Group) CO., LTD.



# 关于亚世集团

## About YES Group

地理位置 Location:

总部/Headquarter:

辽宁省鞍山越岭路288号

#288, Yueling Road, Anshan, Liaoning Province

西厂/West Factory:

辽宁省鞍山千山路501号

#501, Qianshan Road West, Anshan, Liaoning Provi



总部/Headquarter

总面积/Total area: 51161m<sup>2</sup>

建筑面积/Construction area: 40000m<sup>2</sup>

- LCD rear end
- COG/COB/SMT/TAB bonding
- OCR/OCA optical bonding
- LED production and assembly
- EPD production factory

成立于/Since: 1992

上市时间/IPO: in March, 2019

股票代码/Stock code: 002952

注册资金/Registered capital: RMB164million

出口额/Exporting: 80%+

员工人数/Employees: 2000+



30 minutes by car

西厂 West Factory :

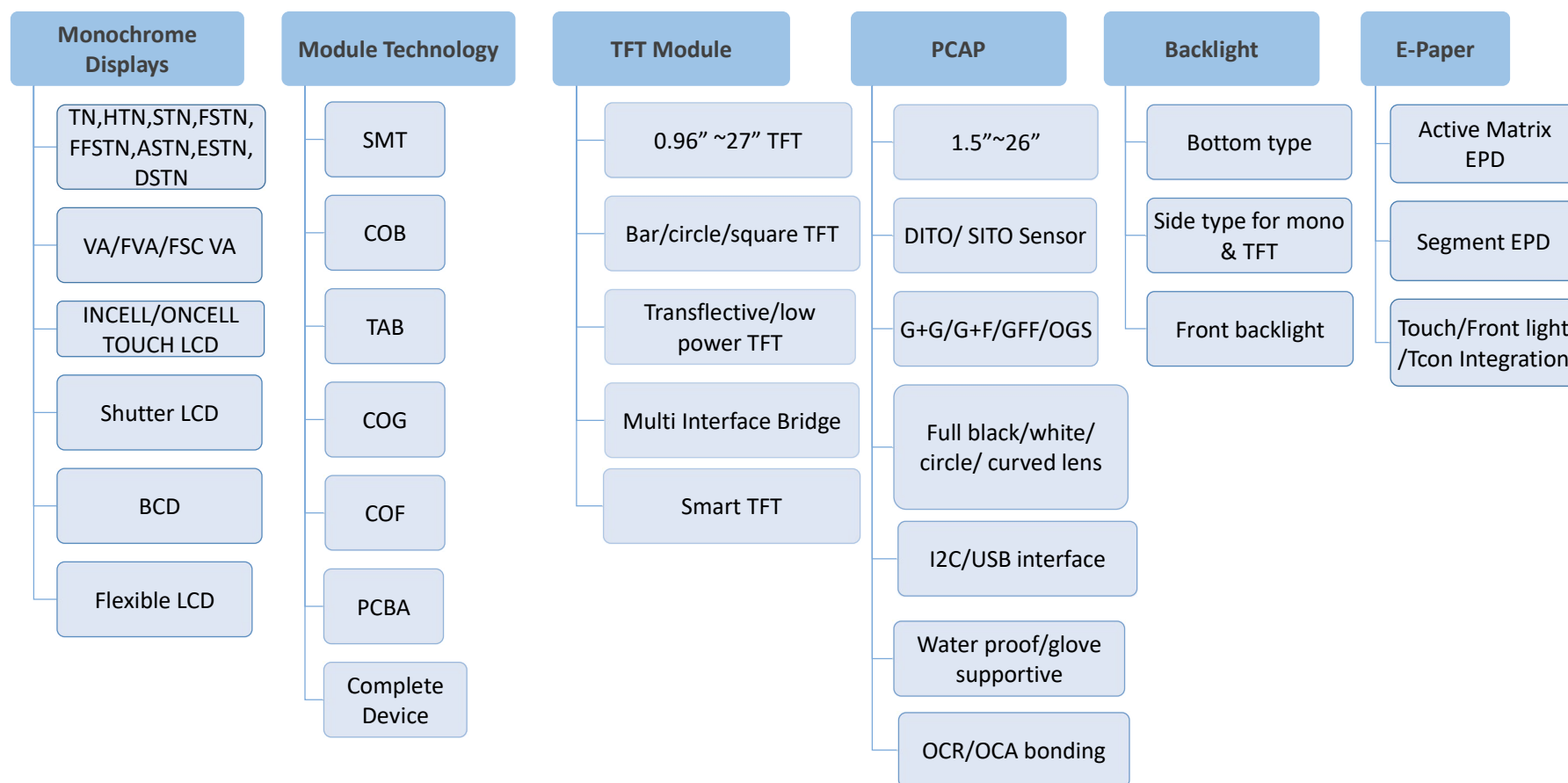
净房面积/Clean room: 4000m<sup>2</sup>

2条LCD前序产线

Two LCD front end production lines

## 亚世集团产品范围/YES Group Business Range

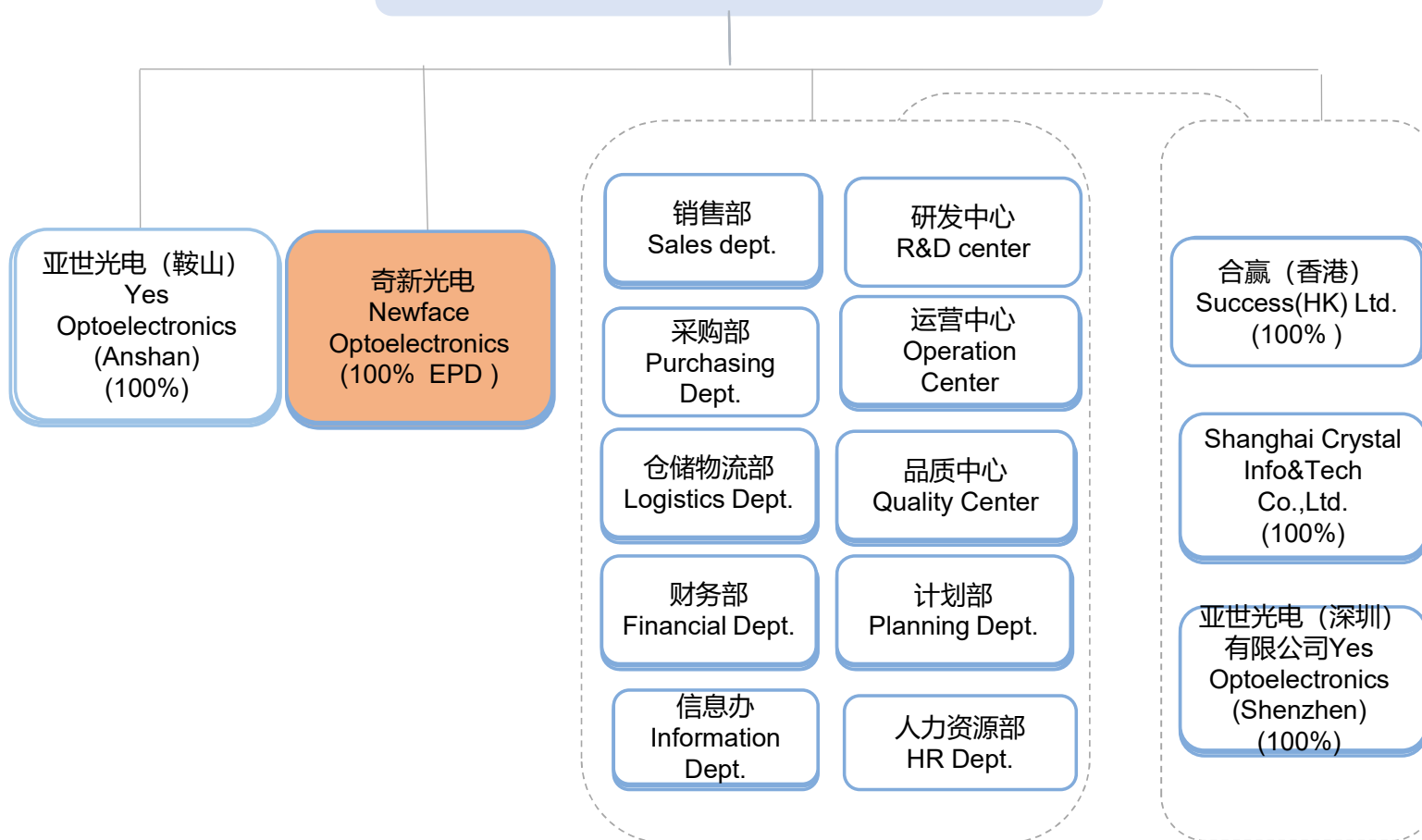
- 液晶显示屏及模组/Monochrome LCD displays and modules ;
- TFT模组及电容式触控屏整合方案/TFT modules and PCAP touch as well as solution;
- EPD模组及配套方案/EPD modules and solution



# 组织机构/Organization Structure



## 亚世光电集团/YES GROUP



## 亚世总部厂区图/About YES Group Headquarter



① 主楼 mail building → offices/SMT lines/backlight assembly

② 1# 厂房 factory → 2<sup>nd</sup> floor LCD rear end processes/ 3<sup>rd</sup> monochrome modules / 4<sup>th</sup> CTP and TFT modules

③ 2# 厂房 factory → EPD production lines under the name of Newface

④ 仓库 warehouse

⑤ 食堂 canteen

# 亚世股份产线/Yes Optoelectronics Production lines



**LCD production lines: 2lines**  
Line A 16"\*14" substrate  
Line B :370\*470mm substrate

**COG production lines:**  
Monochrome displays: 6 lines  
TFT display: 6 lines

**COB : 2lines & SMT : 3 lines**

**Backlight production lines: 5 lines**

**PCAP production lines: 9 lines;**  
OCR bonding 2 lines  
OCA bonding 5 lines  
SCA bonding 2lines

**20 assembly lines in total :**  
**Monochrome: 10 lines**  
**TFT display: 10 lines**

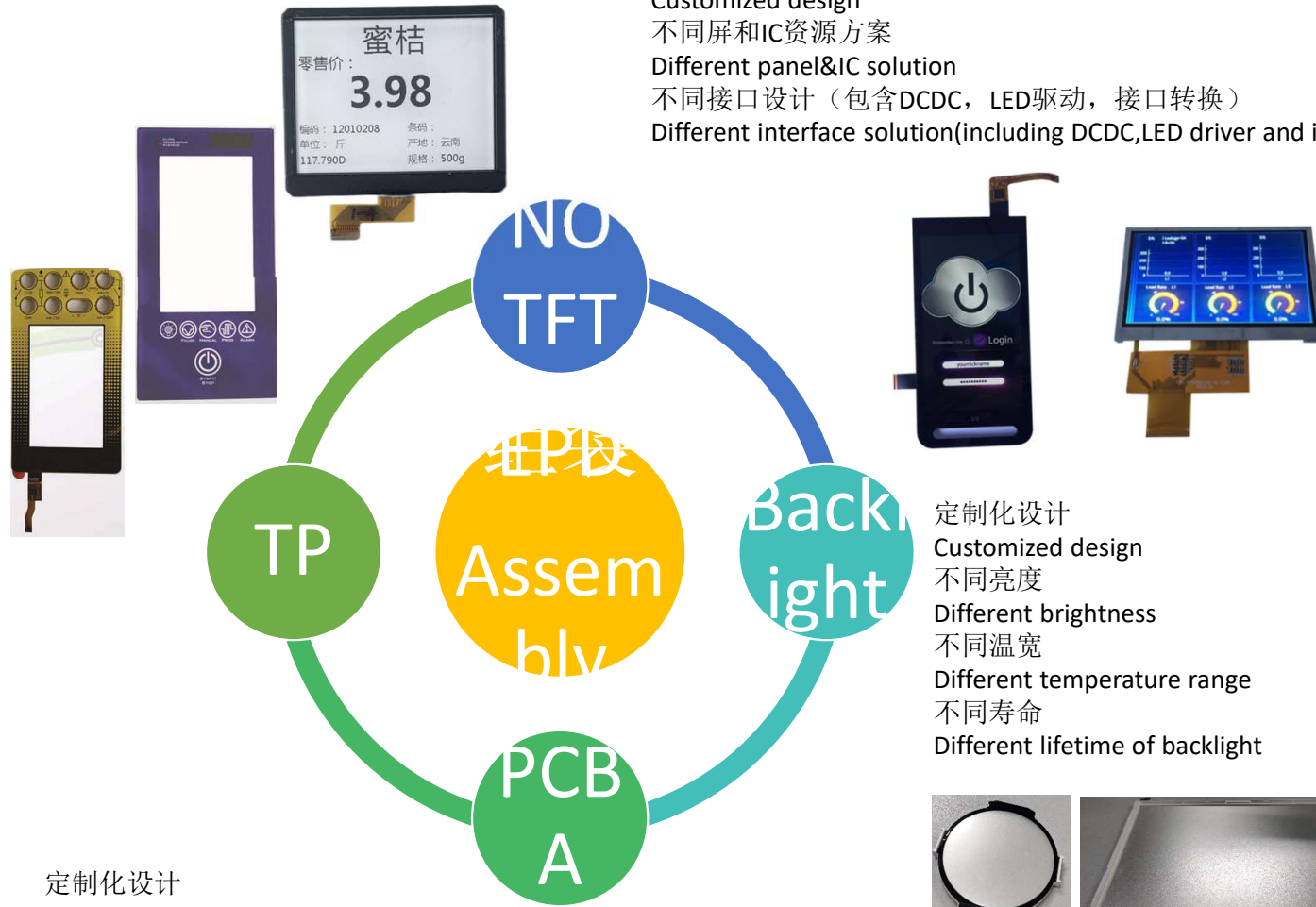


# 一站式服务 One-stop Solution



定制化设计  
Customized design  
不同屏和IC资源方案  
Different panel&IC solution  
不同接口设计（包含DCDC，LED驱动，接口转换）  
Different interface solution(including DCDC,LED driver and interface bridge)

定制化设计  
Customized design  
AR/AG/AF表面处理  
AR/AG/AF surface treatment  
不同IC方案  
Different IC solution  
不同盖板材质  
Different materials for LENS  
G+G/G+F结构  
G+G/G+F structure  
全贴合/框贴  
Optical bonding/Air bonding

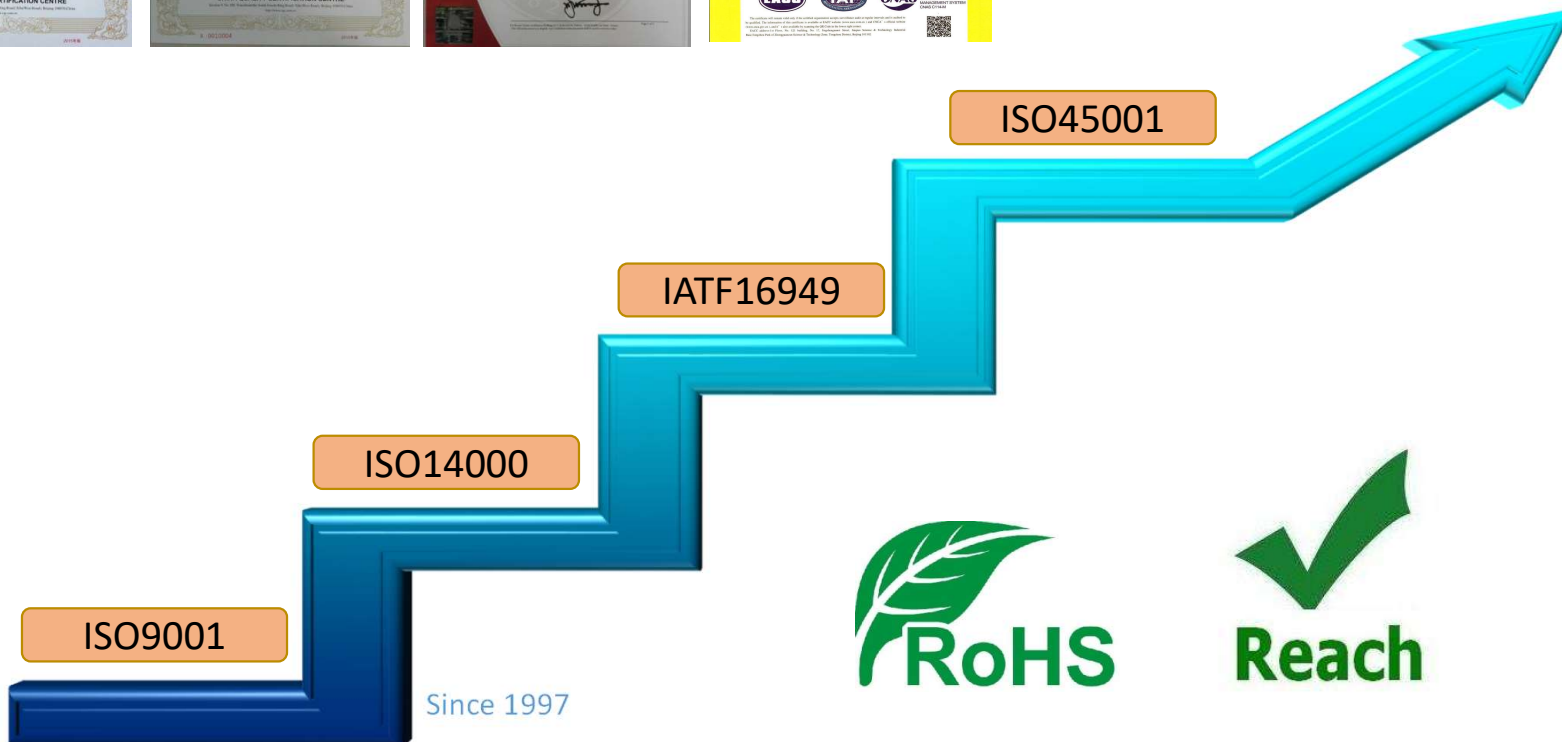


定制化设计  
Customized design  
HDMI&USB控制板HDMI & USB control board  
带MCU控制板Control board with MCU

定制化设计  
Customized design  
不同亮度  
Different brightness  
不同温宽  
Different temperature range  
不同寿命  
Different lifetime of backlight



# 股份质量体系/Quality System





# 应用展示/Applications



# 应用展示/Applications



# 应用展示/Applications



# 奇新光电股份有限公司

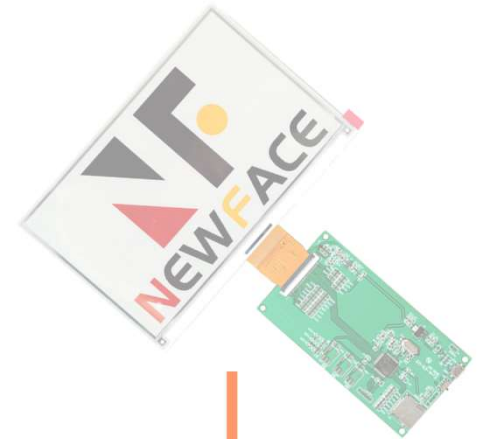
## Newface Optoelectronics Co., Ltd



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## 奇新光电介绍

About Newface Optoelectronics



# 奇新光电厂区概况

About Newface Optoelectronics Factory

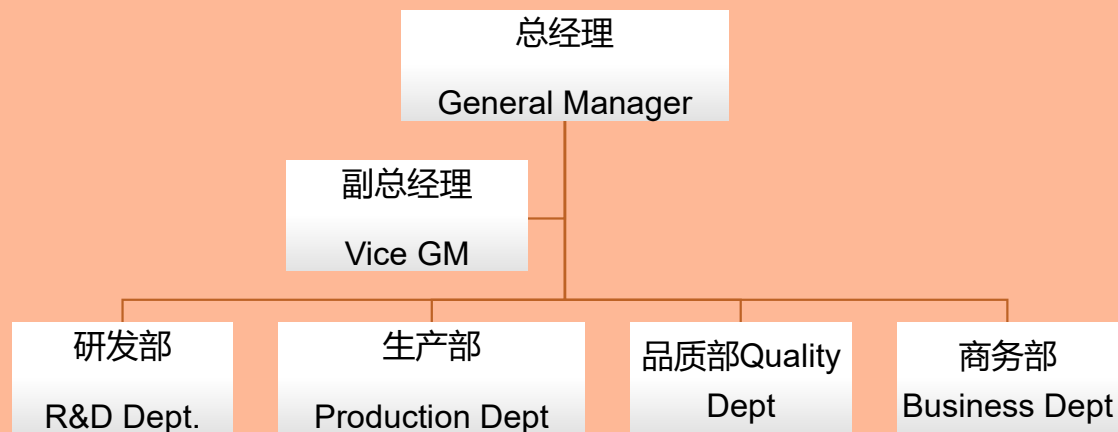


# 奇新光电简介 ABOUT NEWFACE OPTOELECTRONICS

100% 亚世光电（集团）控股 100% invested by Yes Group



## 公司架构 Organization



## 发展历程 Development

2014

2014开始生产笔段型电子纸  
start from segment EPD

2020

11月宣布为E-INK战略合作伙伴  
be announced as strategic partner for E-ink in Nov.

2021

成立奇新光电股份有限公司  
Set up Newface Optoelectronics Co., Ltd

2022

10条生产线, 4.5kkpcs/月  
10x production lines, 4.5kkpcs/month



# 全自动生产线

Full Automatic Production Line

10x production lines 4.5kk-5kkpcs/month



FPL attach



Auto COG&FOG



PS attach



EC sealant



Curing



RTV coat

# 质量体系

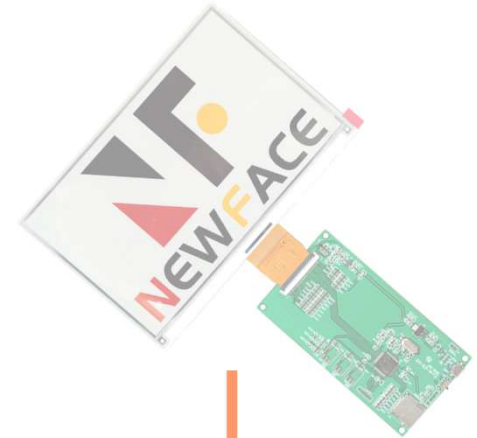
Quality System



02

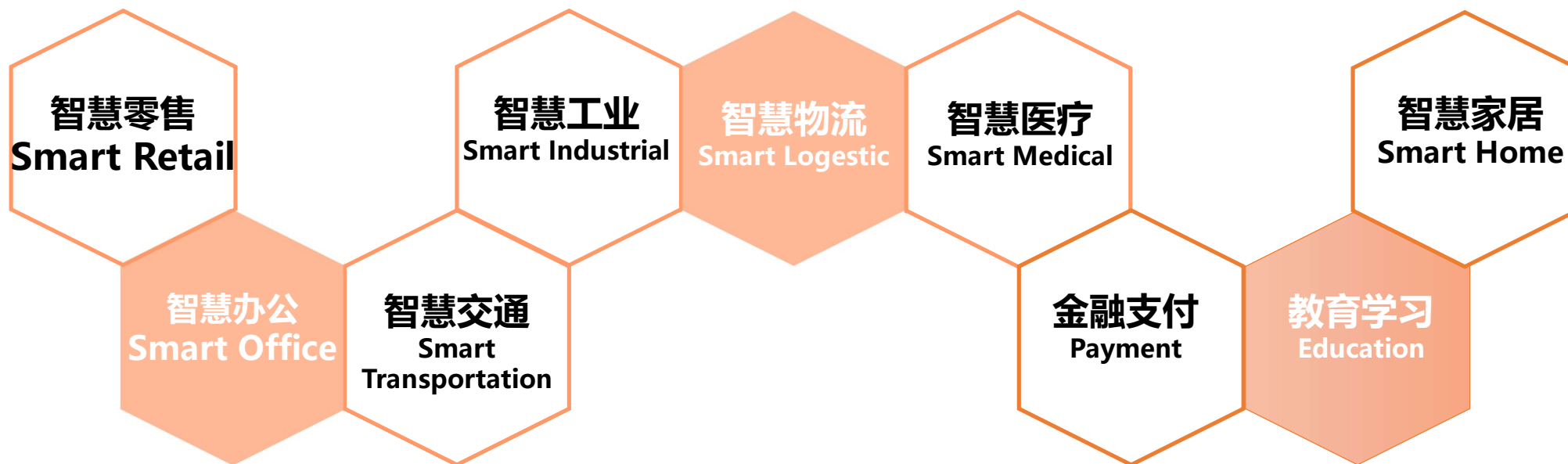
## 电子纸市场应用

EPD Market Application



## 主要市场应用

Main Application



电子纸显示器将给您的工作、学习和生活带来数字化、智能化、绿色化、无纸化的全新体验!

EPD display application will bring you a new experience for digitalization, intelligence, green and paperless in everyone work, study and life!

## 智慧零售 Smart Retail

应用：电子货架/价签 ESL/Price Tag



电子价签/电子货架将实体零售、在线零售、仓储物流、支付系统通过物联网大数据高效整合  
ESL/shelf tag has highly integrated physical shop,online shop, payment system,warehouse via big data and IoT.

## 智慧办公 Smart Office

主要应用：电子笔记本、会议室桌牌、名牌、门牌、信息板等  
Application: E-notebook, meeting room table tag, staff ID card, door plate, signboard etc.



可通过蓝牙等系统及时记录会议信息，人员信息、实现信息管理自动化，提高办公效率  
Electrically noted meeting message, staff record, automatic information and management system, increase office efficiency via bluetooth system and so on.



## 智慧医疗 Smart Medical

主要应用：智能手环、家用血糖仪、智能药盒、床头卡、病房门牌、信息板等

Application: smart ring, blood glucose meter, smart kit, bed-ward tag, sickroom tag, information board etc.



可通过蓝牙系统及时记录药品信息，病人信息、实现信息管理自动化，提高办公效率

Electrically noted medicine message, patient information, automatic information and management system, increase efficiency via blue tooth.



# 智慧交通 Smart Transportation

主要应用：广告牌、公交车拉手、电子车牌、指标牌、车站信息板等

Application: billboard, bus station handgrip, E-car plate, signboard, information board etc.





## 智慧家居 Smart Home

主要应用：温控器、遥控器、空气检测、日历牌等智能应用

Application: thermostat, remote control, air detection, calendar plate and so on for smart home application.



## 智慧工业 Smart Manufacturing

主要应用：仓储/物流货架标签、包装盒、快递柜、流程卡、行李牌、检测二维码等  
Application: warehouse/logestic shelf label, packing box, parcel cabinet, flowcard, luggage tag, 2D code for test etc.



# 教育,支付及其他/Education、Payment & others

主要应用：电子词典、电子书、NFC标签、二维码、支付终端、电子钱包、智能卡、支付信息板等

Application: E-dictionary, E-notebook, NFC label, 2D code for payment, POS, digital pocket, smart card, information board etc.



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## 产品及产品列表

Standard Product & Product List



# 双色(黑白)电子纸

## 2color (BW)

Size	Mono/Color	temperature	DPI	Resolution(mm)	Outline Dimension(mm)	Active Area(mm)
1.54" Low Resolution	B/W	0-50°C	140	152(H)*152(V)	31.8(H)*37.32(V)*1.0(D)	27.512(H)*27.512(V)
	B/W-LT	-25-10°C	140	152(H)*152(V)	31.8(H)*37.32(V)*1.0(D)	27.512(H)*27.512(V)
1.54" High Resolution	B/W	0-50°C	184	200(H)*200(V)	31.8(H)*37.32(V)*1.0(D)	27.0(H)*27.0(V)
2.13" Low Resolution	B/W	0-50°C	110	104(H)*212(V)	29.2(H)*59.2(V)*1.0(D)	23.71(H)*48.55(V)
	B/W-Frontlight	0-50°C	110	104(H)*212(V)	29.2(H)*59.2(V)*1.9(D)	23.71(H)*48.55(V)
2.13" High Resolution	B/W	0-50°C	130	122(H)*250(V)	29.2(H)*59.2(V)*1.0(D)	23.71(H)*48.55(V)
	B/W-LT	-25-10°C	130	122(H)*250(V)	29.2(H)*59.2(V)*1.0(D)	23.71(H)*48.55(V)
	B/W-Frontlight	0-50°C	130	122(H)*250(V)	29.2(H)*59.2(V)*1.9(D)	23.71(H)*48.55(V)
2.66" Low Resolution	B/W	0-50°C	125	152(H)*296(V)	36.30(H)*71.82(V)*1.0(D)	30.704(H)*60.088(V)
2.7"	B/W	0-50°C	117	264(H)*176(V)	70.42(H)*45.8(V)*0.98(D)	57.288(H)*38.192(V)
2.9" Low Resolution	B/W	0-50°C	112	128(H)*296(V)	36.7(H)*79.0(V)*1.2(D)	29.056(H)*66.896(V)
	B/W-Frontlight	0-50°C	112	128(H)*296(V)	36.7(H)*79.0(V)*1.95(D)	29.056(H)*66.896(V)
3.7"	B/W	0-50°C	130	240(H)*416(V)	53.0(H)*92.99(V)*1.0(D)	47.04(H)*81.54(V)
4.2"	B/W	0-50°C	120	400(H)*300(V)	91.0(H)*77.0(V)*1.2(D)	84.8(H)*63.6(V)
5.79"	B/W	0-50°C	144	272(H)*792(V)	56.94(H)*150.92(V)*1.0(D)	47.74(H)*139.0(V)
5.83"	B/W	0-50°C	138	648(H)*480(V)	125.4(H)*99.5(V)*1.2(D)	118.78(H)*88.22(V)
6.0"	B/W	0-50°C	168	600(H)*800(V)	101.8(H)*138.4(V)*0.954(D)	90.6(H)*122.4(V)
7.5"	B/W	0-50°C	124	800(H)*480(V)	170.2(H)*111.2(V)*1.25(D)	163.2(H)*97.92(V)
9.7"	2-16 gray	0-50°C	150	1200(H)*825(V)	218.8(H)*156.425(V)*1.15(D)	202.8(H)*139.425(V)
11.6"	B/W	0-50°C	100	960(H)*640(V)	254.31(H)*176.35(V)*1.0(D)	224.51(H)*163.01(V)
13.3" Low Resolution	B/W	0-50°C	88	960(H)*680(V)	286.32(H)*212.26(V)*1.2(D)	275.52(H)*195.16(V)
	B/W-Frontlight	0-50°C	88	960(H)*680(V)	288.7(H)*212.26(V)*2.4(D)	275.52(H)*195.16(V)
13.3" High Resolution	B/W	0-50°C	150	1600(H)*1200(V)	285.80(H)*213.65(V)*0.78(D)	270.4(H)*202.8(V)
	B/W-Frontlight	0-50°C	150	1600(H)*1200(V)	285.80(H)*213.65(V)*1.5(D)	270.4(H)*202.8(V)
28"	2-16 gray	0-50°C	143	3840(H)*1080(V)	698.6(H)*209.3(V)*0.953(D)	683.52(H)*192.24(V)
31.2"	2-16 gray	0-50°C	94	2560(H)*1440(V)	697.2(H)*402.8(V)*0.805(D)	691.2(H)*388.8(V)
42"	B/W	0-50°C	85	2160(H)*2880(V)	650(H)*872.5(V)*0.805(D)	642.6(H)*856.8(V)



# 三色 (黑白红/黑白黄) 电子纸

## 3color (BWR/BWY) EPD module

Size	Mono/Color	temperature	DPI	Resolution(mm)	Outline Dimension(mm)	Active Area(mm)
1.54" Low Resolution	B/W/R	0-40°C	140	152(H)*152(V)	31.8(H)*37.32(V)*1.0(D)	27.512(H)*27.512(V)
1.54" High Resolution	B/W/R	0-40°C	184	200(H)*200(V)	31.8(H)*37.32(V)*1.0(D)	27.0(H)*27.0(V)
2.13" Low Resolution	B/W/R	0-40°C	110	104(H)*212(V)	29.2(H)*59.2(V)*1.0(D)	23.71(H)*48.55(V)
	B/W/Y	10-40°C	110	104(H)*212(V)	29.2(H)*59.2(V)*1.0(D)	23.71(H)*48.55(V)
2.13" High Resolution	B/W/R	0-40°C	130	122(H)*250(V)	29.2(H)*59.2(V)*1.0(D)	23.71(H)*48.55(V)
	B/W/Y	10-40°C	130	122(H)*250(V)	29.2(H)*59.2(V)*1.0(D)	23.71(H)*48.55(V)
2.15"	B/W/R	0-40°C	156	160(H)*296(V)	31.8(H)*60.8(V)*1.2(D)	26.0(H)*48.1(V)
2.66" Low Resolution	B/W/R	0-50°C	125	152(H)*296(V)	36.30(H)*71.82(V)*1.0(D)	30.704(H)*60.088(V)
	B/W/Y	10-40°C	125	152(H)*296(V)	36.30(H)*71.82(V)*1.0(D)	30.704(H)*60.088(V)
2.66" High Resolution	B/W/R	0-40°C	152	184(H)*360(V)	37.11(H)*72.5894(V)*1.0(D)	30.6912(H)*60.048(V)
	B/W/Y	10-40°C	152	184(H)*360(V)	37.11(H)*72.5894(V)*1.0(D)	30.6912(H)*60.048(V)

Size	Mono/Color	temperature	DPI	Resolution(mm)	Outline Dimension(mm)	Active Area(mm)
2.9" Low Resolution	B/W/R	0-40°C	112	128(H)*296(V)	36.7(H)*79.0(V)*1.2(D)	29.056(H)*66.896(V)
	B/W/Y	0-40°C	112	128(H)*296(V)	36.7(H)*79.0(V)*1.2(D)	29.056(H)*66.896(V)
2.9" High Resolution	B/W/R	0-40°C	144	384(H)*168(V)	79.98(H)*36.97(V)*0.9(D)	67.58(H)*29.57(V)
	B/W/Y	10-40°C	144	384(H)*168(V)	79.98(H)*36.97(V)*0.9(D)	67.58(H)*29.57(V)
3.46"	B/W/R	0-40°C	147	176(H)*480(V)	36.9(H)*94.36(V)*1.0(D)	30.272(H)*82.56(V)
3.5"	B/W/R	0-40	122	184(H)*384(V)	45.03(H)*91.75(V)*1.0(D)	38.18(H)*79.68(V)
	B/W/Y	10-40	122	184(H)*384(V)	45.03(H)*91.75(V)*1.0(D)	38.18(H)*79.68(V)
3.7"	B/W/R	0-40	130	240(H)*416(V)	53.0(H)*92.99(V)*1.0(D)	47.04(H)*81.54(V)
4.2"	B/W/R	0-40°C	120	400(H)*300(V)	91.0(H)*77.0(V)*1.2(D)	84.8(H)*63.6(V)
	B/W/Y	10-40°C	120	400(H)*300(V)	91.0(H)*77.0(V)*1.2(D)	84.8(H)*63.6(V)
5.79"	B/W/R	0-40°C	144	272(H)*792(V)	56.94(H)*150.92(V)*1.0(D)	47.74(H)*139.0(V)
5.83"	B/W/R	0-40°C	138	648(H)*480(V)	125.4(H)*99.5(V)*1.2(D)	118.78(H)*88.22(V)
7.5"	B/W/R	0-40°C	124	800(H)*480(V)	170.2(H)*111.2(V)*1.25(D)	163.2(H)*97.92(V)
11.6"	B/W/R	0-40°C	100	960(H)*640(V)	254.31(H)*176.35(V)*1.0(D)	224.51(H)*163.01(V)
12"	B/W/R	0-40°C	102	1304(H)*984(V)	261.4(H)*211.0(V)*1.2(D)	252.98(H)*190.90(V)
12.48"	B/W/R	0-40°C	130	1304(H)*984(V)	261.4(H)*211.0(V)*1.2(D)	252.98(H)*190.90(V)
13.3" Low Resolution	B/W/R	10-40°C	88	960(H)*680(V)	286.32(H)*212.26(V)*1.2(D)	275.52(H)*195.16(V)
	B/W/Y	10-40°C	88	960(H)*680(V)	286.32(H)*212.26(V)*1.2(D)	275.52(H)*195.16(V)
13.3" High Resolution	B/W/R	0-40°C	150	1600(H)*1200(V)	285.80(H)*213.65(V)*0.78(D)	270.4(H)*202.8(V)



# 四色电子纸 (黑白红黄) -E5

EPD (BWRY) Spectra™ 3100

Size	Resolution	DPI	NEWFACE Model No	2023-Q2	2023-Q3	2023-Q4	2024-Q1
1.54	152x152	140	YMS152152-0154AJH-E5	samples done			
	200x200	184	YMS200200-0154AJH-E5		samples ongoing		
2.13	122x250	130	YMS122250-0213AJH-E5	samples done			
2.15	160x296	156	YMS160296-0215AJH-E5	samples done			
2.66	152x296	125	YMS152296-0266AJH-E5	samples done			
	184x360	152	YMS184360-0266AJH-E5	samples done			
2.70	176x264	117	YMS176264-027AJH-E5	samples ongoing			
2.90	128x296	112	YMS128296-029AJH-E5	samples done			
	168x384	144	YMS168384-029AJH-E5	samples done			
3.52	184x384	120	YMS180384-0352AJH-E5-W5	samples done			
4.20	400x300	120	YMS400300-042ASH-E5		samples ongoing		
5.79	272x292	144	YMS272292-0579ASH-E5				samples ongoing
9.70	672x960	150	YMS672960-097ASH-E5	planning			
11.60	960x640	100	YMS960640-1160ASH-E5	planning			



# 七色电子纸

## N-color EPD

全彩FPL膜片

简化驱动，所有功能集成在一颗驱动IC中

七种颜色显示：黑、白、红、绿、蓝、黄、橙

建议使用温度范围：15°C~35°C

驱动波形时长：28s左右（室温）

Full color FPL film

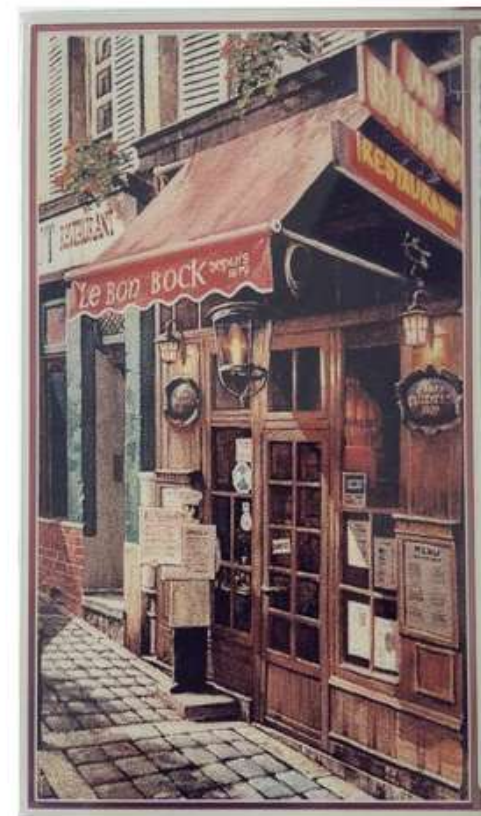
Simple drive, all functions are integrated in a single driver IC

Seven colors: black, white, red, green, blue, yellow and orange

Recommended temperature range: 15°C~35°C

Driving waveform length: about 28s (room temperature)

Size	Mono/Color	temperature	DPI	Resolution(mm)	Outline Dimension(mm)	Active Area(mm)
5.65"	7 color	15-35°C	132	600(H)*448(V)	125.4(H)*99.5(V)*1.15(D)	114.9(H)*85.8(V)
7.3"	7 color	15-35°C	127	800(H)*480(V)	170.2(H)*111.2(V)*1.0(D)	160.0(H)*96.0(V)





04

## 奇新的优势

Our Advantages

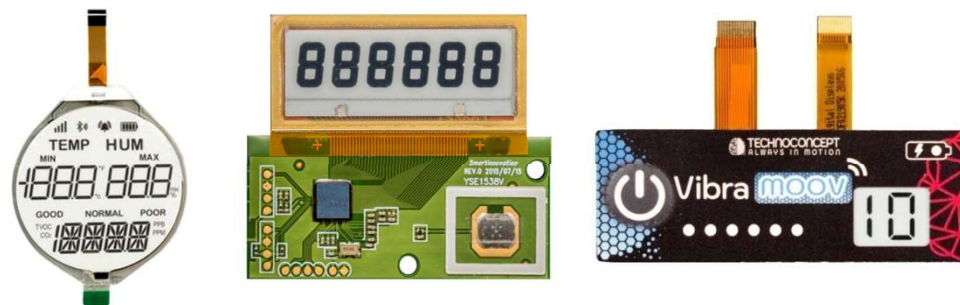


# 定制多样化

Various Customized Solution

1

定制笔段式电子纸模组  
Customized Segment type EPD



2

电子纸模组带前光  
EPD module with Front light



3

电子纸模组带Tcon驱动板  
EPD module with Tcon driving board



4

电子纸模组带盖板或触屏、光学贴合  
EPD module with cover lens or CTP by optical bonding

# 一站式服务

One stop solution



## 墨水屏+前光/触屏 EPD+Frontlight/Touch

- 前光轻薄而且均匀, 呈白色、红色和蓝色
- 更大尺寸至13.3"
- 光学贴合
- Frontlight thin and uniform in white, red, blue color
- Larger size until 13.3"
- Optical bonding



## 墨水屏模组 EPD Module

### 点阵墨水屏

- 黑/白
- 黑白红/黑白黄
- 黑白红黄
- N-color

### 笔段墨水屏

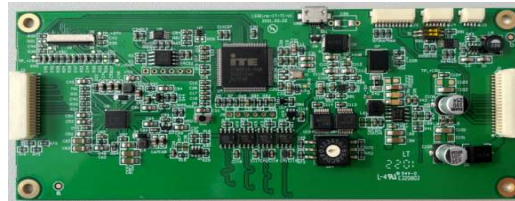
- ITO结构
- FPC结构
- PCB结构
- PET结构
- PI结构

### Matrix type EPD

- BW
- BWR/BWY
- BWRY
- N-Color

### Segment type EPD

- ITO Structure
- FPC Structure
- PCB Structure
- PET Structure
- PI Structure



## T- con Board

- 支持 13.3", 31.2", 42"
- 蓝牙通讯
- Support 13.3", 31.2", 42"
- Blue tooth communication



## 整体解决方案 Total Solution

- 支持多点触控
- 触摸键
- 塑料外壳
- 软件调试或开发
- 代工组装
- Support Multi-touch
- Touch keys
- Plastic housing
- Software debug or development
- OEM assembly

# 产品质量保证

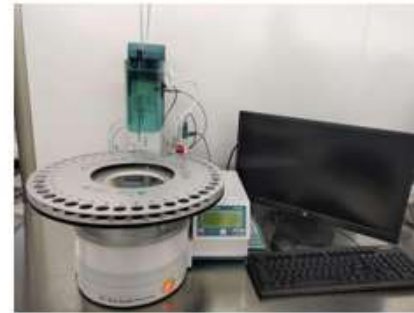
Product Quality Assurance



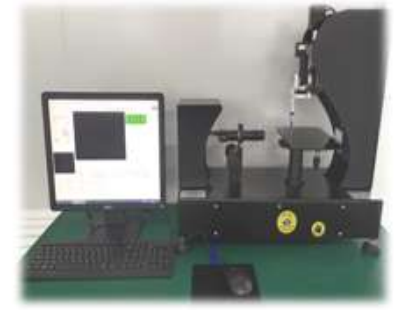
光学测试Optical Test



OM 显微镜 microscope



含水率测试仪  
Moisture constant meter



水滴角测试仪  
Drop Angle Tester



FPC/TCP 拉力测试仪  
Tensile Strength FPC & TCP Bonding



恒温箱  
Thermostat



恒温恒湿炉  
constant TEMP & HUMI  
chamber



恒温恒湿炉  
constant TEMP & HUMI  
chamber



钢球冲击实验机  
Falling roll impact Tester



05

越南工厂规划

Vietnam Factory Planning

# 工厂位置

## Factory Location

Location :  
 26.2Km to Noi Bai International Airport/距离内排国际机场26.2公里  
 40Km to Hanoi /距离河内40公里  
 140Km to Hai Phong Port/ 距离海防港140公里



**Purpose For Vietnam Factory set up :**  
 Better Service to Customers  
 Lower the risk



Factory Location

Industry Park EPE Tariff Free Factory / 业区园区 EPE 免税企业  
 (Export Processing Enterprise 出口加工企业)

## 工厂配置和排期

Factory configuration and Schedule

Clean room: 8000-10000m<sup>2</sup>  
Clean class: 10000



**2023 Oct.**

工厂装修  
factory decoration

**2023 Q4**

样品/试产  
Samples/pilot run

**2024**

EPD 批量  
EPD mass production



**YES! We are to create miracles with you together !**