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志 聖 法 人 說 明 會

Investor Conference

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Mr. Toshio Huang, Executive Vice President of FPD Business Unit

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Place: Sheraton Grand Taipei Hotel

October 31th, 2017

Disclaimer



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Manufacturing Plant



3,795 m²
Taipei



12,000 m²
Taichung



19,800 m²
Guangzhou



34,350 m²
Kunshan



Core Tech



專利
認證 **297** 件

發明
件數 **62** 件

Core Technologies

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Agenda

- 2017Q3 Operating Results
- Growth Opportunities
 - Flat Panel Display (FPD)
 - Printed Circuit Board(PCB)
 - Subsidiary-TCF(PCB)
- Q&A



2017 Q3 營運成果



2017Q3 Operating Results



in TWD millions

	2017Q3*		2016Q3		2016		2015		2014	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Revenue-Consolidated	3,671		2,787		3,885		3,363		3,740	
COGS			1,925	69.1%	2,722	70.1%	2,619	77.9%	2,490	66.6%
Gross Margin			862	30.9%	1,162	29.9%	744	22.1%	1,250	33.4%
Operating Expense			695	24.9%	951	24.5%	968	28.8%	1,038	27.7%
Operating Income	430	11.7%	167	6.0%	212	5.5%	(224)	-6.7%	213	5.7%
Net Non-Op. Profit			(19)	-0.7%	(10)	-0.3%	(419)	-12.4%	70	1.9%
Net Income before tax	385	10.5%	148	5.3%	202	5.2%	(643)	-19.1%	283	7.6%
Net Income after tax	320	8.7%	148	5.3%	200	5.1%	(730)	-21.7%	228	6.1%

Net Income after tax attributed to stockholders of the parent	302	8.2%	158	5.7%	210	5.4%	(496)	-14.7%	243	6.5%
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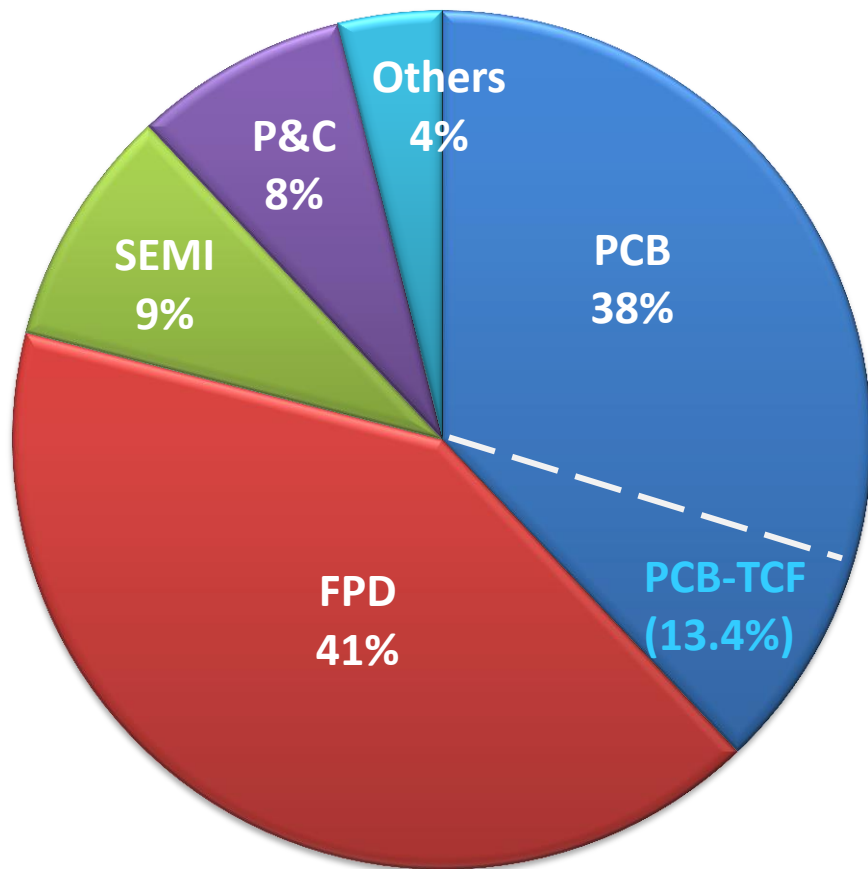
Employees	847		867		932		999	
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ROE	13.94%	6.61%	10.16%	-19.55%	8.33%
EPS (NT\$/after tax)	\$2.02	\$1.04	\$1.39	(\$3.12)	\$1.53
Debt Ratio	61.36%	65.28%	62.17%	62.69%	51.03%

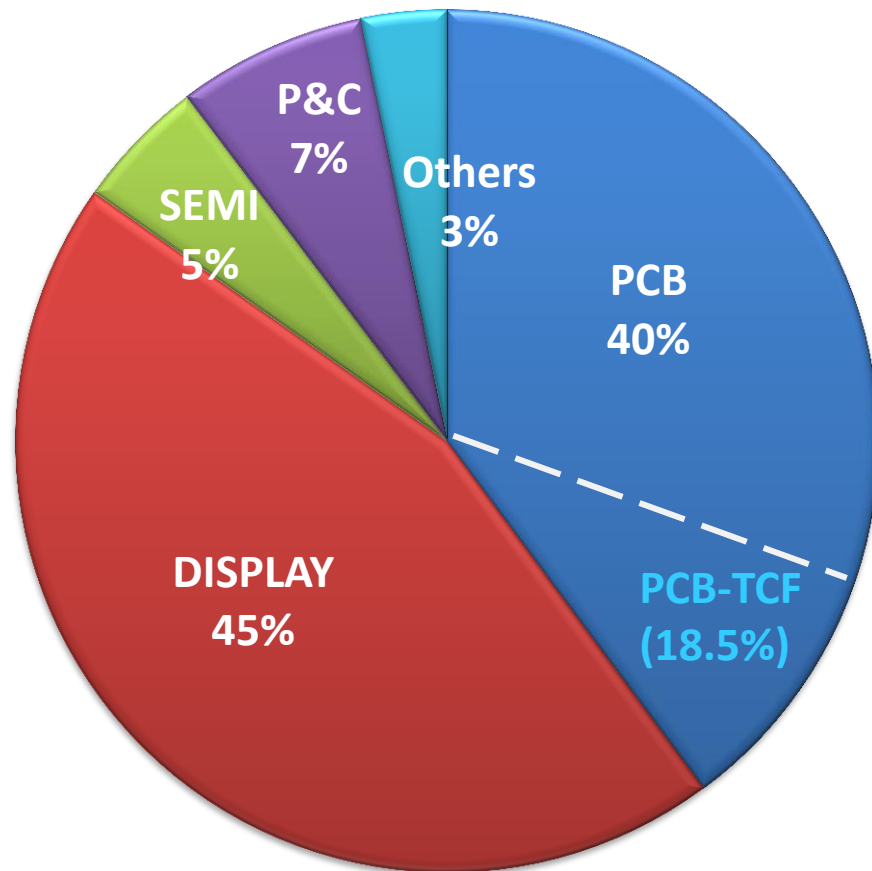
Revenue Breakdown



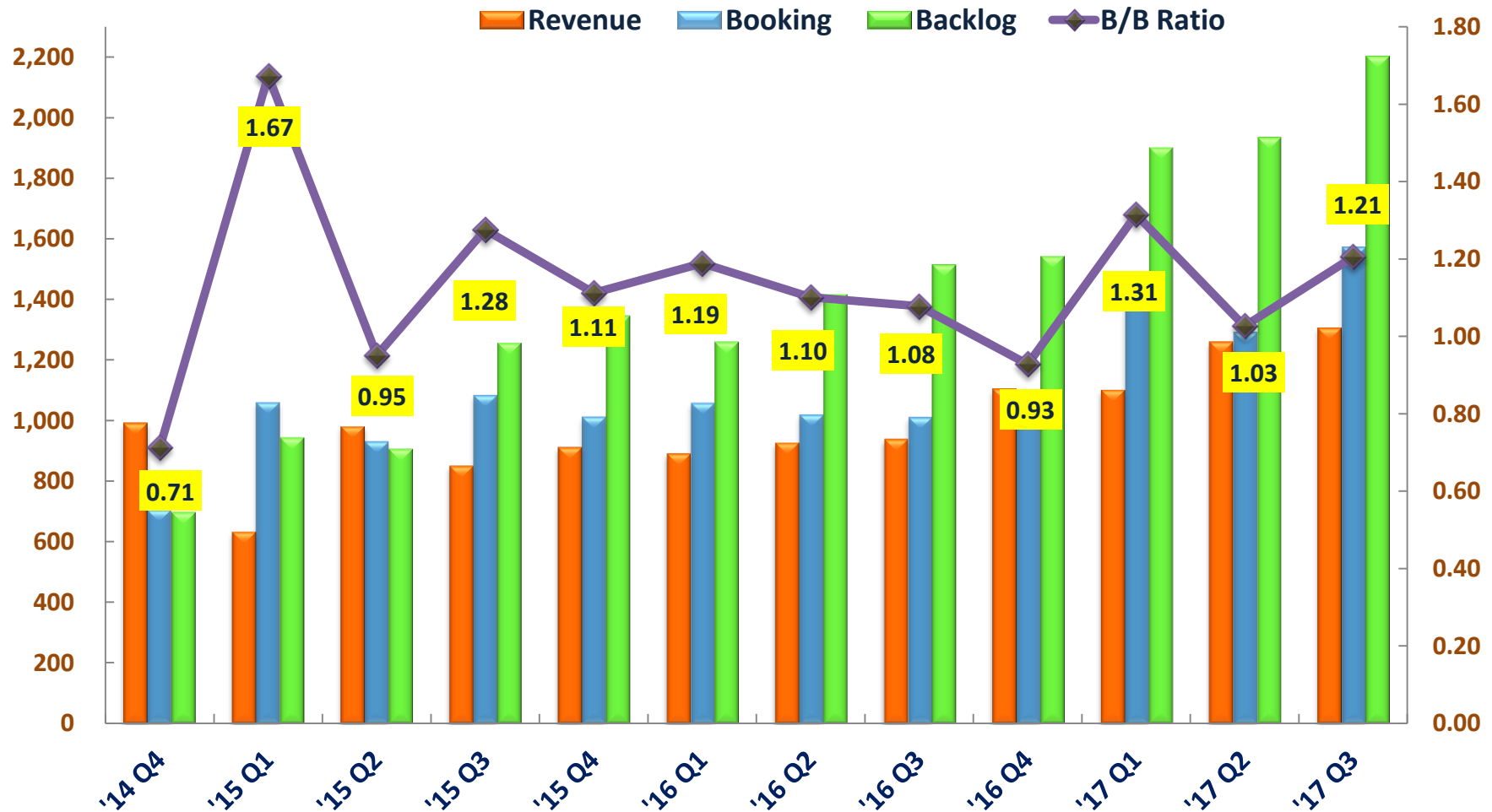
2016



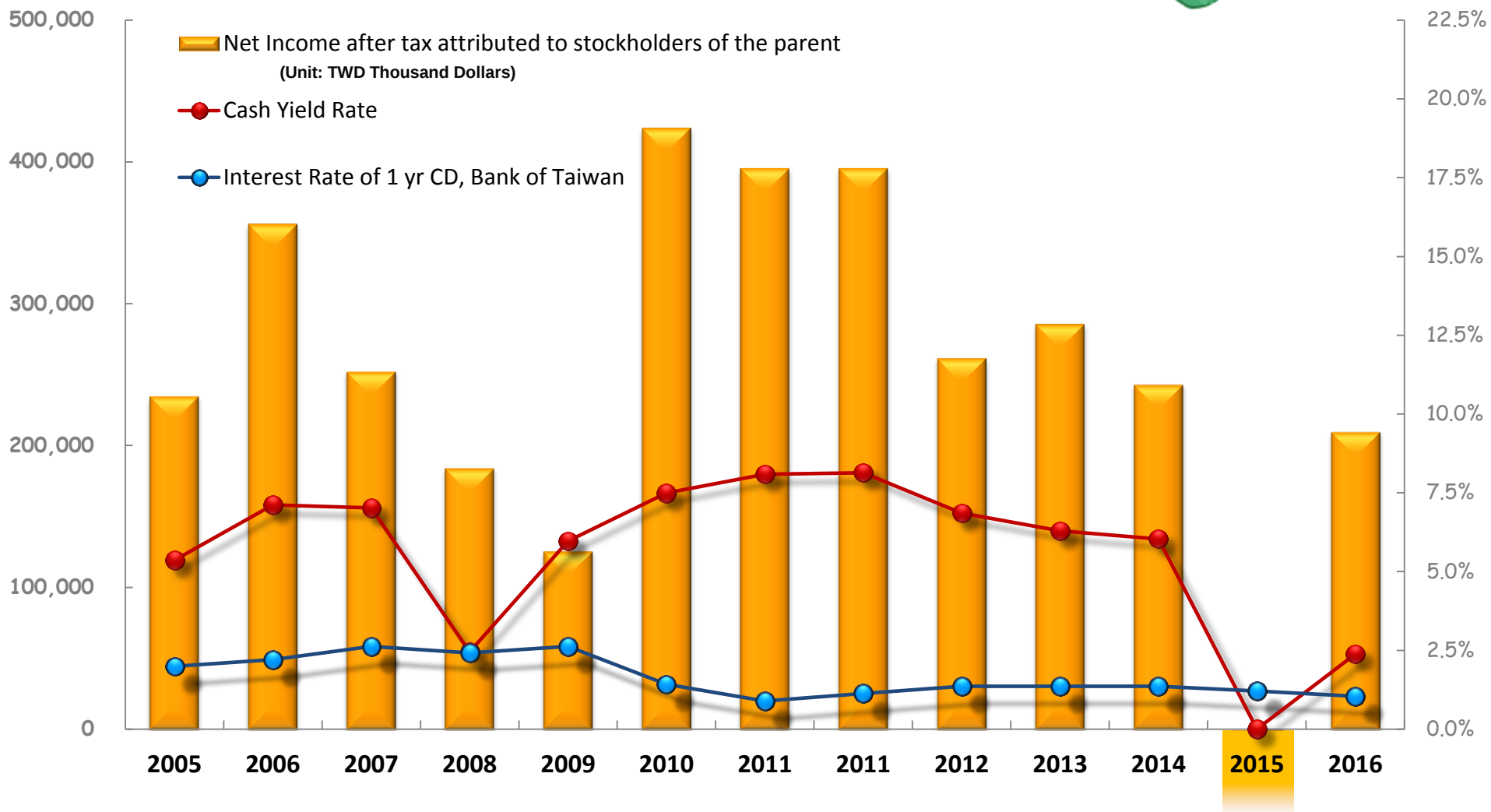
2017/1~9



B/B Ratio & Backlogs



Cash Yield





Growth Opportunities



Core Techs in SEMI/FPD UV & Thermal



真空/自動化
OVEN(SEMI)



UV2 for TFT

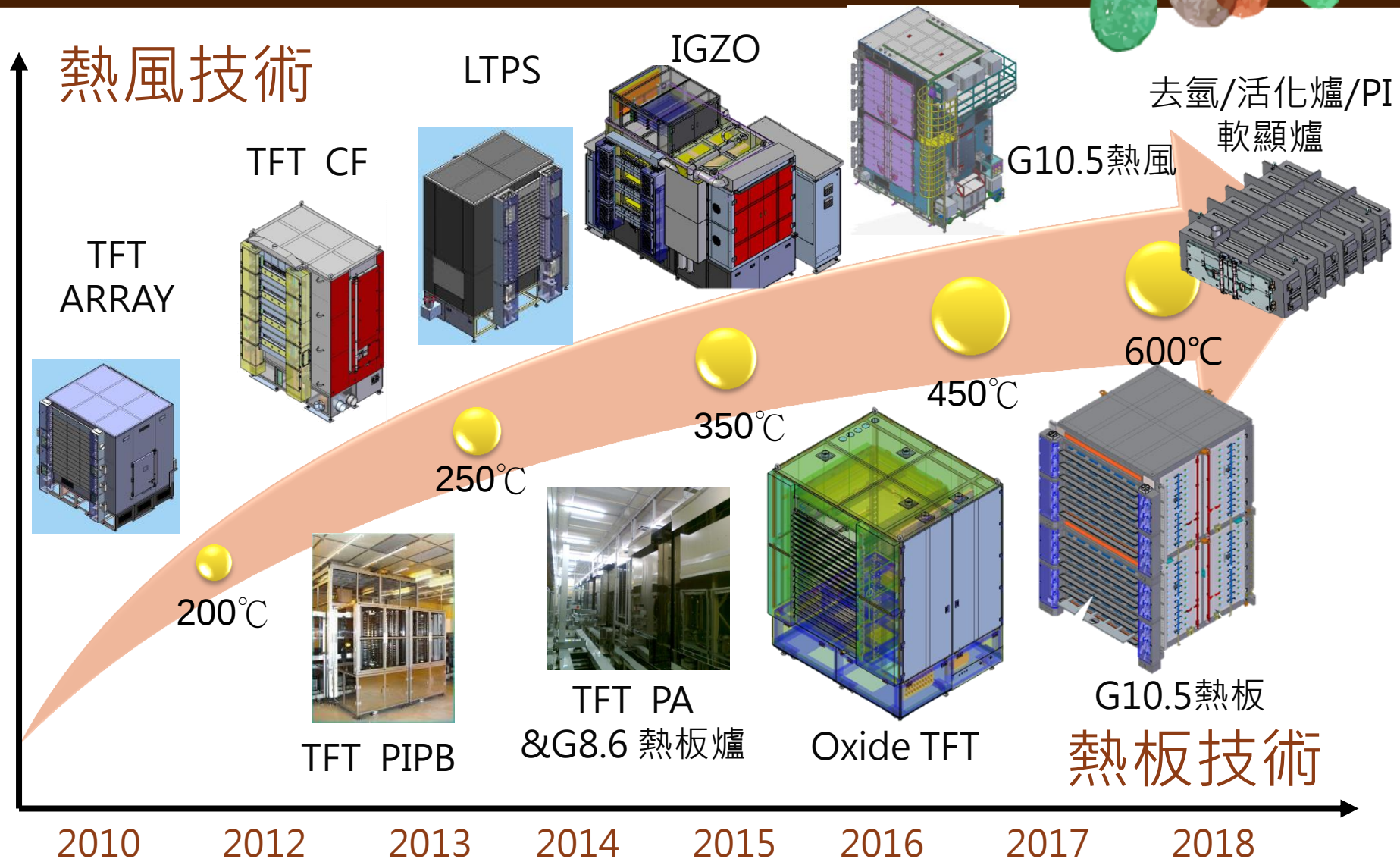


熱板 for TFT

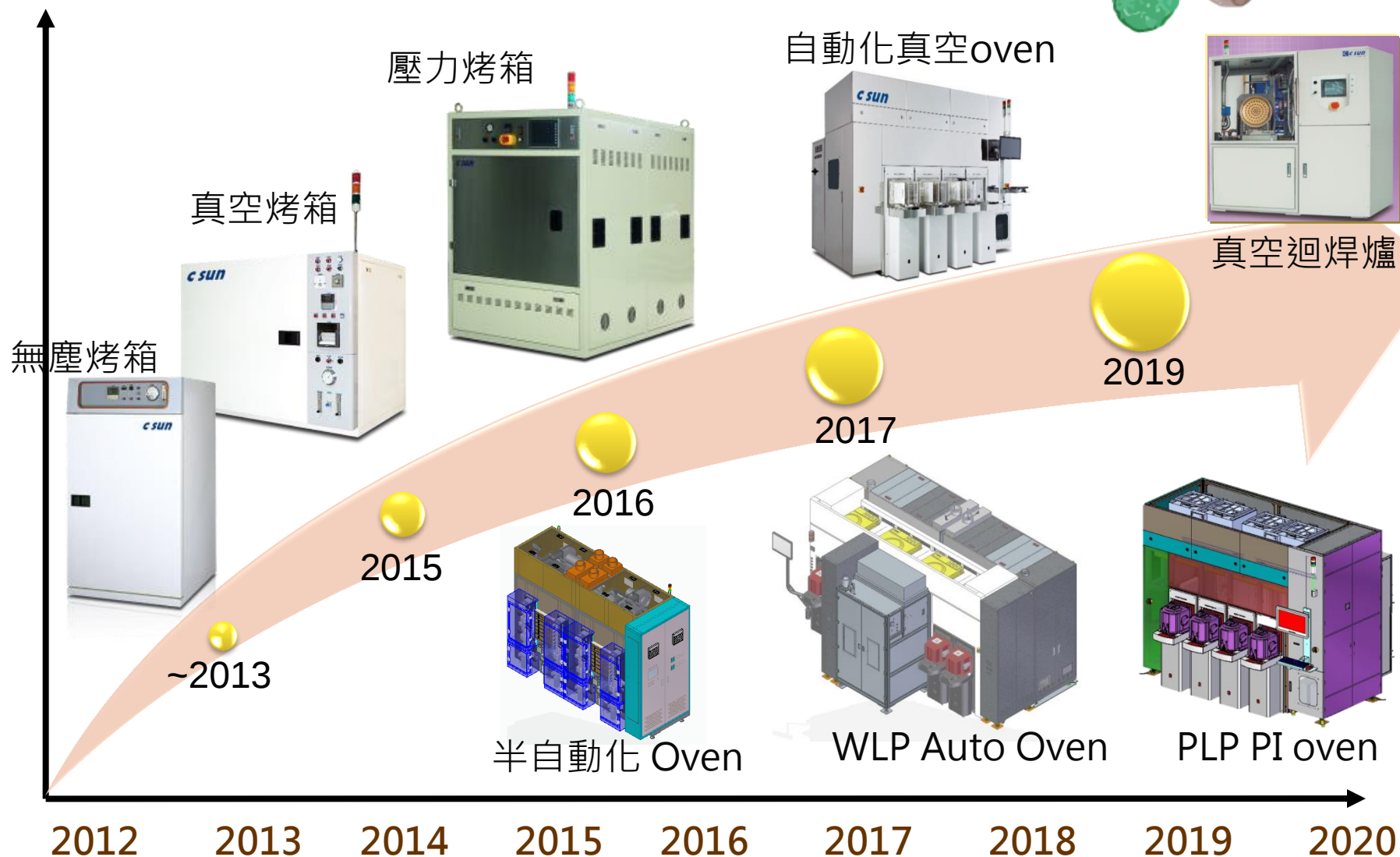


熱風 for TFT

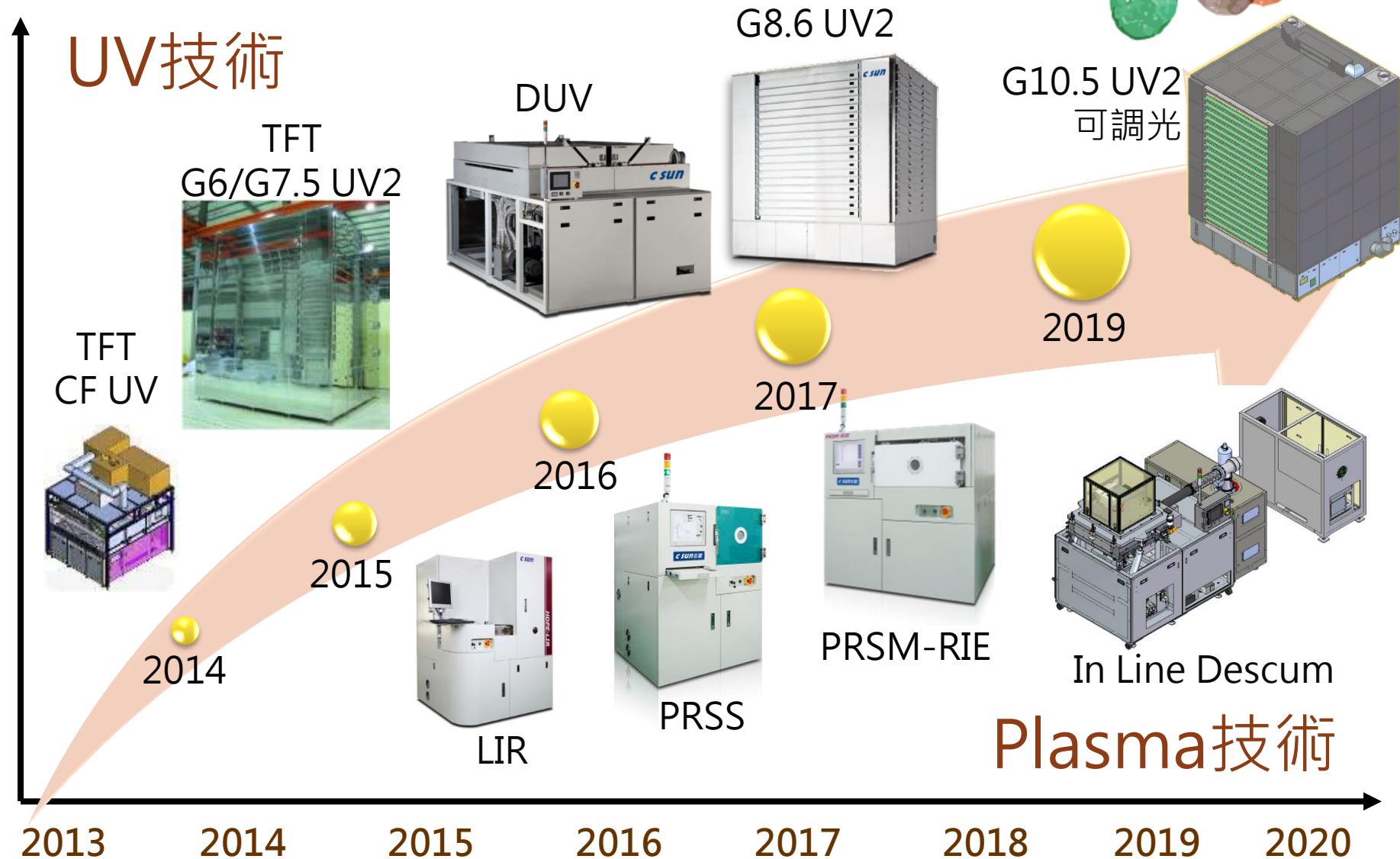
Thermal Product Roadmap in FPD



Thermal Product Roadmap in SEMI



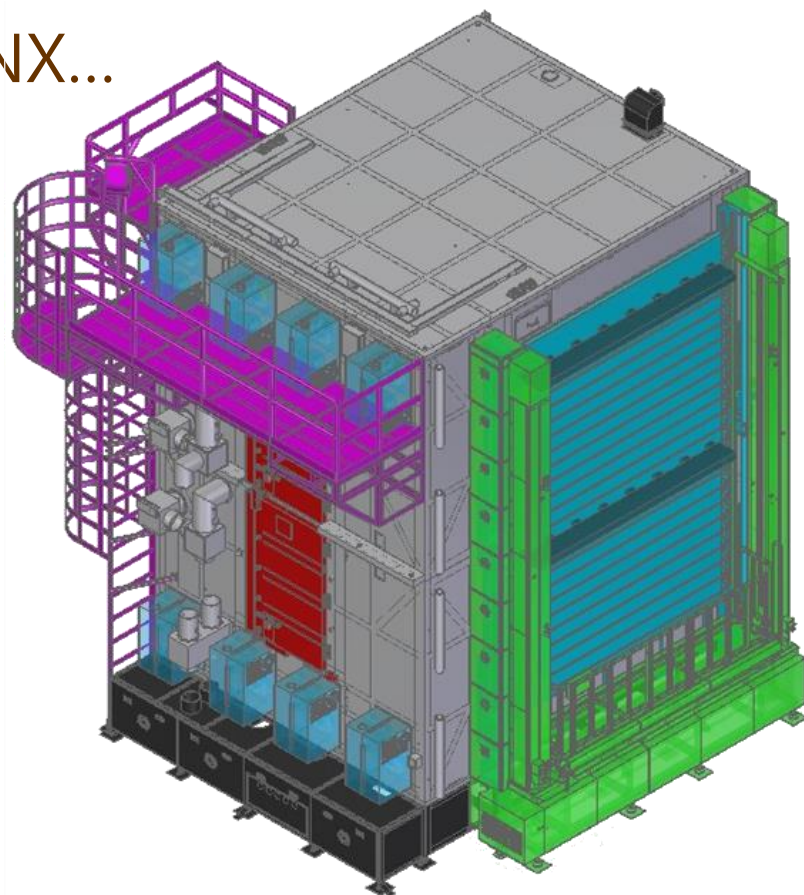
UV/Plasma Product Roadmap in FPD



Seize the Opportunities in Large Size FPD Anneal & Curing

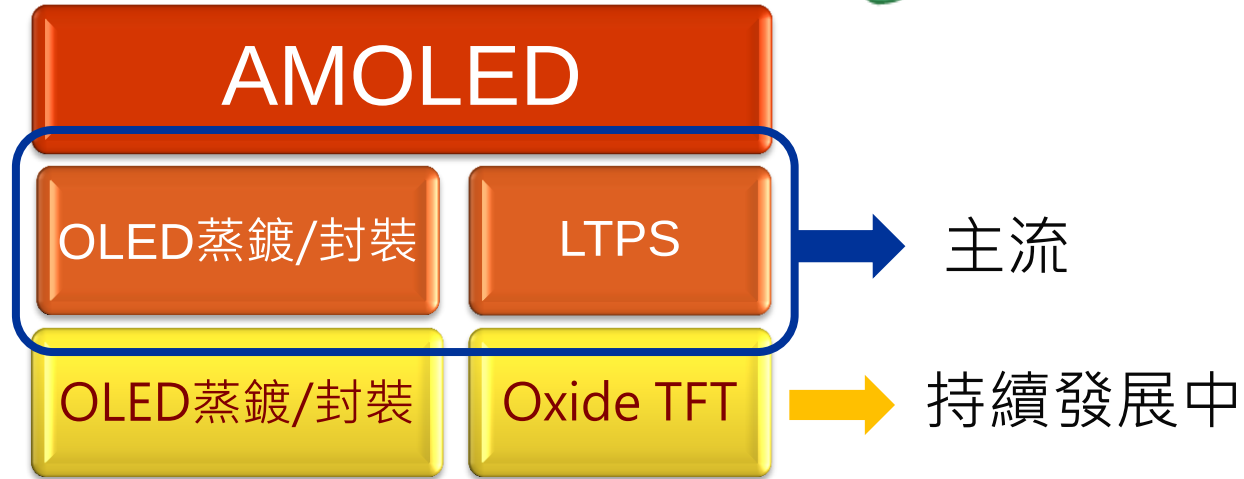
- G8.6/G10.5建廠方興未艾
- 技術:TFT設備超大型化與溫度控制技術提升。
- 客戶群:BOE/CSOT/CHOT/HKC/INX...
- G8.6烘烤設備全球市佔第一。
- 首套G10.5烘烤設備裝機中

製程	製程溫度	志聖設備
Array	230~250°C	ANOV (退火爐)
CF	230~240°C	Post-bake (光阻固烤爐)
CELL	120~160°C	SEPB (框膠固烤爐)



The Prosperous Development of AMOLED

- 產業趨勢:

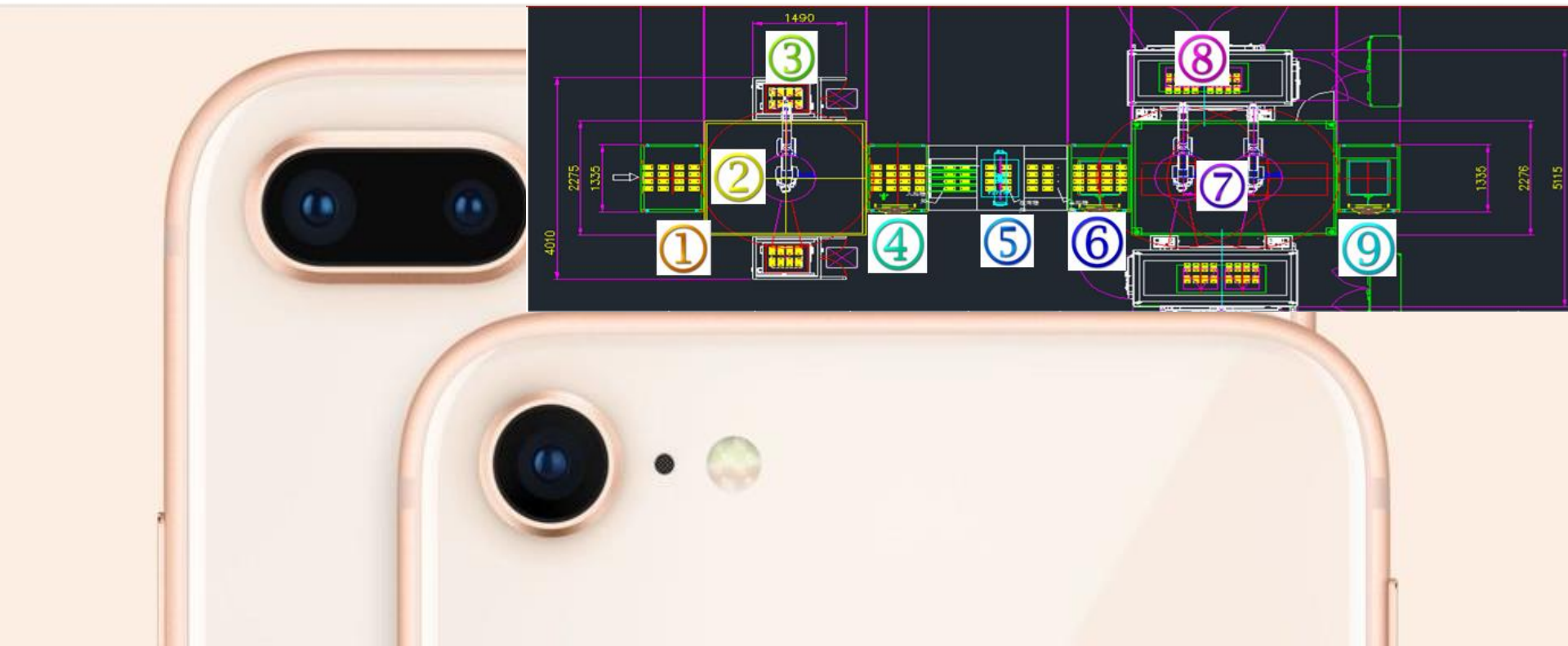


- 背板技術:LTPS/Oxide TFT→退火、去氫、活化製程。
- OLED封裝段:蒸鍍前Curing/蒸鍍後Aging。
- 客戶群:AUO/BOE/CSOT/INX/TIANMA...
- 已切入→LTPS ITO/Metal、**IGZO Oven**製程退火設備
→OLED蒸鍍前Curing/蒸鍍後Aging
- 志聖正發展LTPS 背板製程關鍵技術:去氫、活化爐



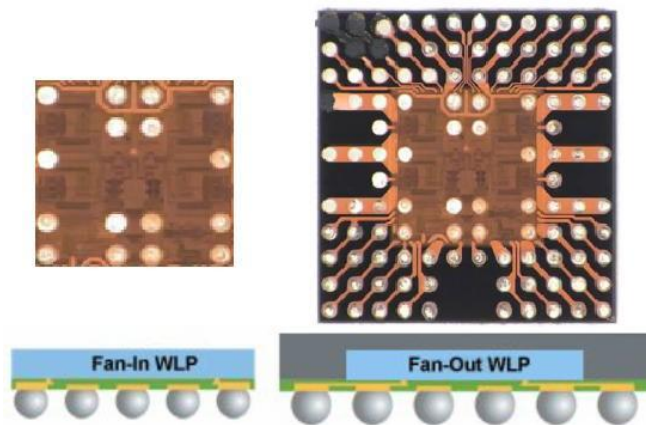
Thermal Process in Glass Case for Smartphone

- 新開發Pre Bake/Post Bake設備導入玻璃機殼製程。
- 設備已量產玻璃機殼中



The Development of Semiconductor Advanced Packaging

- 先進封裝製程發展快速(Fan-Out) ，封裝載具變化(WLP、PLP)。
- 傳統封裝廠朝向自動化整合發展，提高良率降低成本
- 熱技術應用與現況:
 - 先進封裝Molding段:與外商合作切入Molding 固化製程。
 - 與客戶合作開發切入PLP RDL 全自動烘烤設備，製程驗證中
 - 傳統Oven結合自動化技術，導入客戶端
- 客戶群:tsmc、ASE、SPIL、PTI.....。



CSUN's Business in TFT Field

2017現況

AUO L6K 昆山
AUO L7B 中科
AUO L8A 中科
BOE B10 福建
B社 惠州
CEC 南京
CSOT t2 深圳
CSOT t3 武漢
HSD 南科
HKC 重慶
IVO 昆山
L社 長沙
TIANMA 武漢
TIANMA 廈門

A*

后科

2017

H*重慶

H*華中

2017

C*

華北

2017

B*

B9華中

2017

H*

南科

2017

2018展望

C* t2 華南

C* t4 華中

C* t6 華南

I* Fab1 南科

I* T2 竹南

I* Fab5 南科

K* 華東

L* 華南

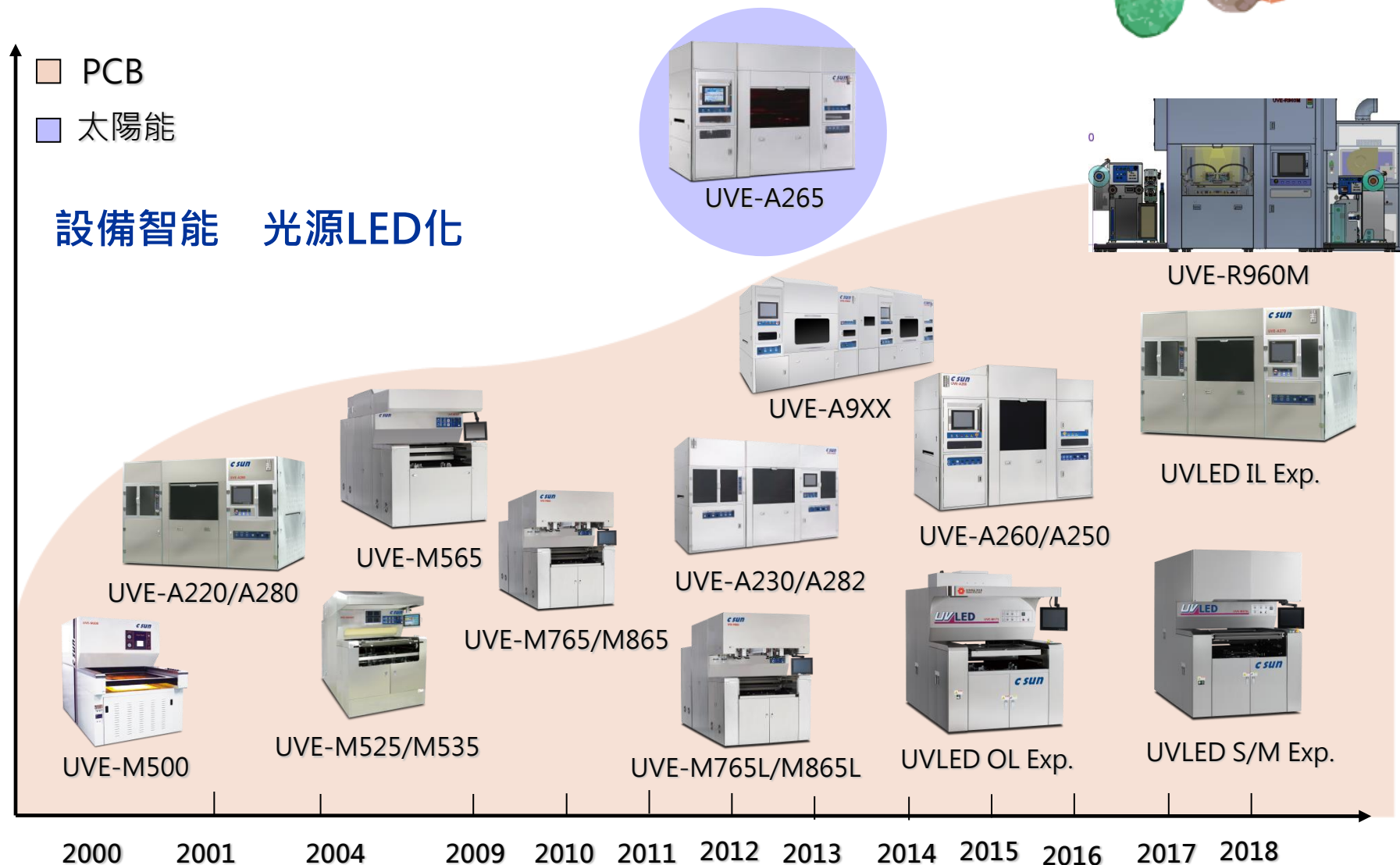
B* B11 華中



Lamination Exposure & Smart Production System in PCB/SEMI/PV



Exposure Product Roadmap

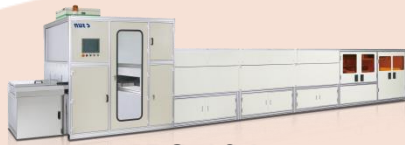


Lamination Product Roadmap -PCB/PV

PCB

太陽能

設備智能 跨產業應用



RC-A24



CSL-A25V+VL-A24



MP-A25



PL-A24



CSL-A25



CSL-A32



CSL-A25PHII



CSL-A25UII



RTR-500PH

1996

2000 2001

2004

2009

2010 2011

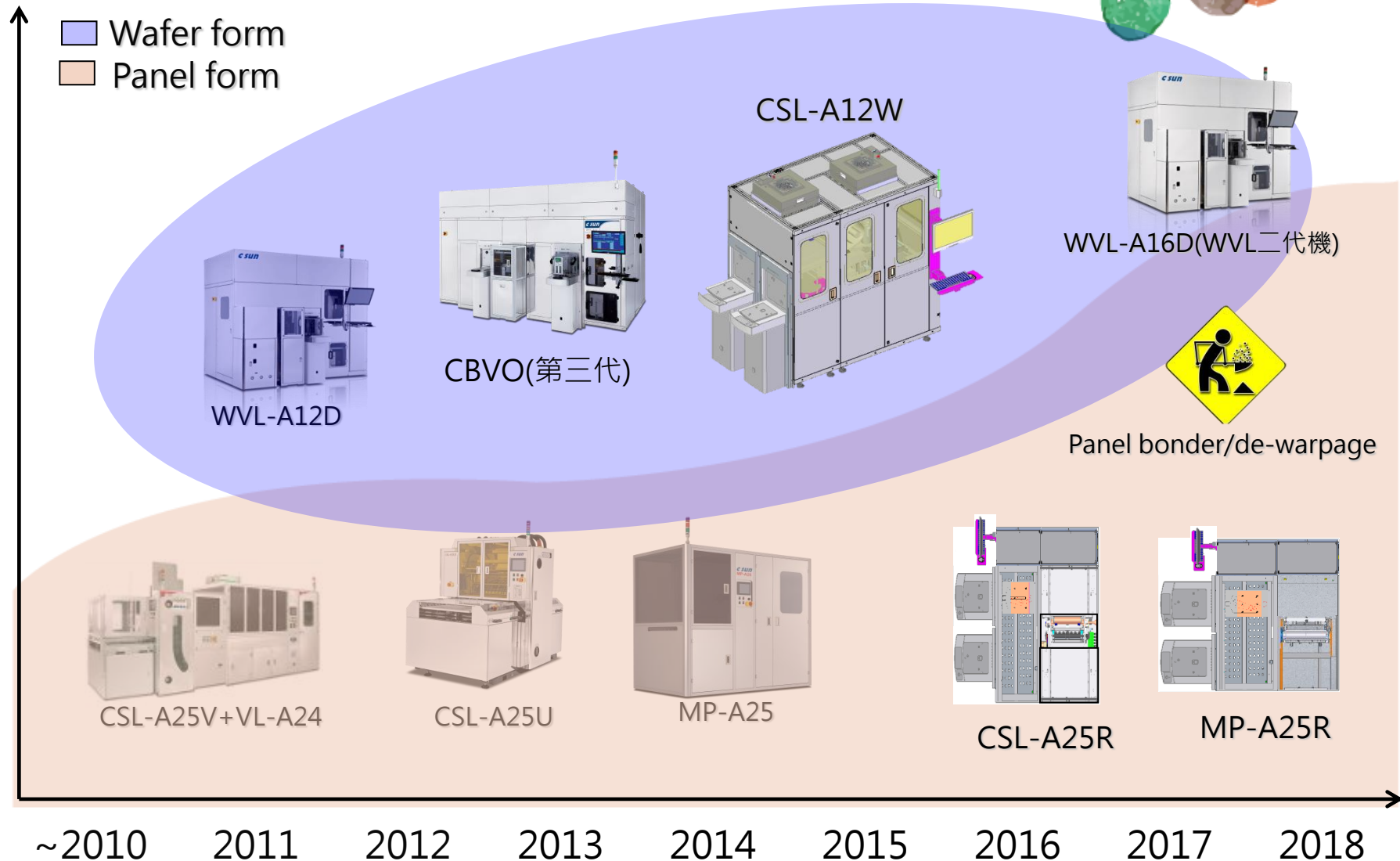
2014

2016

2017

2018

Product Development in Semiconductor Field (Laminator/Bonder/Peeler)



Two Expansion Drivers for the Growth of PCB Industry : Smart Production & ECO.

CSUN智動曝光機

雲端管理平台

設備資訊監控

設備異常通知

設備訊息通知

定期保養功能

耗材更換通知

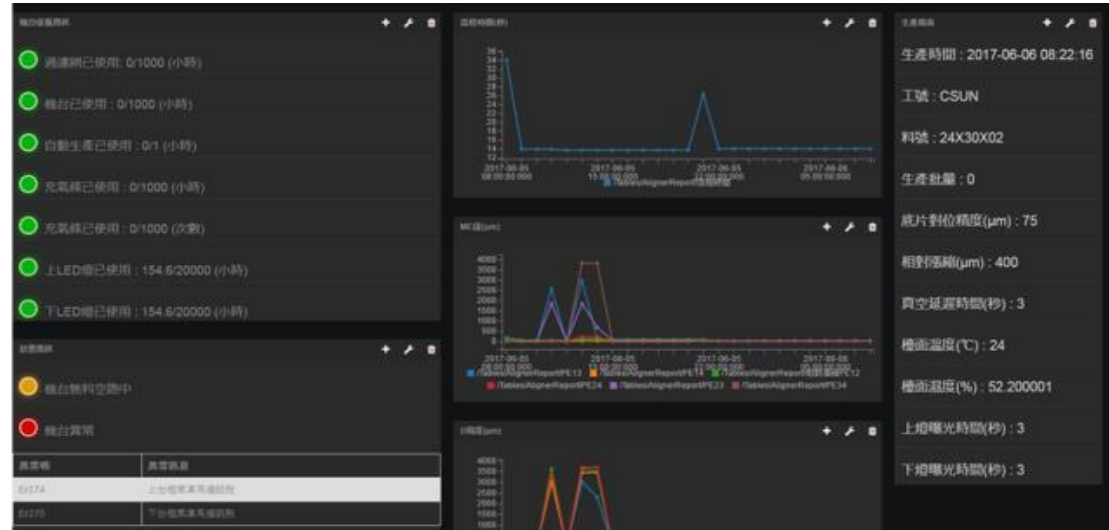
帳號權限管理

郵件發送功能

數據分析

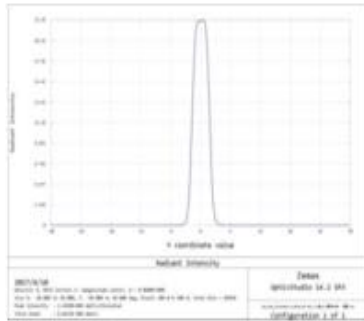
遠端參數設定

多國語言(繁簡英)



Two Expansion Drivers for the Growth of PCB Industry : Smart Production & ECO.

技術發展狀況—High-Resolution UV LED exposure system



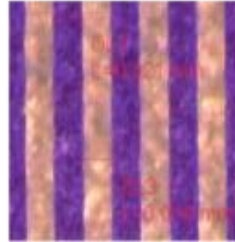
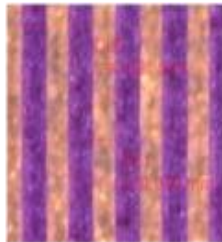
設計模擬將光線收斂至半角2度以下



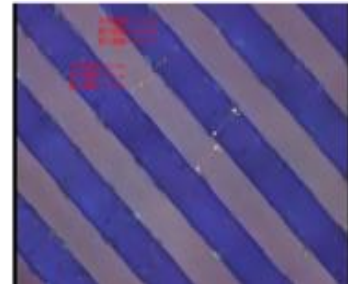
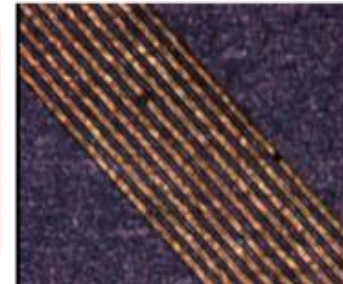
LED Module 設計



Dry Film : ETERTEC APR410
(thickness: 20um)
Substrate : cooper
Mask : PET Films
Exposure Resolution: 20um
(limited by PET Films)



Dry Film : ETERTEC 6000
(thickness: 20um)
Substrate : cooper
Mask : Glass mask
Exposure Resolution: 10um



Trailing the development of semiconductor advanced packaging

- 高階AI先進封裝製程
- 消費性晶片先進封裝製程





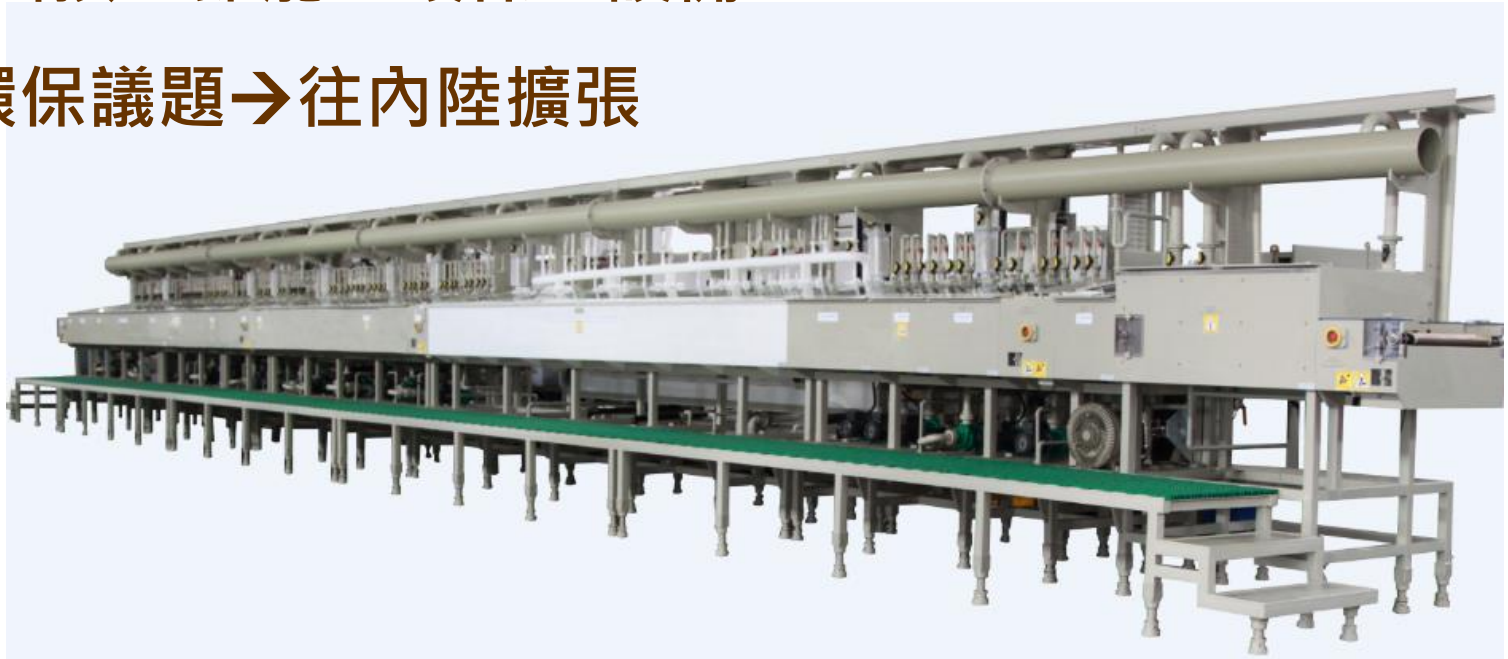
Subsidiary-TCF



Growth Momentum

2017營收成長動能

- Desmear PTH取代既有龍門線設備
 - 耗能、耗水、耗藥水
 - 汰舊換“節能、環保”設備
- 沿海環保議題→往內陸擴張





Thank You

