

# Welcome 久元電子股份有限公司



Welcome



## Brief Introduction

August 16th, 2016



# 2016 VISIT SCHEDULE @久元

*Company Profile*

## Contents

## Time

- |   |             |
|---|-------------|
| <input type="checkbox"/> Brief Introduction of YTEC | 14:00~14:20 |
| <input type="checkbox"/> Q & A                      | 14:20~15:30 |
| <input type="checkbox"/> Line Tour (Free)           | 15:30~16:00 |

# Contents

*Company Profile*

- Brief Introduction**
- Factory Overview**
- Company Milestone**
- Company Management Concept**
- OEM Services**
- R&D Roadmap and Own Product Development**
- Revenue Growth**
- Company Mission**

# Brief Introduction

*Company Profile*

**Found Time** : 1991/July

**Chairman** : Bily Wang

**President** : Jeff Chang

**President of Own Product Group** : Glen Chen

**Employee** : 1093 persons

**Capital** : NTD 1285million (USD 40.6 million)

**Factories** : **Plant 1** : Special & substrate sawing

**SBIP Plant** : IC Back-end turn-key service, ATE&AOI

**Chuangsing Plant** : IC Final Testing service

**Li Hsin Plant** : LED Back-end turn-key service

**An Ping Plant** : LED Testing & sorting

**Xiamen Plant** : LED Testing & sorting

**Changzhou Plant** : LED Testing & sorting

**Wujiang MightYtek Plant** : IC Assembly & Testing

## **Business Items** :

- 1. Semiconductor and LED OEM:** IC testing, wafer sawing, grinding, chip sorting and LED testing, laser scribing, sorting and substrate sawing.
- 2. Design, manufacture and sales of semiconductor equipments:** Full-function IC tester, logic ,analog, Mixed-Signal IC Tester , LED tester, prober and sorter, CCM equipments, AOI system.

# Factory Overview

Company Profile

Plant #1



SBIP Plant



Li-Hsin Plant



Chuangsin Plant



An-Ping Plant



Hsinchu

Tainan

# Factory Overview

Company Profile

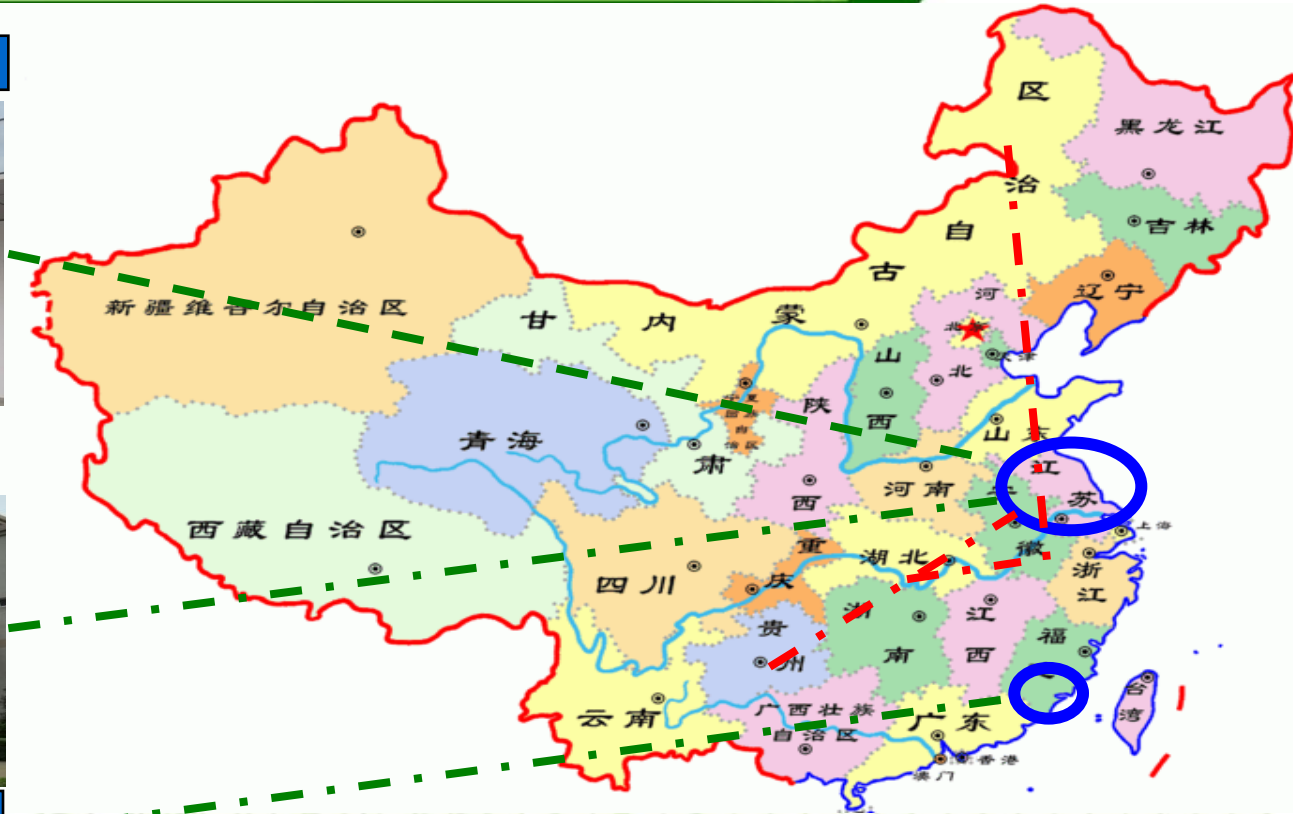
Changzhou YT Plant



WuJiang MightYtek Plant



Xiamen YT Plant



# Company Milestone

Company Profile

- 1991/Jul.** YTEC was founded and the capital is NTD \$ 5 million.
- 1998/Oct.** Develop logic tester (Goblin) with 5 MHz/40 pins.
- 2000/Mar.** Achieved the certification of ISO 9001
- 2000/Jul.** Full-function IC tester was verified by Industry Agency with predominant product development project.
- 2002/Nov.** SEC (Securities and Exchange Commission) approve YTEC to public stock.
- 2003/Nov.** LED OEM service was established.
- 2004/Mar.** Got the approval to establish the branch in Hsin chu SBIP.
- 2004/Mar.29** Listed in Taiwan stock exchange. (Stock No.: 6261)
- 2006/Mar.** Signs the cooperation agreement of the IC test system technology. with Agilent Technologies
- 2006/Dec.** Achieved the certification of ISO 14001 and OHSAS 18001.
- 2007/Jul.** Develop Tainan An Ping plant for LED sorting.
- 2008/May** Develop Li Hsin plant for LED test & sorting.
- 2008/Oct.** Achieved the certification of ISO/TS 16949.
- 2009/May.** To establish the Xiamen Young Tek Electronics Co., Ltd. to provide the LED Backend Turn-key service.
- 2009/Jun.** Solar silicon substrate inspection system was verified Science Park Administration with development project.
- 2010/Mar.** Develop SBIP plant for wafer grinding & sawing.
- 2010/Sep.** To establish the Changzhou YoungTek Electronics Co., Ltd. to provide the LED Backend Turn-key service.
- 2011/Jan.** Achieved the certification of IECQ QC080000.
- 2011/Dec.** To establish the WuJiang MightYtek Semiconductor Co., Ltd. to provide the Semiconductor Backend Testing & Ass'y Turn-key service.
- 2012/Feb.** To establish the Shenzhen Clear Rich Tech. Co., Ltd. to provide the Semiconductor Backend Testing service.
- 2012/May.** Signs the cooperation memorandum, the expansion related marketing functions Development with Yoshikawa Semiconductor Co., Ltd.
- 2013.Dec.** Got the 14th Industrial Excellence Award by Ministry of Economic Industry Agency .
- 2015.May.** Development of innovative measuring technique and system for critical dimension inspection on through silicon vias was verified Science Park Administration with development project.
- 2015.Jun.** Develop Chuangsin plant for IC final testing.
- 2015 Aug.** Got the Corporate Social Responsibility Award by CommonWealth Magazine.



## 經營理念：(Management Concept)

主人翁經營理念；下工程即是客戶。

Treat YTEC as your own company. (Host concept)

Treat all post projects and processes as our customers.

## 工作態度：(Working Attitude)

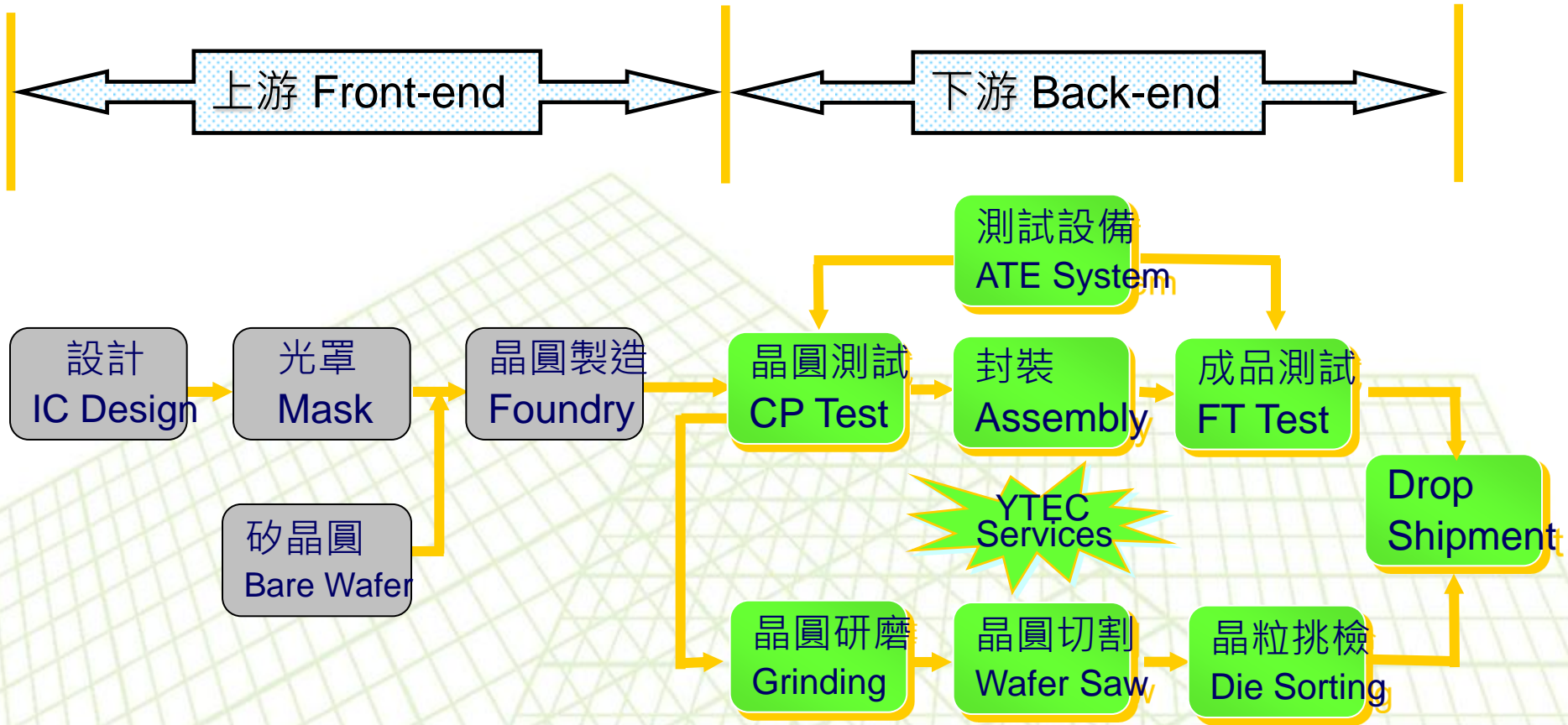
成功者找方法；失敗者找藉口。

A successful person will find the way to overcome a challenge

Loser finds excuses.



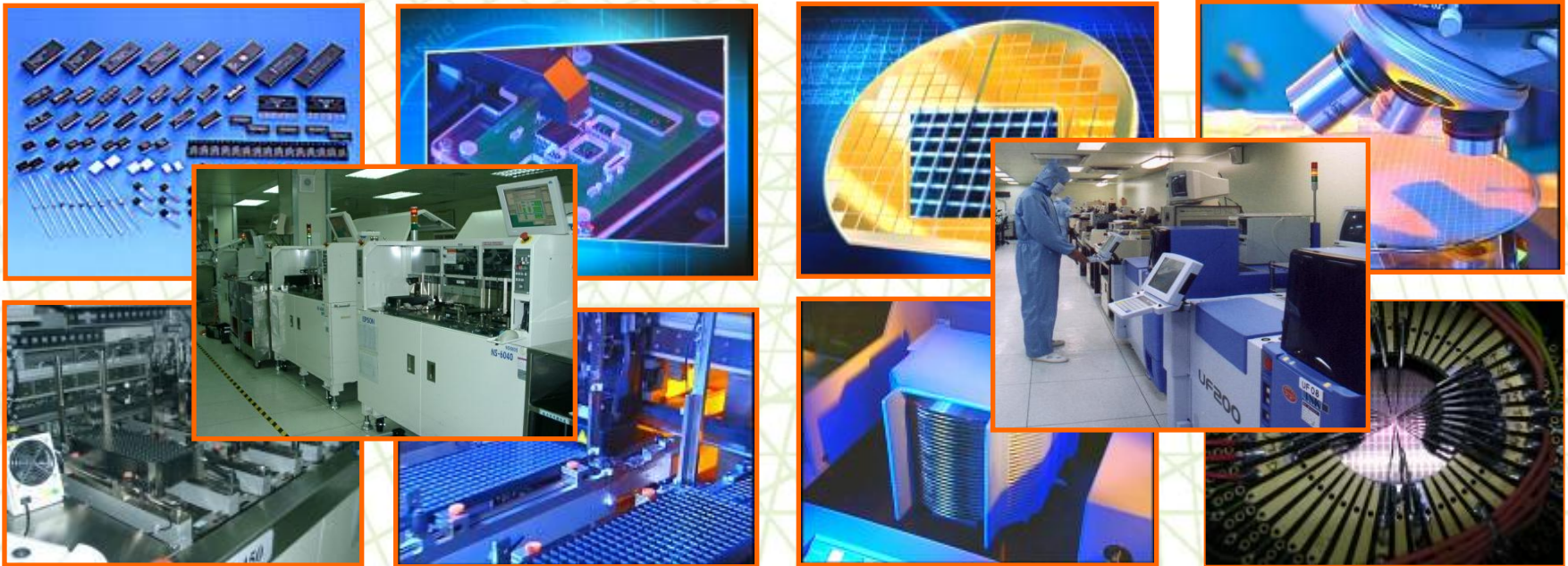
# IC OEM Services Flow



# 專業測試代工服務(IC Testing OEM)

Company Profile

- ❑ **4"~12" Wafer testing (CP)**、**Test program and test kit development** (Probe-card design and manufacture).
- ❑ **IC packaging testing (FT)**、Package type : DIPs、T/SOPs、L/QFPs、QFN、L/BGA...
- ❑ **PC peripheral product**、**Logic**、**Analog**、**Mixed-signal**、No-volatile memory、MCU、**LCD driver IC**、High speed/ High pin count (Scud-1A 512C) testing.  
**CIS**(CMOS Image Sensor)、RF、MEMS、SoC product testing
- ❑ Others : Laser trimming、Lead scanning、Test program and test kit development technical support **Turn-key service** (For example: PKG assembly、Tape-reel、Drop-shipment...).



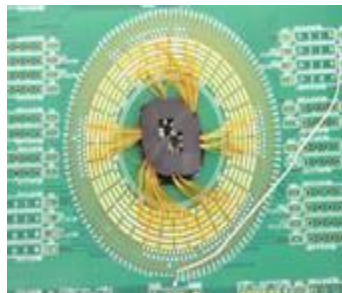
# 針測板設計與製作

## Probe Card Design and Manufacture

### Company Profile



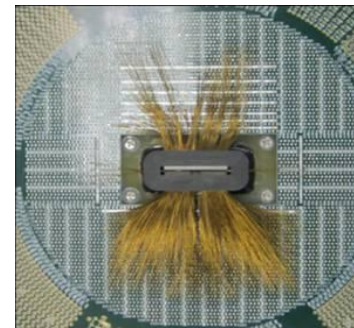
*YT5100 7D (16 Dut)*



*Scud 1A*



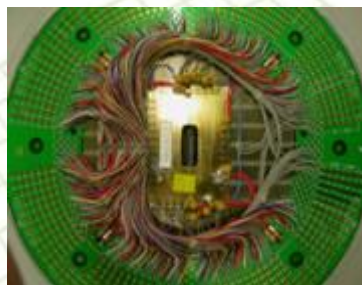
*Yokogawa ST6730 (Tester side)*



*Yokogawa ST6700 (Wafer side)*



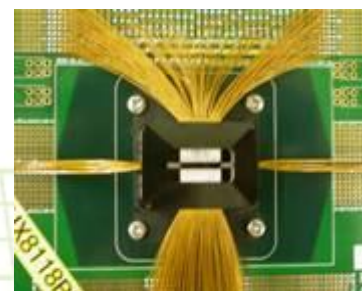
*Agilent HP9400*



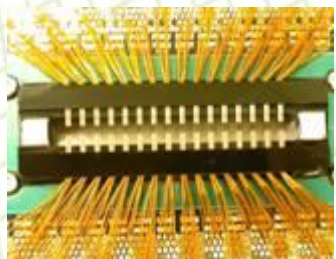
*Yokogawa TS6700 (Tester side)*



*Advantest T5371 (32dut)*



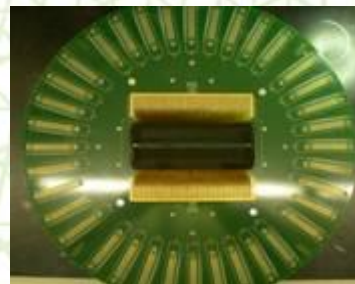
*Advantest T6371 (Wafer side)*



*Advantest T5335P (64dut)*



*Advantest T5335P (4dut)*



*V5400 576Dut  
(Wafer side)*



*V5400 576Dut  
(Tester side)*

# 研磨、切割及挑檢代工服務 (Grinding, Sawing, P&P Service)

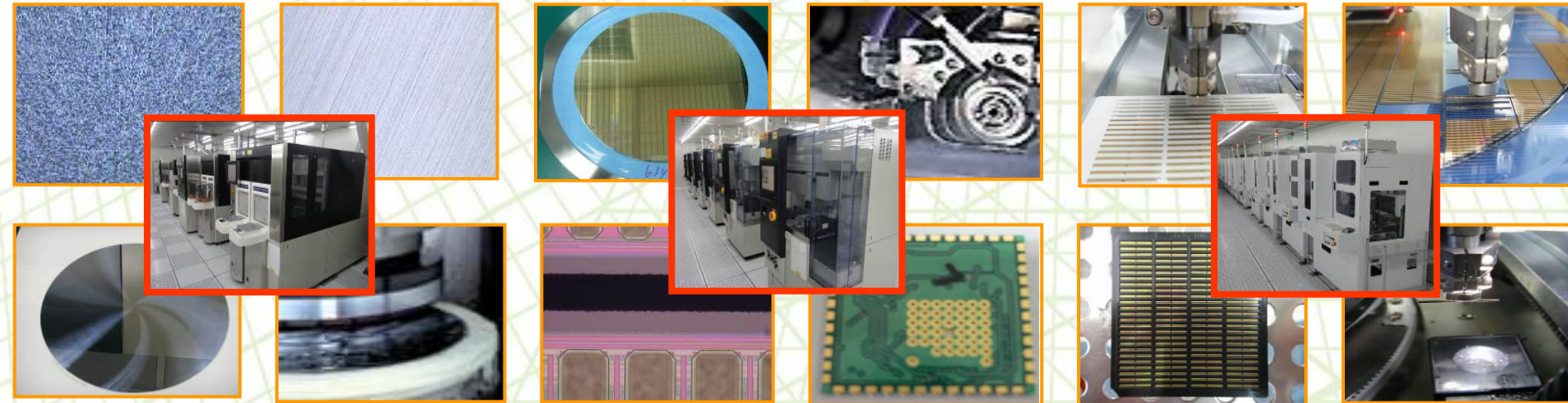
Company Profile

## ❑ IC Grinding、Sawing、Pick & Place

- 4"~12" Wafer back-side grinding、sawing、chip pick & place services for Consumer and gold bump COG products。
- Pick & Place Chip Back-side AOI inspection System inside。

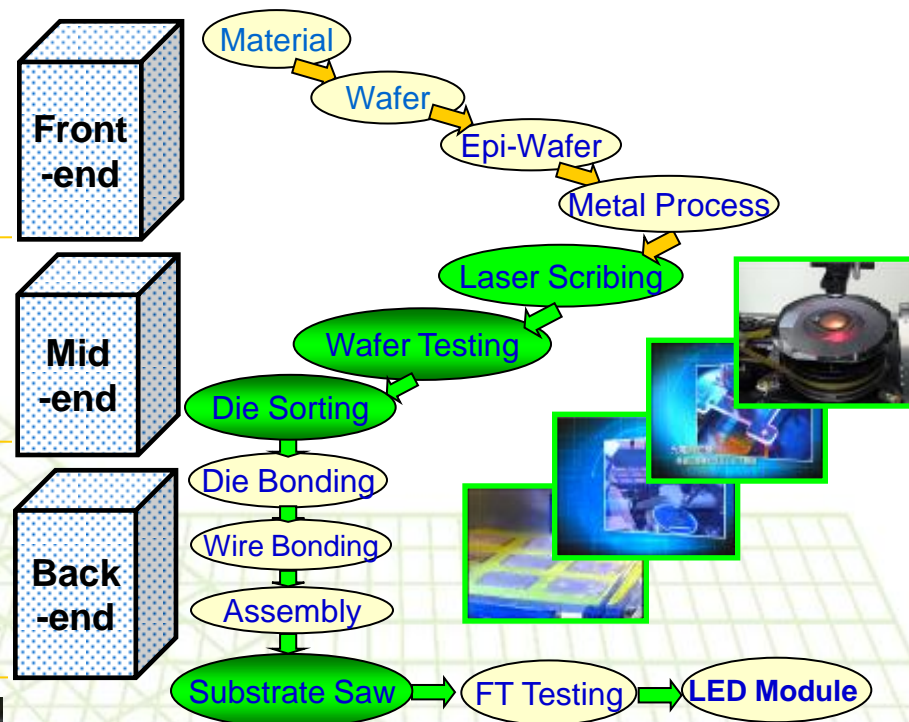
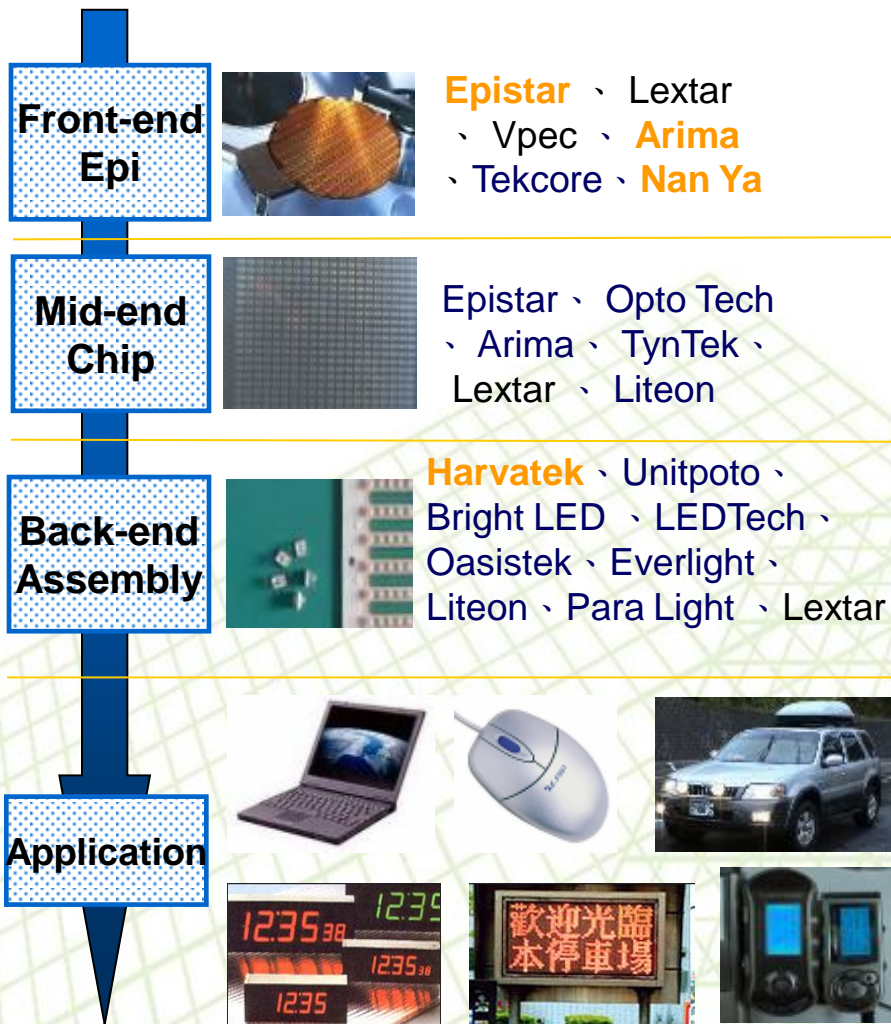
## ❑ Substrate Sawing

- LED package substrate、Glass substrate、Ceramic Substrate、Ceramic+FR4、Lead-frame、QFN package、HTCC、LTCC、PCB。



# LED OEM Services

Company Profile



- **Front-end Product** : Wafer、Epi-Wafer、For example GaAs、GaAsP、AlGaAs、AlGaInP
- **Mid-end Product** : Laser Scribing、Wafer Testing and Pick & Place Die-sorting
- **Back-end Product** : Lamp、Display、SMD、IR transmission module、Optical Communication product、Substrate Saw

# IC Testing Application Equipment

Company Profile



YT5100

全功能高速SoC IC  
測試機



YT6100

Flat Type  
IC測試分類機



YT6200

QFN測試包裝機

Scud-1A

全功能高速測試機



IS-610

全自動晶粒分類機



SB-800

全自動IC固晶機



# IS-610 & SB-800 IC Auto Sorter&Die Bonder

Company Profile

IS-610 IC Auto Sorter



SB-800 IC Die Bonder





# YT5100 & Scud-1A IC Tester

Company Profile

YT5100 High Speed Soc IC Tester

Scud-1A Fully Auto IC Tester



# YT6110 IC Handler / YT6200 QFN Testing & Packing

Company Profile

YT6110 IC Handler



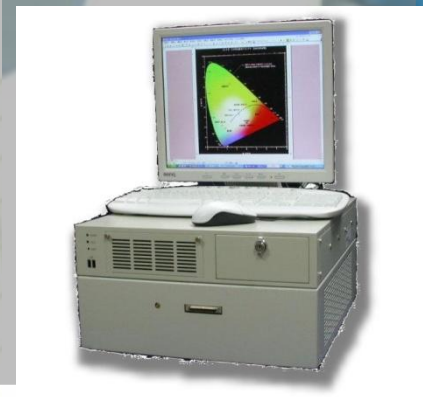
YT6200 QFN  
Testing & Packing



# YT1100 LED Tester(YT1100 LED 測試機)

Company Profile

□ YTSD01 -> YTSD02 -> YT1000 HV LED Tester(8000V ESD)  
-> YT1100 HV LED Tester (Multi-station)

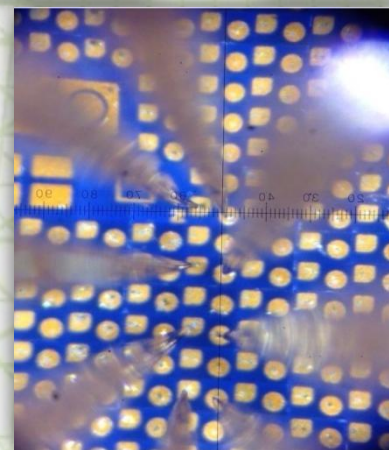
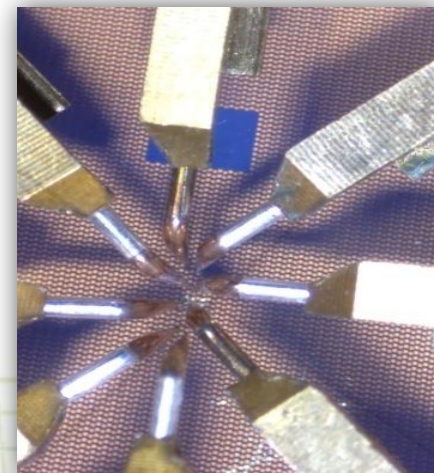


# DB-260 LED Prober(晶粒檢測機)

Company Profile

## PB-260 LED Prober(晶粒檢測機)

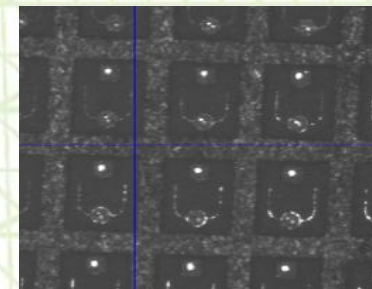
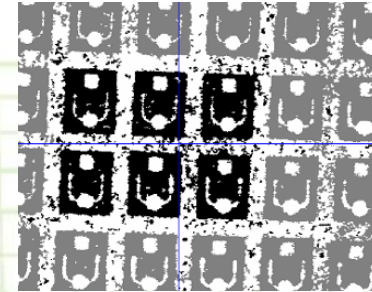
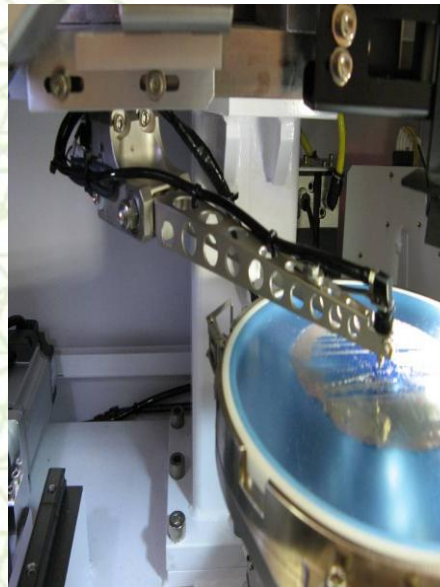
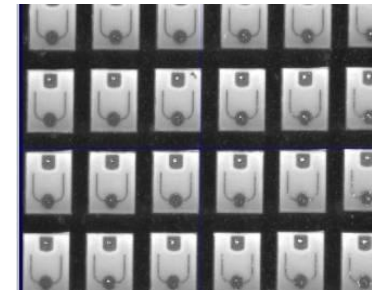
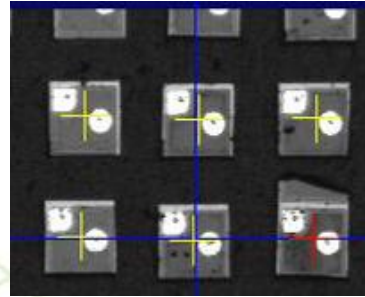
### ◆外觀照片



# LS-360 LED Sorter(晶粒挑檢機)

Company Profile

## LS-360 LED Sorter(晶粒挑檢機)



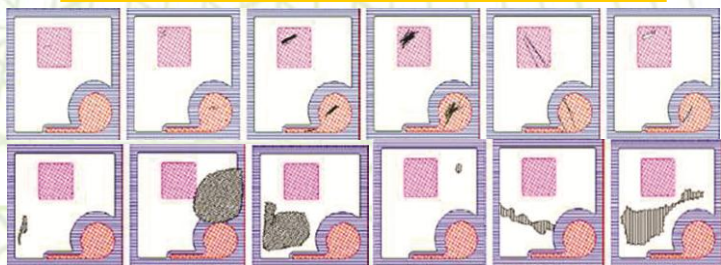
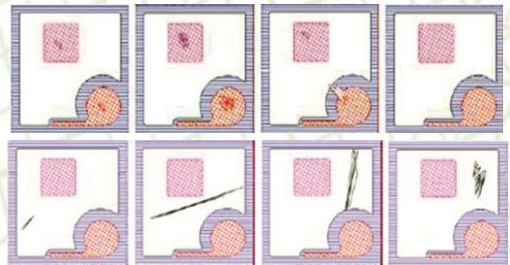
# 自動光學檢測系統(Auto Optical Inspection)

Company Profile

**YT 5311 LED Chip/Wafer/Mask**  
半自動光學檢測系統



**YT 2800 LED Chip/Wafer/Mask**  
全自動光學檢測系統



# 自動光學檢測應用(AOI Application)

Company Profile

被動元件、LED  
產品六面外觀檢測



**YT2300**

元件六面外觀  
檢測機

**YT2330**

雙軌元件六面外觀  
檢測機

LED及被動元件散熱基板  
產品之外觀檢測



**YT2700**

LED及被動元件  
散熱基板之2D AOI  
檢測機



**YT2705**

LED及被動元件  
散熱基板之2D AOI  
檢測機  
(Auto Load/Unload)

# LED Assembly Application Equipment

Company Profile





# 自動光學檢測系統(Auto Optical Inspection)

Company Profile

YT 2300(YT2330) Component AOI

自動光學檢測系統(雙軌)



## Reel type taped products:

- Resistor
- Capacitor
- Inductor
- LED
- IC
- Relay
- Connector
- Fuse



# DB-159 Die Bonder & YT2500 LED Dispenser

Company Profile

## DB-159 Die Bonder

DB-159 泛用型高速固晶机  
High Speed Multiple Applications Epoxy Die Bonder

UPH **15K**  
Cyc. Time 230ms



超宽工作行程: 120 x 280mm  
顶针自动测高、防撞设计  
多种制程选择  
开放式参数设定

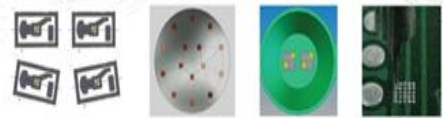


www.wecon.com.tw

DB-159

多制程选择

- ▶ 个别产品角度判断功能(图1)
- ▶ CAD程式输入档案功能(图2)
- ▶ 多晶圆功能(图3)
- ▶ 视讯点胶固晶功能(图4)
- ▶ 多图像教导晶圆功能

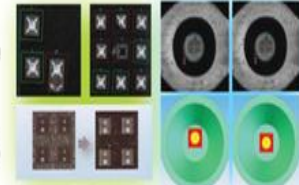


(图1)



影像辨识系统 (图5)

- ▶ 可自行外观检查标准: 发数、PAD污染检查、异物、破裂、发发区污染检查
- ▶ 具有缺晶、掉晶检查功能
- ▶ 视讯化制程可正确判判
- ▶ 晶圆位置设定能以方形或圆形标底显示, 以提高设定精度 (图6)
- ▶ 晶圆检测测修正功能



(图5)

(图6)

规格(Specification)

型号名称	15K (SMD-2003标准, 全上TR制程)	影像辨识系统 LCD	256 Gray level
UPH	15K (SMD-2003标准, 全上TR制程)	Resolution	320x256 pixels
Dispensing accuracy	X/Y: ±1.5μm Z: ±2μm	测厚精度	±1μm
Dispensing speed	Max. 523 wafers/hr.	最大工作高度	180mm
最大承载单位		Dimensions	1310(W) x 2020(D) x 1800(H) mm
Wafer Ring Size	6" (300mm)	所需电压	AC100 / 4A(Normal), 15A(Peak) / 220V
Working Range	φ120mm (4.7")	Pneumatic source	5 kg/cm <sup>2</sup>
Die size	0.4mm - 8.0mm (45°/45°上角最佳配合)	Vacuum	33kg/cm <sup>2</sup> (Sub-atm. Vac. Pump)
送料行程 Length	110" (2800mm)		
Width	47" (1200mm)		
产品高度 Height	600mm		
搬运宽度	Assist CCD x 17" CCD x X12 w/s Stage		

规格如有变更, 恕不另行通知

威控自动化机械股份有限公司  
WECON AUTOMATION CORP.

台湾新竹市埔顶路91号1217室  
No.127, Alley 95, Pudin Rd, Hsinchu City, Taiwan  
TEL:886-3-5734757 FAX:886-3-5734760

www.wecon.com.tw

## YT2500 LED Dispenser



# YT6400 LED Handler & YT6300 LED Tapping

*Company Profile*

*YT6400 LED Handler*



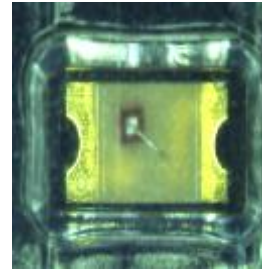
*YT6300 LED Tapping*



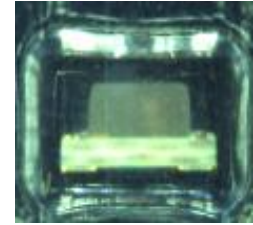
# 自動光學檢測系統 (Auto Optical Inspection)

Company Profile

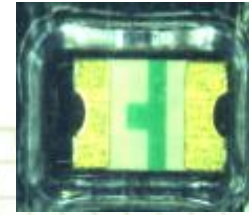
## YT 2210 Reel Type Components 自動光學檢測系統



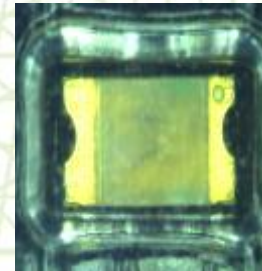
Polarity inverse package



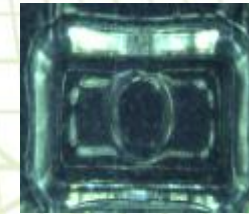
Tilt



Over turn



Mixed package



Empty

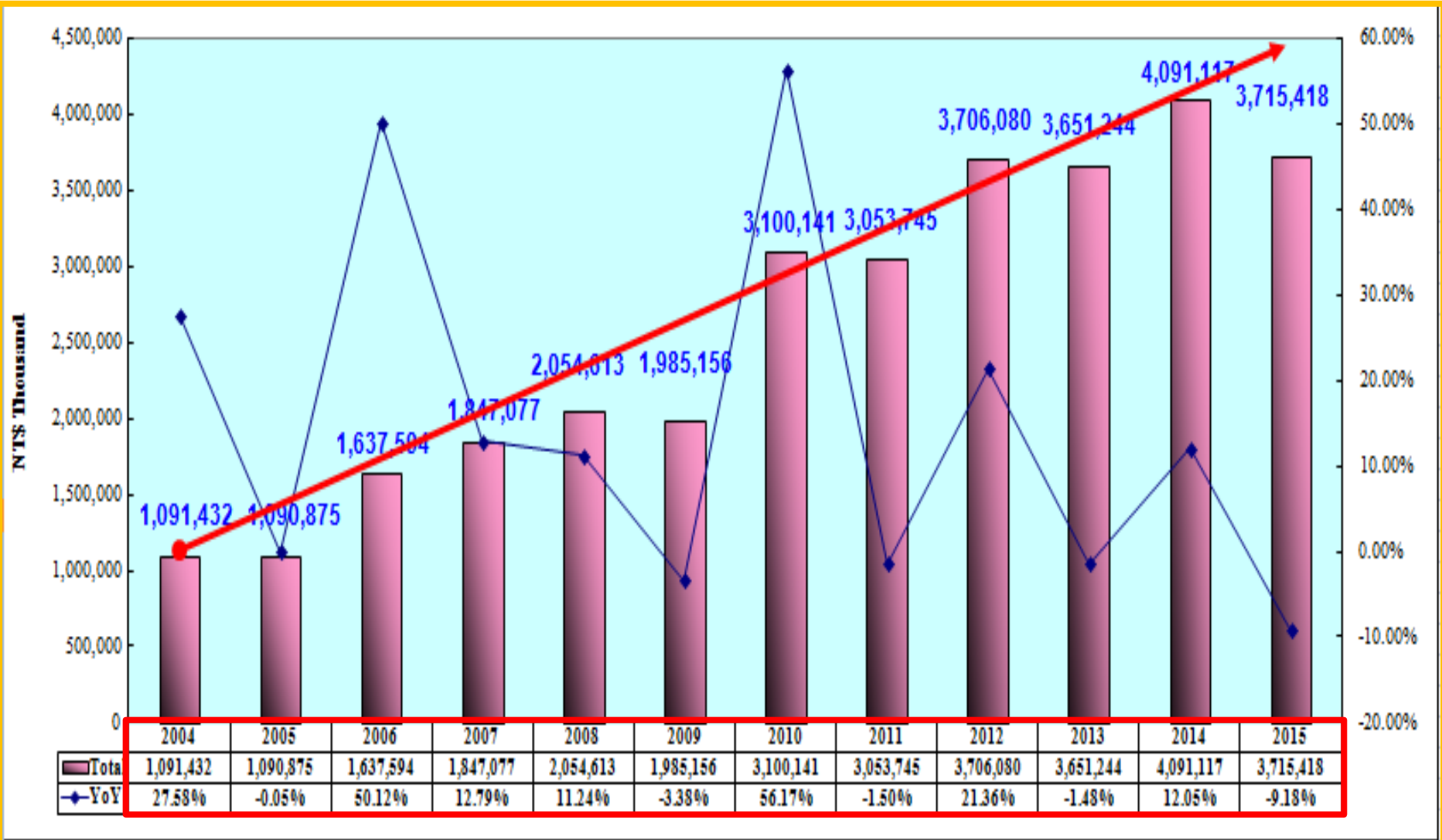
# 2015&2016 Combine Monthly Revenue

Company Profile  
NT\$(Thousand)

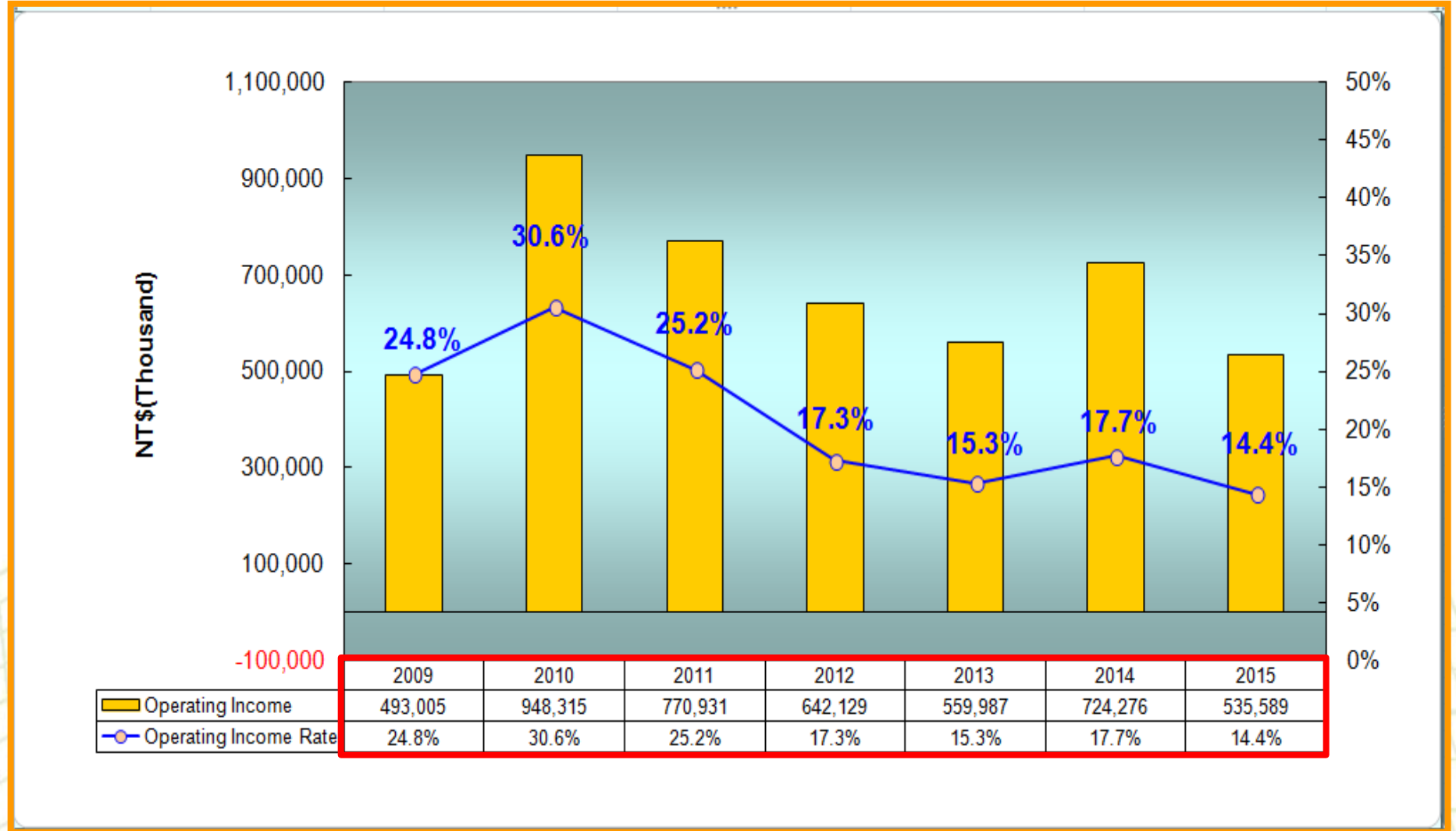
Business Item/Month		Jan.	Feb	Mar	Apr	May	Jun.	Jul.	Aug.	Sep	Oct.	Nov.	Dec.	Total	Share(%)	
切割挑檢代工 Sawing & Sorting OEM	2015	135,098	121,083	160,633	136,076	152,400	139,402	128,503	131,086	132,698	121,859	126,762	125,247	973,195	44.43%	
	2016	114,165	109,432	115,984	110,092	93,623	104,501	102,369						750,166	35.35%	
	YoY	-15.49%	-9.62%	-27.80%	-19.10%	-38.57%	-25.04%	-20.34%							-22.92%	
	MoM	-8.85%	-4.15%	5.99%	-5.08%	-14.96%	11.62%	-2.04%								
測試代工 Testing OEM	2015	153,402	111,282	149,694	133,104	148,019	152,532	149,951	141,844	138,247	150,328	143,175	147,463	997,984	45.56%	
	2016	142,378	120,765	164,015	151,937	163,088	155,305	160,431						1,057,919	49.85%	
	YoY	-7.19%	8.52%	9.57%	14.15%	10.18%	1.82%	6.99%							6.01%	
	MoM	-3.45%	-15.18%	35.81%	-7.36%	7.34%	-4.77%	3.30%								
機器組裝等產品銷售 Own Product Sales	2015	34,665	26,765	62,321	20,593	35,835	25,944	13,107	47,535	24,098	38,551	26,192	29,924	219,230	10.01%	
	2016	48,441	43,220	50,004	34,587	74,485	38,148	25,367						314,252	14.81%	
	YoY	39.74%	61.48%	-19.76%	67.96%	107.86%	47.04%	93.54%							43.34%	
	MoM	61.88%	-10.78%	15.70%	-30.83%	115.36%	-48.78%	-33.50%								
營業收入淨額(Unit:K) Sales Revenue (Net)	2015	323,165	259,130	372,648	289,773	336,254	317,878	291,561	320,465	295,043	310,738	296,129	302,634	2,190,409	100.0%	
	2016	304,984	273,417	330,003	296,616	331,196	297,954	288,167						2,122,337	100.0%	
	YoY	-5.63%	5.51%	-11.44%	2.36%	-1.50%	-6.27%	-1.16%							-3.11%	
	MoM	0.78%	-10.35%	20.70%	-10.12%	11.66%	-10.04%	-3.28%								
營業收入淨額(累計) Sales Revenue (Total)	2015	323,165	582,295	954,943	1,244,716	1,580,970	1,898,848	2,190,409	2,510,874	2,805,917	3,116,655	3,412,784	3,715,418	--	--	
	2016	304,984	578,401	908,404	1,205,020	1,536,216	1,834,170	2,122,337								
	YoY	-5.63%	-0.67%	-4.87%	-3.19%	-2.83%	-3.41%	-3.11%								
總計代工成長 OEM Growth (Total)	2015	288,500	232,365	310,327	269,180	300,419	291,934	278,454	272,930	270,945	272,187	269,937	272,710	1,971,179	--	
	2016	256,543	230,197	279,999	262,029	256,711	259,806	262,800						1,808,085		
	YoY	-11.08%	-0.93%	-9.77%	-2.66%	-14.55%	-11.01%	-5.62%							-8.27%	
	MoM	-5.93%	-10.27%	21.63%	-6.42%	-2.03%	1.21%	1.15%								

# 2004~2015 Combine Revenue Growth

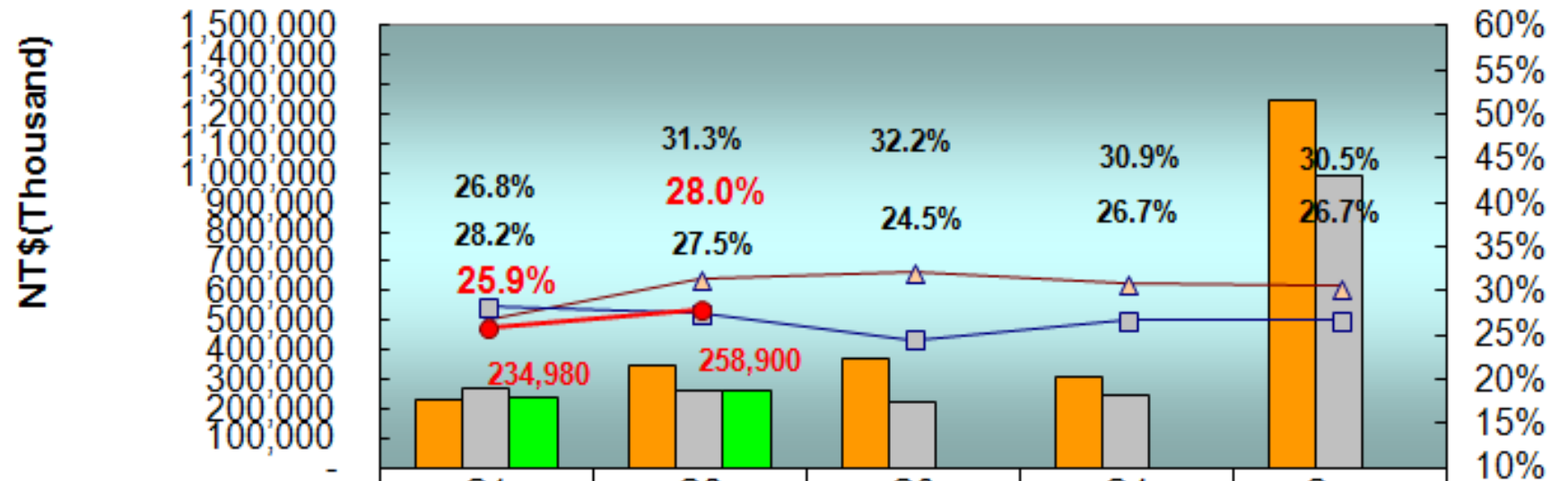
Company Profile



# 2009~2015 Combine Operating Income



# 2014~2016 Combine Gross Profit

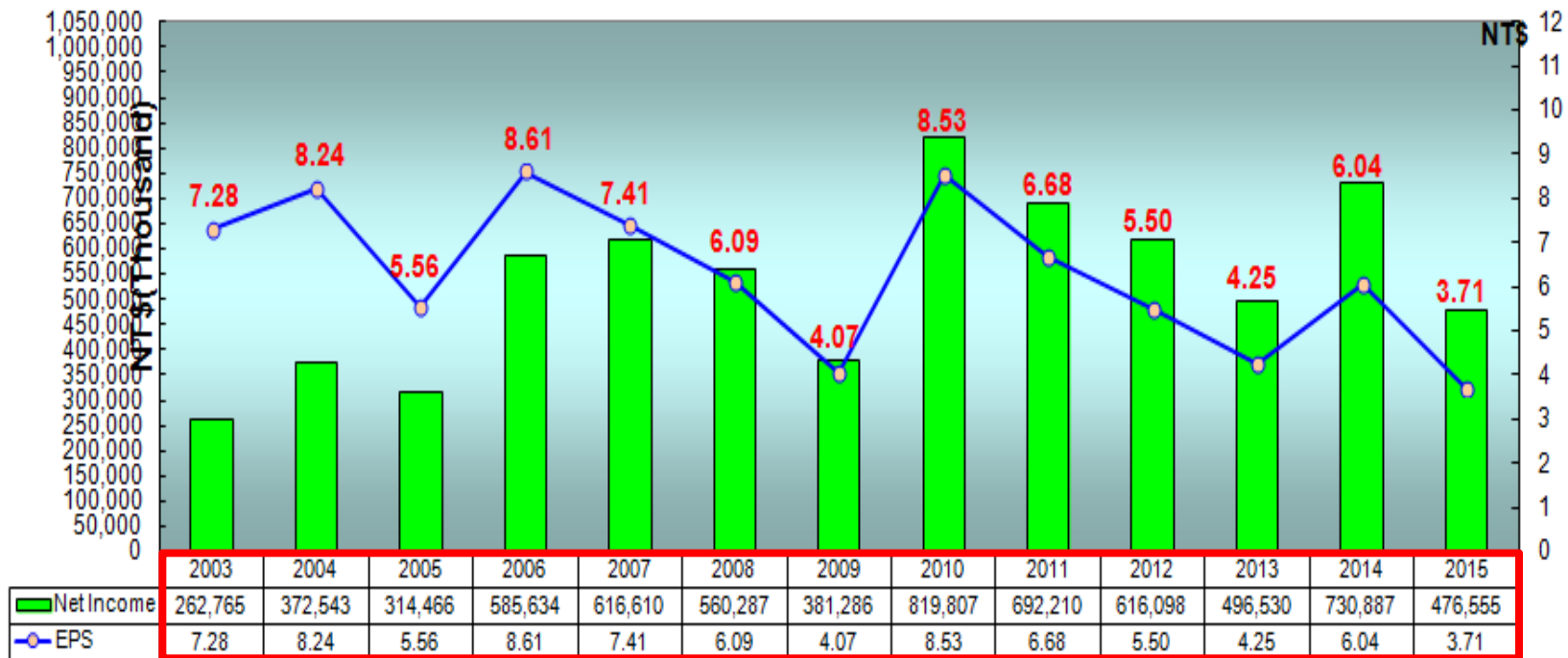


	Q1	Q2	Q3	Q4	Sum
2014 Gross Profit	230,235	342,967	368,603	306,106	1,247,911
2015 Gross Profit	268,809	259,974	221,886	242,449	993,118
2016 Gross Profit	234,980	258,900			
2014 Gross Margin	26.8%	31.3%	32.2%	30.9%	30.5%
2015 Gross Margin	28.2%	27.5%	24.5%	26.7%	26.7%
2016 Gross Margin	25.9%	28.0%			



# Yearly Net Income & EPS

Company Profile



# Business Expansion Status(相關產業之狀況)

## Company Profile

- **半導體及光電切挑代工服務**：2016年Q2營收QOQ降-9.24%、2016年7月MOM微降2.04%、低於年初預期,因此將持續追蹤、另LED在新的應用提昇下、公司亦開發新專案,應可適時提供市場成長之需求、相信可挹助公司之營收成長。
- **IC測試系統、IC固晶、挑揀設備及QFN測試包裝機、分類機開發**：成功的開發完成100MHZ 768/1536 pins全功能IC測試機、針對多媒體、Digital TV及高速邏輯SOC產品並行測試、並導入量產、更高階機種亦將陸續上市、另研發出IC封裝製程之固晶及挑揀設備與QFN測試包裝機及分類機、可應用於IC封裝製程及成品測試生產、更具備三合一功能(測試、外觀檢測及包裝)、以提昇IC測試代工服務之競爭優勢。
- **CIS、CCM、LED後段生產設備及AOI設備開發**：成功開發完成CIS(CMOS影像感測系統)、具備高速影像處理及完整電性測試之解決方案、並導入代工服務、挹助營收。自行開發之CCM(影像感測模組測試設備)、LED後段生產設備及AOI(自動光學檢測系統)等設備、因應市場需求將擴展銷售、AOI設備研發係以解決半導體及光電等產業在目檢之視覺盲點並可大幅節省人力、並已將光電技術結合影像分析等與自動化設備設計、成功研發出各類型外觀檢測機。  
綜觀設備銷售2016年Q2營收YOY成長78.73%、QOQ成長3.92%、2016年1~7月營收YOY成長43.34%符合預期、設備研發之成效已陸續顯現、因此將持續追蹤、相信在持續開發新產品及功能提昇下、展望未來應可持續挹助業績成長之動力。
- **半導體代工服務**：2016年Q2營收YOY成長8.46%、QOQ成長10.11%、2016年1~7月營收YOY成長6.99%、MOM成長3.3%符合預期、因此將持續追蹤、而YTEC在持續開發新產品與互補及平衡的產品線發酵下(如LCD、RF、MEMS..etc)、展望未來應可持續挹助業績成長之動力。

# Share payout composition and history

Company Profile

Year		96年度 (2007)	97年度 (2008)	98年度 (2009)	99年度 (2010)	100年度 (2011)	101年度 (2012)	102年度 (2013)	103年度 (2014)	104年度 (2015)	105年度 (2016)
		配95年度 Profit(2006)	配96年度 Profit(2007)	配97年度 Profit(2008)	配98年度 Profit(2009)	配99年度 Profit(2010)	配100年度 Profit(2011)	配101年度 Profit(2012)	配102年度 Profit(2013)	配103年度 Profit(2014)	配104年度 Profit(2015)
Cash(NTD)		\$4.00	\$4.00	\$3.00	\$3.00	\$4.671	\$5.238	\$4.659	\$3.668	\$5.000	\$3.300
Free	Pair stock of	\$1.00	\$0.50	\$0.10	\$0.10		\$0.098	\$0.099	\$0.10		
Stock	Capital reserve fund	--	--	--	--	\$0.093	\$0.095	--	--	--	--
EPS(NTD)		\$8.61	\$7.41	\$6.09	\$4.07	\$8.53	\$6.68	\$5.50	\$4.25	\$6.04	\$3.71

# 公司願景 **Company Mission**

*Company Profile*

著眼於國內外市場的開拓，讓久元成為立足台灣的整合性後段IC及LED代工服務廠，並朝放眼世界的自有產品、自有品牌邁進。

Based on the domestic and international marketing development, YTEC has gotten a foothold as an integrated back-end IC&LED OEM factory. YTEC moves forward, with it's own products, and Own Bench Marks.



# Q & A

*Company Profile*

# ☐ Thank you very much

