

# Machvision, INC (3563 TT)

2016 1st Investor Conference

2016 / 8 / 16

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- A. Company Overview
- **B.** Our Products
- C. Business Update
- D. 2016 Performance

## **Company Overview**

Founded in 1998.6.9

Main Products: Automated Optical Inspection (AOI) and

**PCB** measurement

2015 April: Awarded The 3rd excellent Enterprises as Backbones

in Taiwan

2016 June: Ranked on top 5% in 2nd Corporate Governance

**Evaluation of Listed Companies** 

Founder: Dr Collin Wang - PhD in industrial engineering

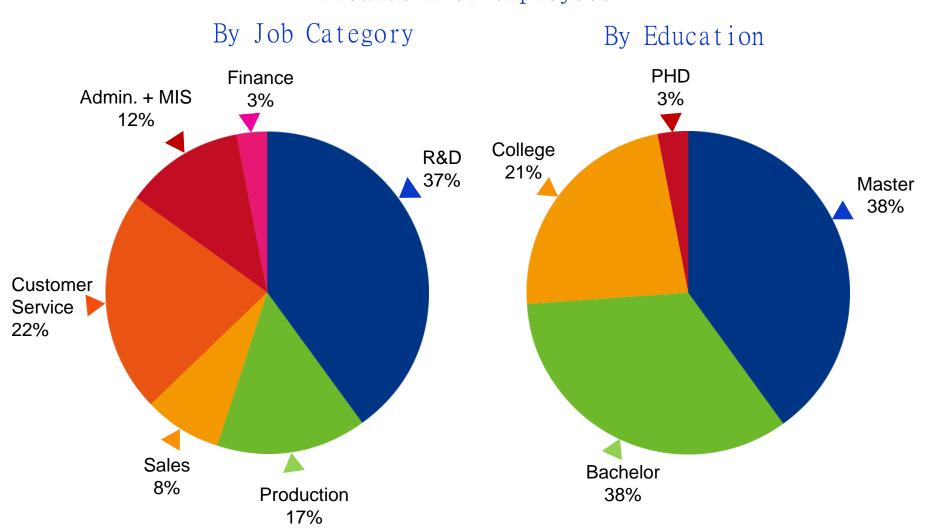
at Penn. State University

Research expertise – Image Processing/ R&D Management



## **Company Overview**

#### Breakdown of employees



## **Company Overview**

## Automated Optical Inspection (AOI)







## **Company Overview**

#### AOI Technology can be applied in many industries:

IC · PCB · PCBA · FPD · Passive · LED · Solar · Textile · Auto · Medicine...etc.

Taiwanese listed AOI Companies	Machvision	TRI	Utech	Favite
Ticker	3563	3030	3455	3535
Key Industries	PCB	PCBA	FPD	FPD
2015 GM%	61.1%	53.3%	52.1%	28.9%
Main Competitors	Orbotech Shirai	Omron Kohyoung	Takano Kubotek	Takano Kubotek

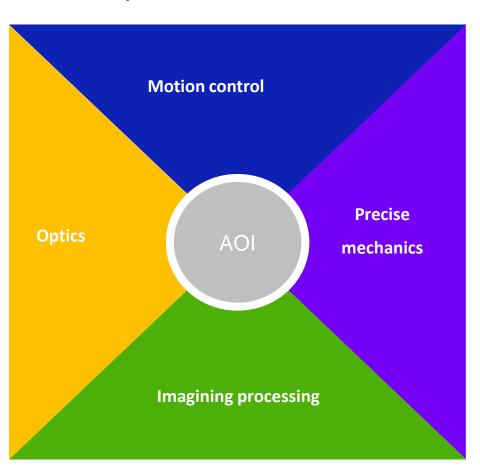
## **Company Overview**

#### AOI markets used to be dominated by developed countries

International AOI Peers	Orbotech	Camtek	Screen	Takano
Country	Israel	Israel	Japan	Japan
Key industries	PCB · FPD	PCB · FPD	PCB	FPD
Market Cap (US\$mn)	1,410	540	3,000	103
International AOI Peers	Rudolph	topcon	KLA-tencor	KohYoung
Country	US	Japan	US	Korea
Key Industries	IC	IC	IC	PCBA
Market Cap (US\$mn)	540	1,370	10,580	570

## **Company Overview**

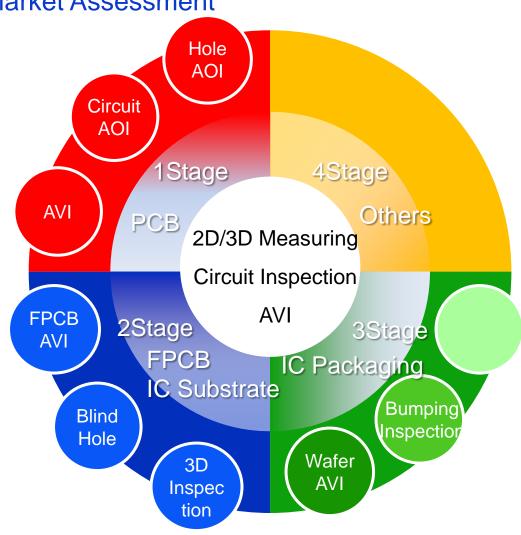
#### **Core Competitiveness**



- ✓ Patents Protected
- ✓ Outstanding Ability on R&D Integration
- ✓ Efficient and reliable services

## **Company Overview**

#### **New Market Assessment**



- ✓ Market Size
- ✓ Sufficient
  Capability
- ✓ Chance of success

#### **Our Products**

Drilling & Routing Measuring Series







Circuit AOI Series







Circuit AOI

LineGauge

**AVI Series** 











FPCB AVI

FC AVI

CSP AFI 2

LaserVia · 3D and Others







LaserVia AOIM



FC CSP Bump Inspection

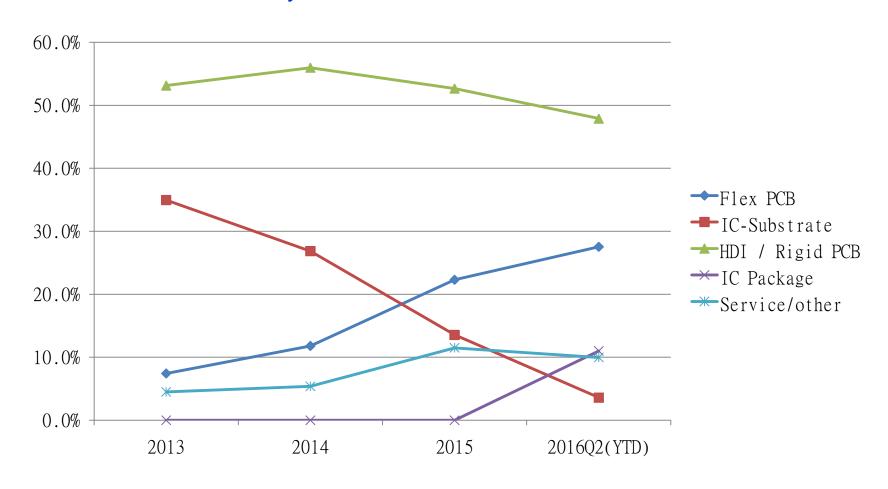
Solid Measuring Viewer

Dimple AOI

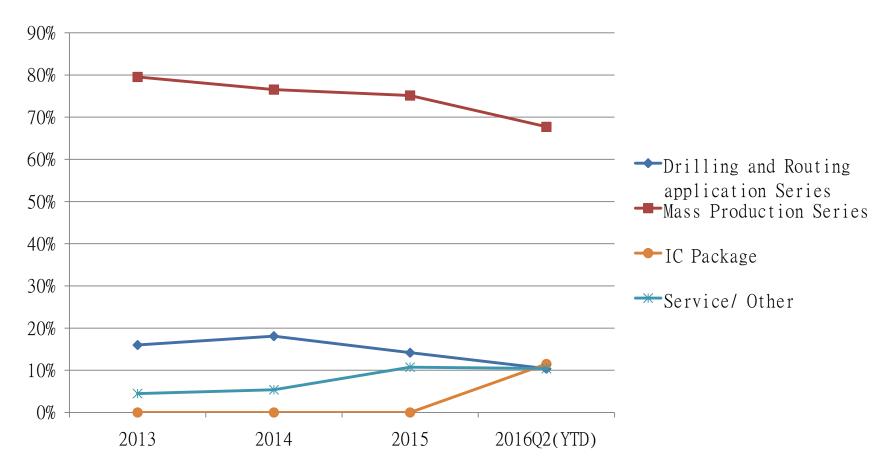
## **Our Products**

	Measurement Series	Circuit AOI and AVI Series	Wafer AVI
Market Trends	Stable market	Upgrade demand is strong due to higher accuracy	Dominated by foreign competitors
Competitors	Chinese local competitors	Orbotech · Shirai	Rudolph · KLA · Topcon
Machvision's Market share in Asia	50-60%	20%-30%	0%
Machvision's	Redesign to expand the competitiveness gap	Use automatic loading/unloading to increase efficiency	Expand customer base
Strategy	<ol> <li>Maintain market share through brand name and bundle sales</li> </ol>	<ol> <li>Lower the false alarm rate to replace human visual inspection</li> </ol>	Expand product line to satisfy customer demand

#### Revenue Breakdown by industries



#### Revenue Breakdown by industries



#### **MACHVISION**

#### The demand for FPCB inspection is increasing

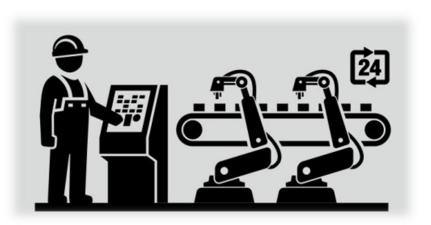
- ✓ Demand for flexible PCB is increasing
- ✓ Higher accuracy is required
- ✓ Inspection for blind via is getting important
- Demand for FPCB AVI is rising
- Higher accuracy for blind via inspection
- Order visibility for FPCB is high



#### **MACHVISION**

### PCB firms are willing to replace human visual inspection

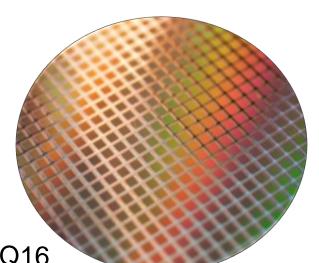
- ✓ PCB firms are willing to purchase equipment to replace human visual inspection
- Automated loading/unloading to increase efficiency
- AOFI to lower the false alarm rate



#### **MACHVISION**

#### Huge potential for IC inspection

- ✓ Machvision has sufficient technology
- ✓ IC packaging companies are willing to use local suppliers due to cost control
- ✓ 3D packaging required more AVI inspection
- Successfully sold our new equipments in 2Q16
- Strong interests from China IC packaging companies



#### **MACHVISION**

#### The market size for wafer AVI is large

- ✓ Rudolph NSX series has sold more than 1,000 units from 1997 to 2011
- ✓ 3D IC packaging requires higher quality control and hence raise the demand for AVI

## 2016 Performance

	2015 Q2	2016 Q2	change	YoY
Revenue	177,120	183,905	6,785	3.8%
Gross Profit	110,847	121,503	10.656	9.6%
Gross margin	62.6%	66.1%	3.5%	
SG&A	50,050	52,372	2,322	4.6%
OP Profit	60,797	69,131	8,334	13.7%
EPS	0.928	0.933	0.005	

## 2016 Performance

	2015 H1	2016 H1	change	YoY
Revenue	317,824	330,456	12,632	4.0%
Gross Profit	193,831	208,381	14.550	7.5%
Gross margin	61.0%	63.1%	2.1%	
SG&A	89,750	102,695	12,945	14.4%
OP Profit	104,081	105,686	1,605	1.5%
EPS	1.73	1.59	- 0.14	

#### 16Q2 Gross margin hit historical high of 66%

- Better Product Mix
  - ✓ Portion of LaserVia AOI and FPCB AFI increase
  - ✓ The introduction of Wafer AVI

Cost down through re-engineering



## **Thank You**