

# Chime Ball Group Roadshow

(1595 Taiwan)

President: Wonder Chang

General Manager of BHT : Ray Lu

2018.04.11



Equipment Solution & Service Provider For Wafer Fabrication System

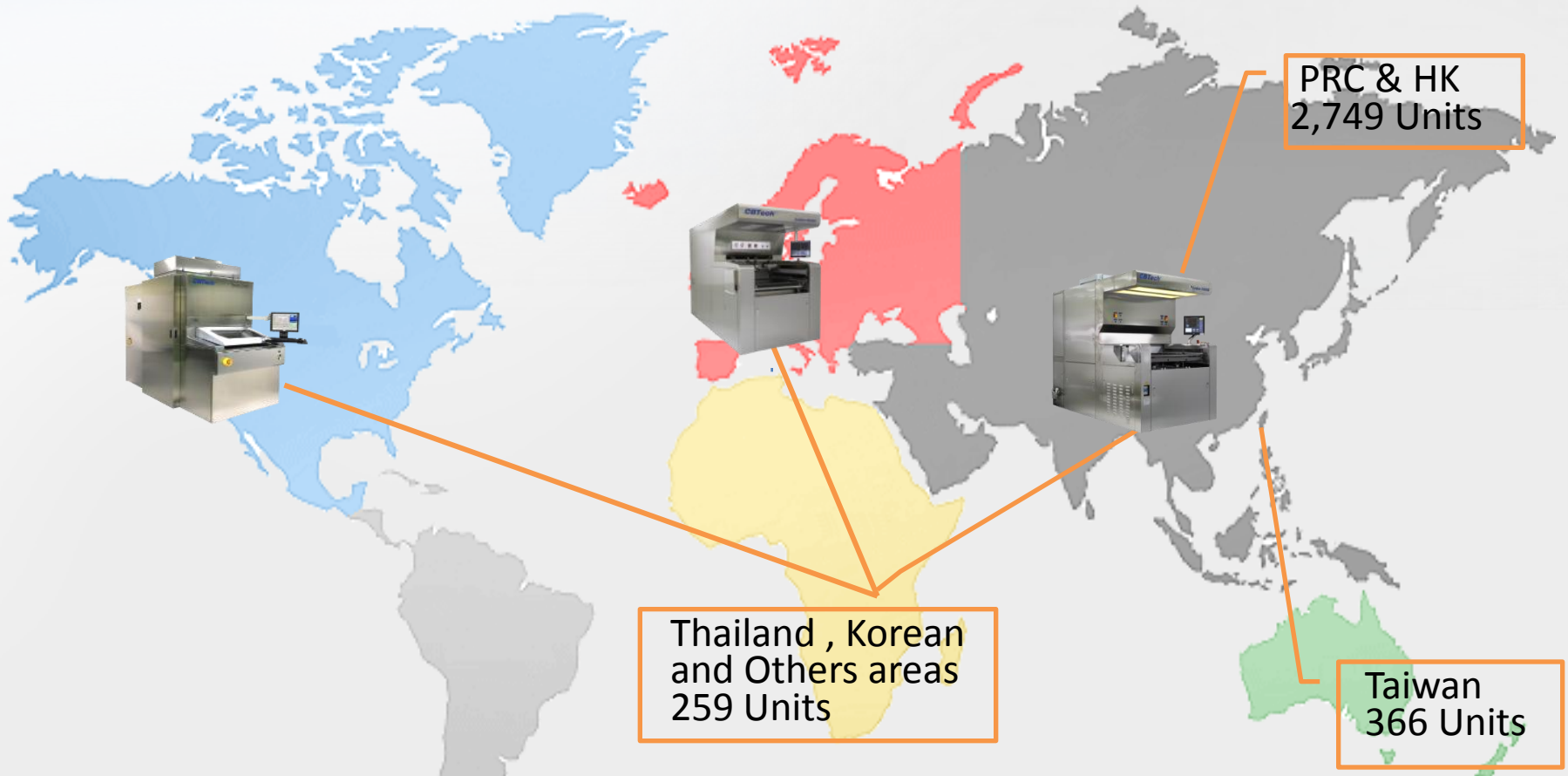


# Group Overview

- Founded in 1999.02.19 , Capital :NTD 5 Million , Employee: 7 employees.  
Now , Capital :NTD 4.71 Billion , Employee: 191 employees.  
(USA-LAB: 4 employees .Thailand: 3 employees. China Subsidiary: 47 employees. )
- Main products: CCD semi-auto/ fully-auto exposure machine, Direct Imaging System
- Our manager and RD team's average seniority rate is over 10 years in PCB industry .  
Core Capabilities Meet Every Challenge to help our customers develop the next generation solutions. we apply new 2-3 patent every year.
- We have sold over 3500 units Exposure Machine on the world.  
Our customer almost are IPO company (e.g. Foxxcon, Tripod, KCE, KB Grop. Etc)  
Provide best in class products and services that delight our customers and make our employees proud.
- 2014: Acquired Maskless USA., 29 Patents. Developed the Direct Imaging technology .
- 2016:Developed LED UV Green Energy Exposure unit.
- 2017: Acquired BAO HONG TECHNOLOGY CO., LTD. Kicked off the semiconductor business.

# Group Overview

According to the report from DIGITIMES, the global demand for PCB exposure machine is 350-400 units per year.



CBT sold 204 units in 2017. Now CBT is a leader Brand of Semi-Auto Exposure Machine. Our R&D investments continue to advance our core technologies.

# Competitive



		CBT	Orbotech	Screen
Prices		Low	High	High
Throughput		140	240	187
Alignment( $\pm\mu\text{m}$ )		10	7.5	7
Min Line/Space ( $\mu\text{m}$ )		30/30	10/15	12
Maintenance Cost		Low	High	High



In line with market demand.

Our strong service team provide on-site service , timely services, and high-quality component for customer different requirement.

In conclusion , this is why customers always choose CBT.



# Product & Market

# Applications of Our Products

Widely applied across diverse industry fields :

Personal Entertainment



Laptops



Telecommunications



Home Entertainment System



Car system



Global PCB market is forecast  
**US\$756 billion in revenue**  
\* By Prismark ,(2016-2022)

Healthcare Applicationsoo

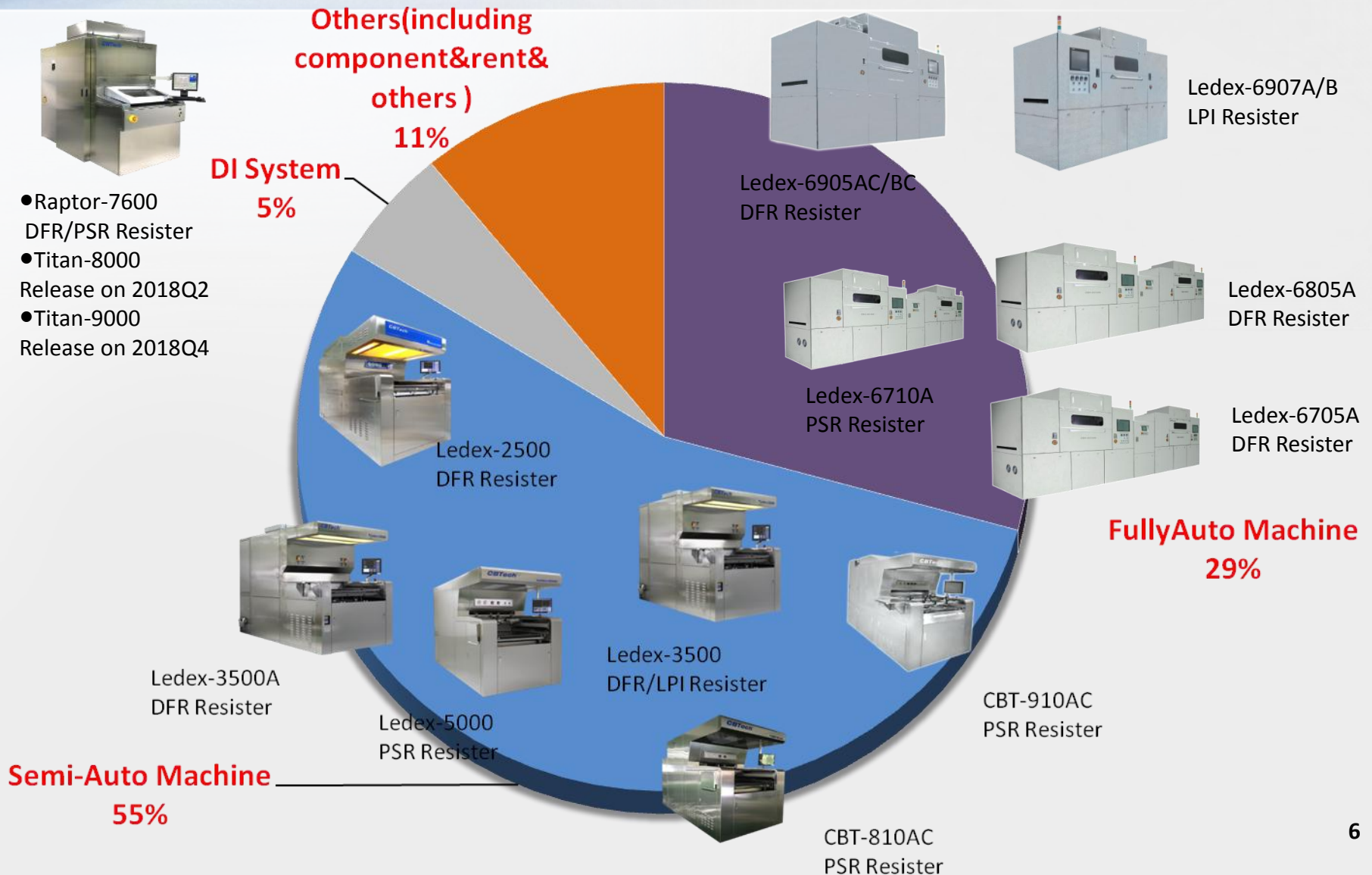


The more fields for future :



# Each model share of revenue

With the printed wiring will be more fine, CBT will release 2<sup>nd</sup> generation DI.



# PCB BU Product Introduction

To face different needs, we have various products to choose .

PCB  
Inner Layer  
Exposure unit



Ledex-3500  
DFR/LPI Resister



Ledex-6907A/B  
LPI Resister



Ledex-6905AC/BC  
DFR Resister

FPC/PCB  
Outer Layer  
Exposure unit



Ledex-3500A  
DFR Resister



Ledex-2500  
DFR Resister



Ledex-6805A  
DFR Resister



Ledex-6705A  
DFR Resister

FPC/PCB  
Solder Mask  
Exposure



Ledex-5000  
PSR Resister



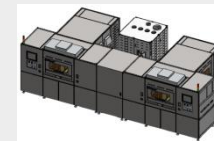
CBT-810AC  
PSR Resister



CBT-910AC  
PSR Resister



Ledex-6710A  
PSR Resister



Ledex-8810  
Release on 2018Q1

FPC/PCB  
Digital Direct  
Imaging  
Exposure unit



Raptor-7600  
DFR/PSR Resister



Titan-8000  
Release on 2018Q2



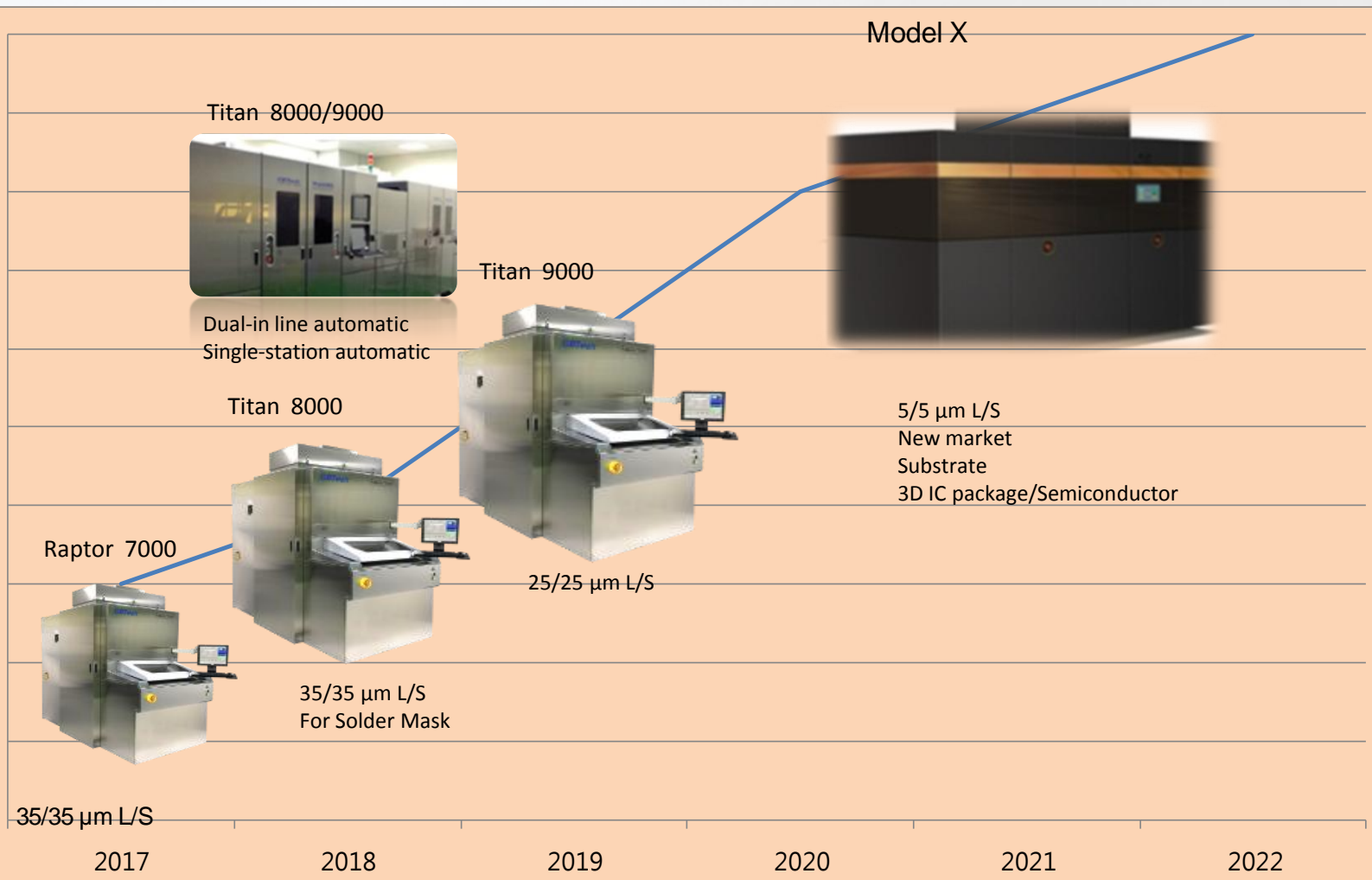
Titan-9000  
Release on 2018Q4

With the printed wiring will be more fine, CBT will release 2<sup>nd</sup> generation DI.  
It enhance production speed than the 1<sup>st</sup> generation.



# PCB DI Products Roadmap

The circuit line width become more narrow in future.  
Depend on PCB industry technology roadmap, CBT will release various system in future.



# PCB BU

## Future Product

### (Next 5 Years Down the Road)

#### Objectives



### Contact Exposure Machine



### Direct Imaging Machine for PCB



### Direct Imaging Machine for New Market

#### Focus On

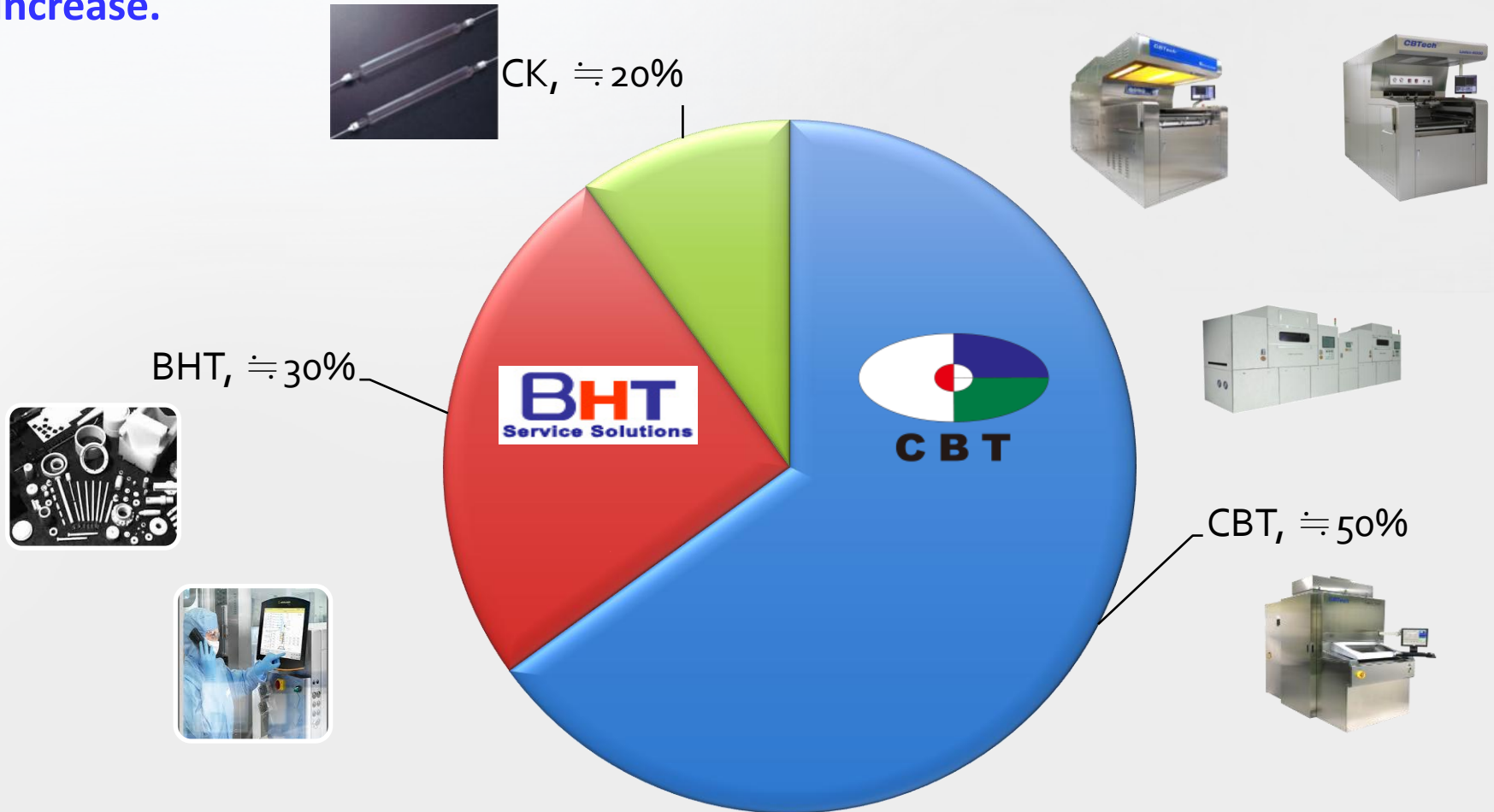
- UV LED light source Applications.
- Rapid fully automatic exposure machine .

- Titan 8000 for Solder Mask applications in FPC & PCB.
- Titan 9000 for fine line 25 $\mu$ m resolution.

- Below 10 $\mu$ m resolution market.
- Model X For Substrate & 3D IC

# Industry Prospects

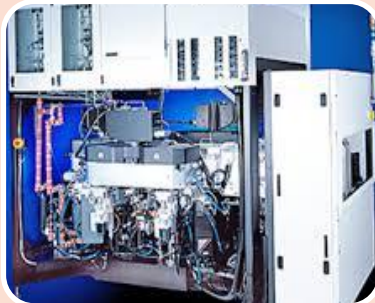
After BHT join to be CBT Group member, we forecast that they can bring us revenue increase.



# Semiconductor BU (BHT)

## BHT Business Product Line

(An Alternative OEM Service Provider)



**Equipment  
Refurbish**



**Turnkey  
Fab to Fab  
Relocation**



**Spares Parts**



**Equipment  
Service  
Consultancy**

With SEMI report said that the semiconductor industry will continue to grow in future. The Semiconductor system are mostly imported in Taiwan and China. For get ahead of the game , we develop new equipment actively.

# Semiconductor BU Business & Operation Objectives (Next 3 Years Down the Road)

## Objectives

## Focus On



**Get Up and Go on Developing 300mm Equipment Alternative OEM Level In-House Refurbishing Capabilities.**

Focus on Software Developing, Build ability of Systematic Diagnostic in house.



**Carry out Semi Spares Agent & Repair Business.**

*Strengthen China Sales Organization, Focus on Implanter & CMP Consumable Parts, Target Increase 250% of YoY Spares Business*



**Developing Legacy Equipment CIP kits with Alternative Critical Components.**

Focus on Productivities Improvement, Energy Saving & Cost Oriented items



**Developing Domestic 200/300 mm Semi Equipment.**

Focus on 200mm /300mm CVD / PVD Application

# Semiconductor BU (BHT)

## The Competitive Advantages of Secondary Refurbished Equipment



### Lowest Cost

- Utilized existing equipment platform from surplus market with complete local supply chain management .



### Shorter Lead-Time

- Localization to not only reduce the cost of materials but also lead time.



### Sustainability

- OEM Certified, Continuous supply to main customers & regions.

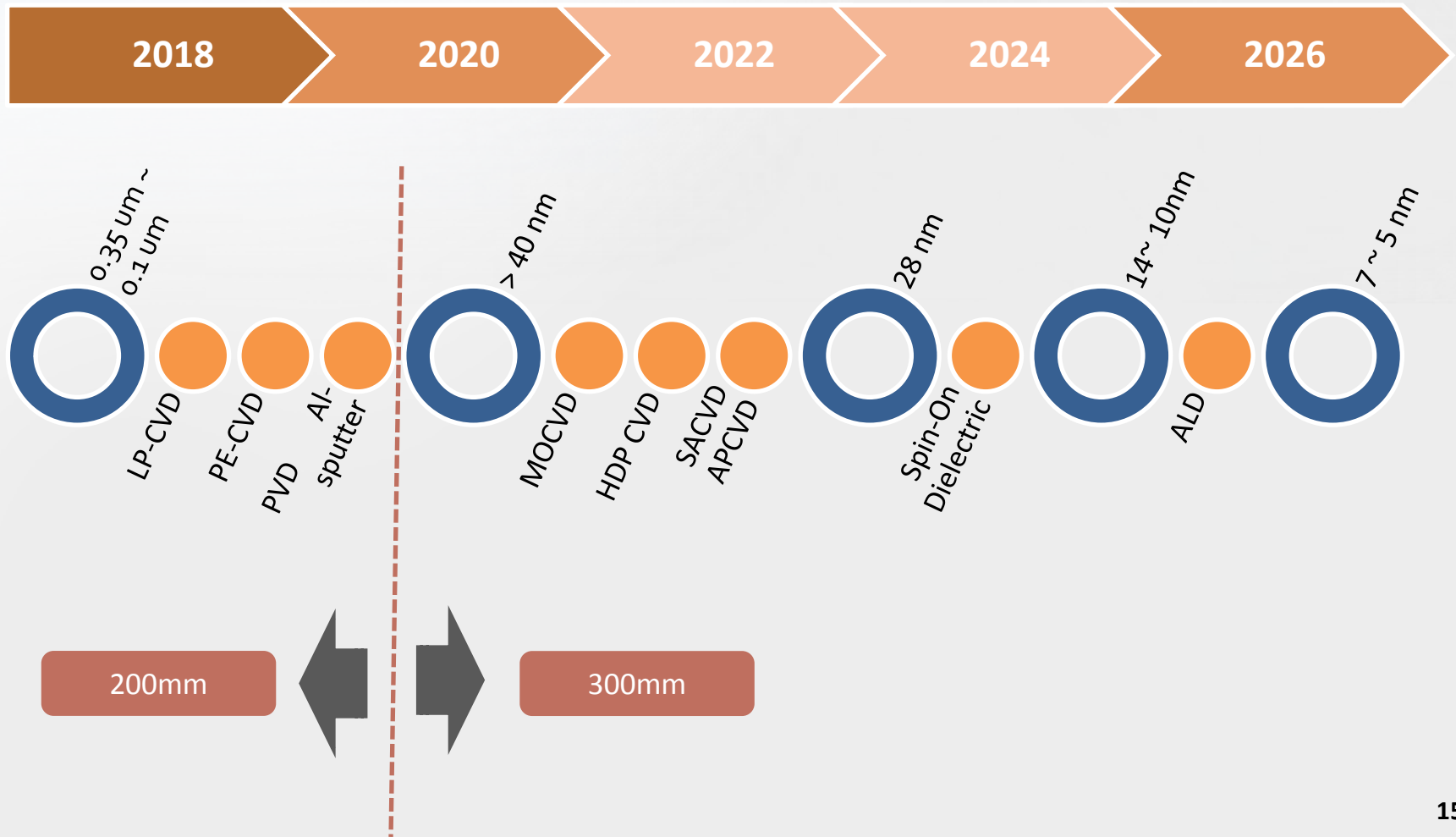
- Lower cost, accelerated timeline, lower risk and with a higher rate of success

# Developing Legacy Equipment CIP kits and Alternative Critical Components



- Focus on Legacy Equipment Productivities Improvement, Energy Saving & Cost Oriented items

# Semiconductor BU Equipment Developing Time Table





# Summaries of Further Strategies



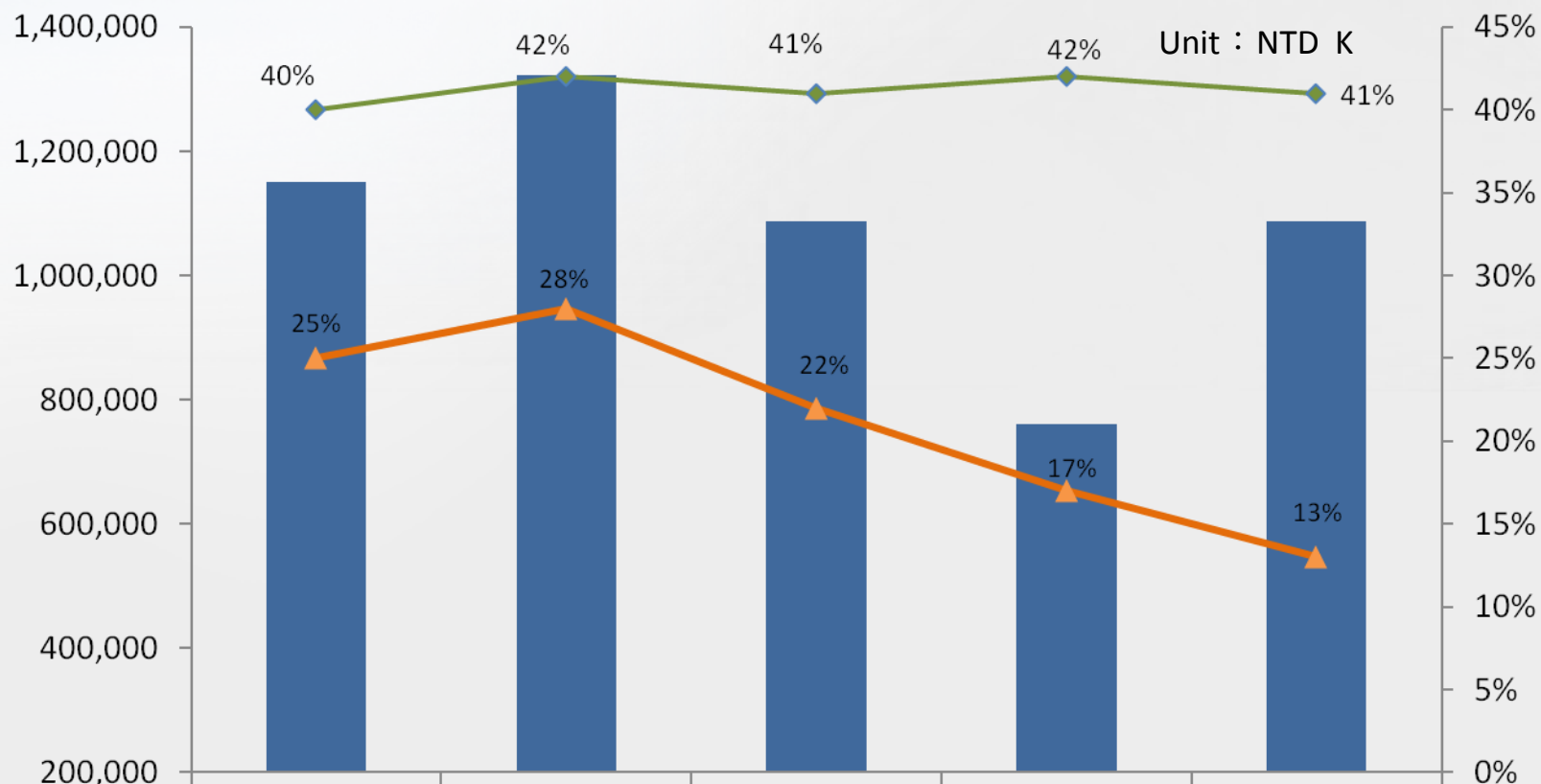
**CBT plus BHT will make the most of multiplier effect**



# Financial Performance

# Revenue and Margin

The drop in sales of 2016 is due to suffering from impacts of global economics recession.



Revenue	1,150,850	1,322,461	1,086,910	760,904	\$1,086,910
Gross Margin	40.00%	42.00%	41.00%	42.00%	41.00%
Operating Margin	25.00%	28.00%	22.00%	17.00%	13.00%

# 2013-2017 Income Statement

NTD K	2017	2016	2015	2014	2013	YoY
<b>Revenue</b>	1,369,985	760,904	1,086,910	1,322,461	1,150,850	80%
Gross Profit	432,536	313,084	445,815	557,539	459,742	38%
Operating Expenses	257,369	183,268	207,933	180,940	168,617	40%
<b>Operating Profit</b>	175,167	129,816	237,882	376,599	291,125	35%
Non Operating Income/(Loss)	159,387	-79,035	38,154	-469	22,092	-302%
Income before Tax	334,554	50,781	276,036	376,130	313,217	559%
Tax Expenses	37,631	21,579	65,919	82,954	72,522	74%
<b>Net Income</b>	296,923	29,202	210,117	293,176	240,695	917%
<b>EPS(NTD)</b>	7.12	0.72	5.17	7.58	6.22	889%
<b>Key Financial Ratio(%)</b>						
Gross Margin	32%	41%	41%	42%	40%	
Operating Expense Ratio	19%	24%	19%	14%	15%	
Operating Margin	13%	17%	22%	28%	25%	
Effective Tax Rate	11%	42%	24%	22%	23%	
Net Margin	22%	4%	19%	22%	21%	
ROE	12%	2%	11%	16%	14%	

# 2013-2017 Balance Sheet

NTD K	2017	2016	2015	2014	2013	YoY
<b>TOTAL ASSETS</b>	3,876,942	2,417,343	2,498,955	2,378,722	2,124,506	60%
Cash	1,333,390	794,307	685,007	543,279	480,074	68%
NR & AR	581,510	470,275	597,244	634,472	482,654	24%
Inventories	666,729	384,377	361,238	321,867	275,509	73%
Fixed Assets	634,642	598,102	593,675	609,991	615,912	6%
<b>TOTAL LIABILITIES</b>	1,489,489	615,935	612,678	541,857	455,462	142%
Short-term Debt	40,000	60,000	60,000	60,000	60,000	-33%
Curr. Of Long-term Debt	136,667	20,000	20,000	20,000	20,000	583%
NP & AP	345,830	213,338	155,012	255,447	176,241	62%
Long-term Debt	430,000	16,667	36,667	56,667	76,667	2480%
<b>TOTAL EQUITY</b>	2,387,453	1,801,408	1,886,277	1,836,865	1,669,044	33%
Common Equity	2,387,453	1,801,408	1,886,277	1,836,865	1,669,044	33%
Non-controlling Interests	0	0	0	0	0	
<b>Key Financial Ratios</b>						
A/R Turnover Days	141	259	209	156	176	
Inventory Turnover Days	225	320	206	151	142	
A/P Turnover Days	109	150	117	105	129	
Cash Conversion Cycle	257	429	298	202	189	

# 2013-2017 Cash Flow Statement

NTD K	2017	2016	2015	2014	2013
<b>Beginning Balance</b>	794,307	685,007	543,279	480,074	672,583
Depreciation & Amortization	56,419	40,850	31,227	21,623	20,128
Cash form Operating Activities	197,739	204,165	109,725	244,670	144,474
Capital Expenditure	-3,203	-1,337	-48,767	-3,920	-58,972
Cash form Investing Activities	-491,202	7,132	3,957	-55,335	-147,390
Cash form Financing Activities	786,367	-124,456	45,907	-155,406	-157,239
<b>FX Impact</b>	-7,037	-17,054	-321	11,573	6,490
Change in Cash	539,083	109,300	141,728	63,205	-192,509
<b>Ending Balance</b>	1,333,390	794,307	685,007	543,279	480,074
Free Cash Flow*	194,536	202,828	60,958	240,750	85,502

# 2013-2016 Dividend Payout

NT\$	2016	2015	2014	2013	2012
Net Income	29,202	210,117	293,176	240,695	255,319
Cash Dividend	20,311	104,456	174,093	135,406	135,406
DPS	0.5	2.7	4.5	3.5	3.5
Dividend yield(%) *	1%	6%	7%	4%	5%
Payout Ratio(%)	70%	50%	59%	56%	53%
ex-div date	2017/7/12	2016/8/31	2015/7/15	2014/7/14	2013/7/7

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**Thank you!**  
**Q&A**