IC/PC/ LED 自動化設備
解決方案

AllRing Tech
萬潤科技簡介

Presented by Allring

公司簡介

設立

May 24. 1996

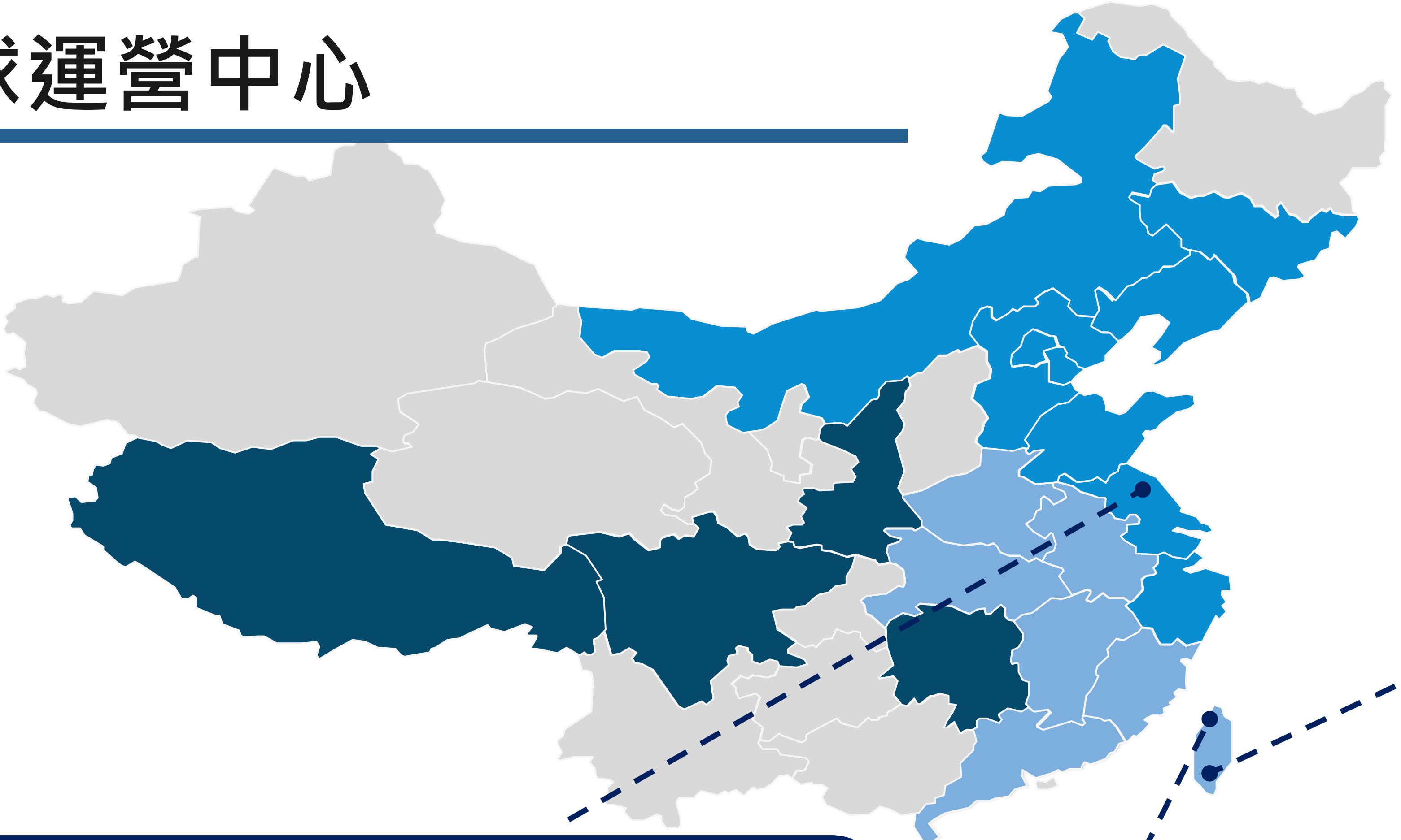
董事長

盧鏡來先生

主要產品

半導體測試及封裝設備,被動元件設備

全球運營中心



總部
Kaohsiung/Taiwan
Factory Area: 27,000 m^2

子公司
- Kunshan
  Jiangsu

Factory Area:
20,000 m^2

工廠
- Hsinchu
- Taichung

集團里程碑

1996

- 公司成立
- 發展被動元件領域設備
- 自動切割機
- 電感測試與包裝機

2000

- 發展半導體領域設備

2004

- 進駐南科高雄園區
- PCB 檢查設備
- FPD 塗膠機

2008

- 發展LED領域設備
- 繞線設備

2010

- 成立昆山萬潤精機
- 成立萬潤慈善基金會

2013

- 發展SiP製程設備
- 在台研發中心創立

Allring

集團里程碑






2015
- 擴建第二期廠區
- PSA 貼合機

2016-2017
- ACF/OCA 貼合機
- AOI - Info/CoWos
- Wafer Level 點膠機
- 電感繞線機

2018-2019
- AGV
- 厚度量測設備

2020-2021
- 晶圓級上下料機
- 六面檢查機
- Wafer AOI

2022
- 電容測試機
- 切割機
- 散熱片機

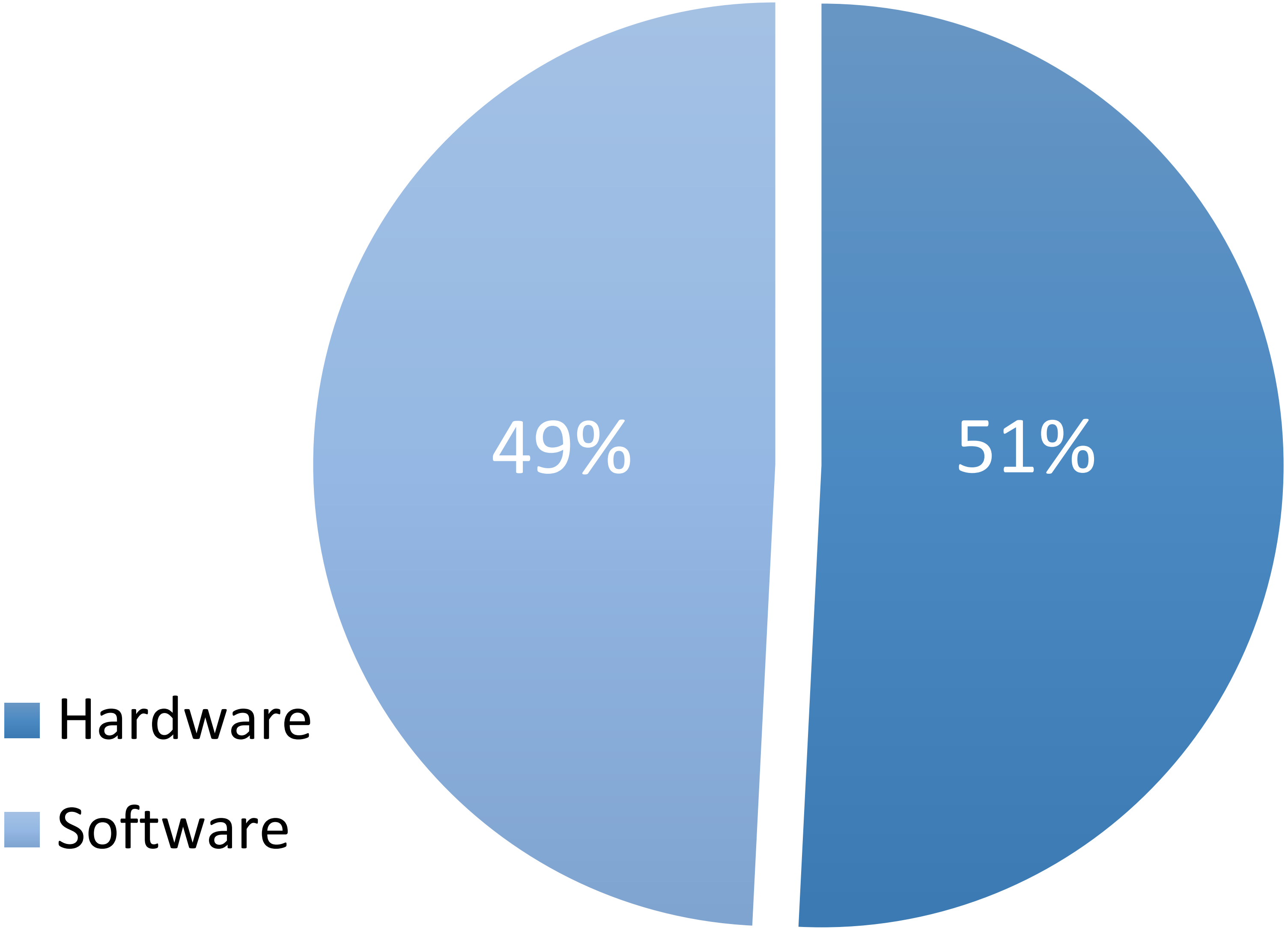
2023
- 植球機
- 雙軌點膠機

研發人力資源

60%

OF OUR 280 EMPLOYEES ARE RESEARCH AND DEVELOPMENT

研發人力資源



產品線

自動化

- Loader/ unloader
- Carrier Transfer
- Lane Change
- Ball Mounter

貼合

- Flex
- PSA
- OCA
- Film Tim
- Metal Tim
- PI Film

點膠

- Underfill
- Flux Jetting
- Silver Paste
- Heatsink

視覺檢測

- Post-Die Bond
- Post-Dispenser
- Post-Bumping
- AOI and Sorting

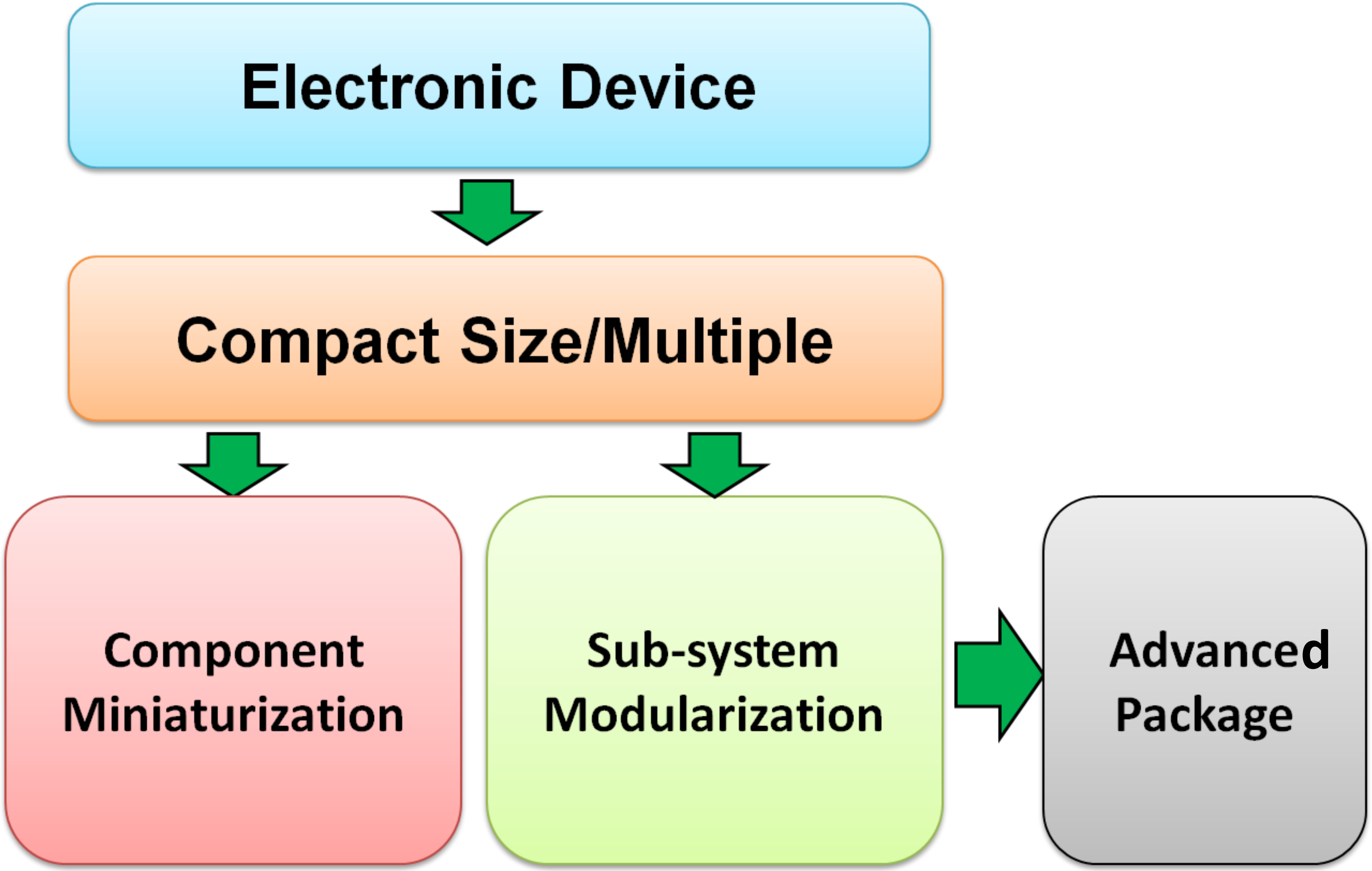
被動元件/LED

- Cutting
- Plating
- Testing
- Winding
- Packing

機器人

- Cleaning Robot
- Security Robot

產業概況


Electronic Device

Compact Size/Multiple

Component Miniaturization

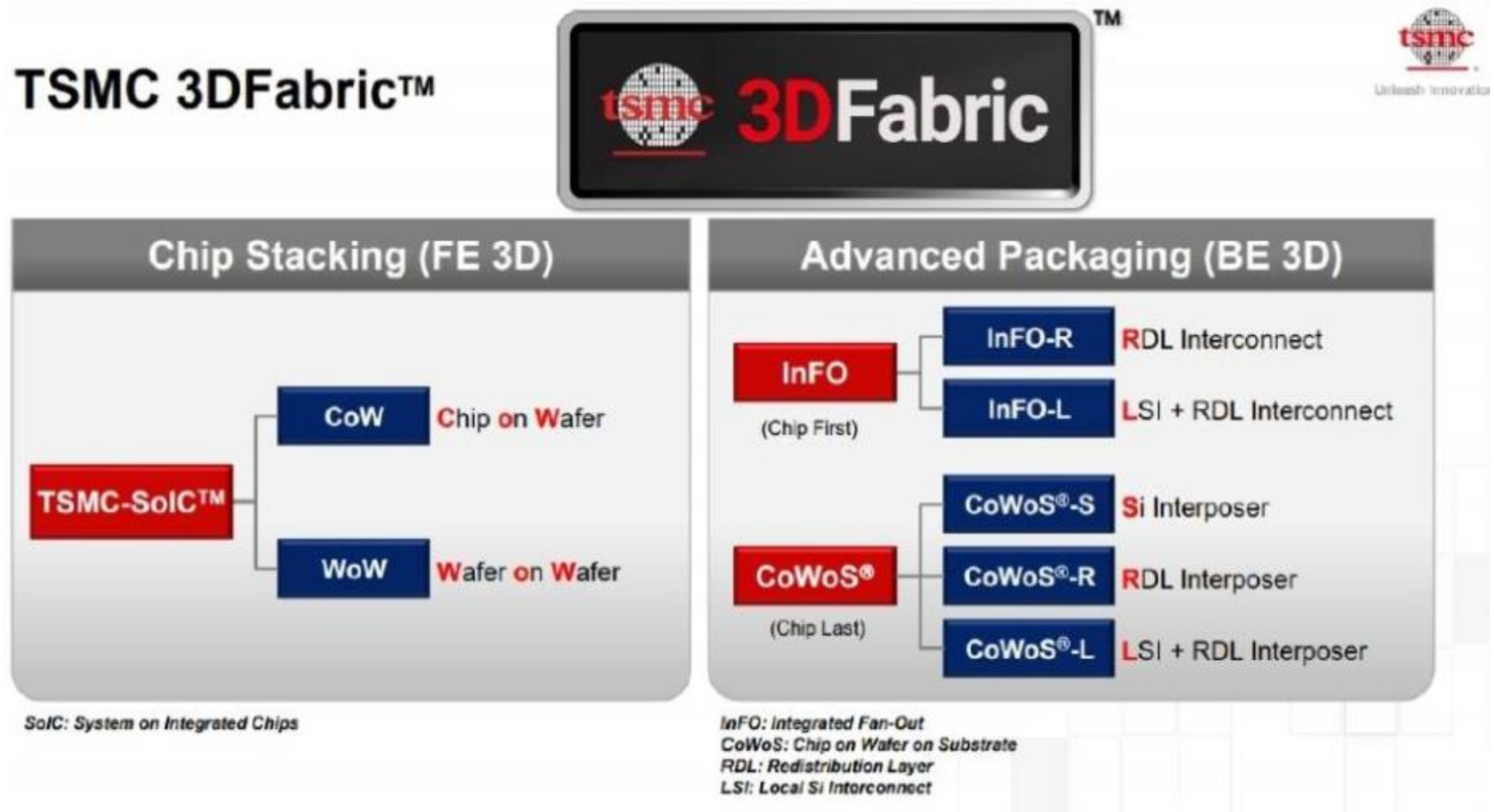
Sub-system Modularization

Advanced Package

封裝製程

Packaging Type		Manufacturer		Application
SiP (System in Package)		OSAT	ASE	Smart phone
			USI	
		Module house	GIS	
			Luxshare	
		Component	AAC	
			AMS	
3D Package	SoIC	Foundry	TSMC	Smart Phone AI
	InFO,CoWoS		TSMC	
2D/2.5D	Flip chip	OSAT	ASE	Smart Phone IoT Mobile
			Spil	
			Amkor	
			Chipbond	
			Powertech	

TSMC's 3D 封裝



TSMC 3DFabric™

3DFabric™

Chip Stacking (FE 3D)

- TSMC-SoIC™
  - CoW: Chip on Wafer
  - WoW: Wafer on Wafer

SoIC: System on Integrated Chips

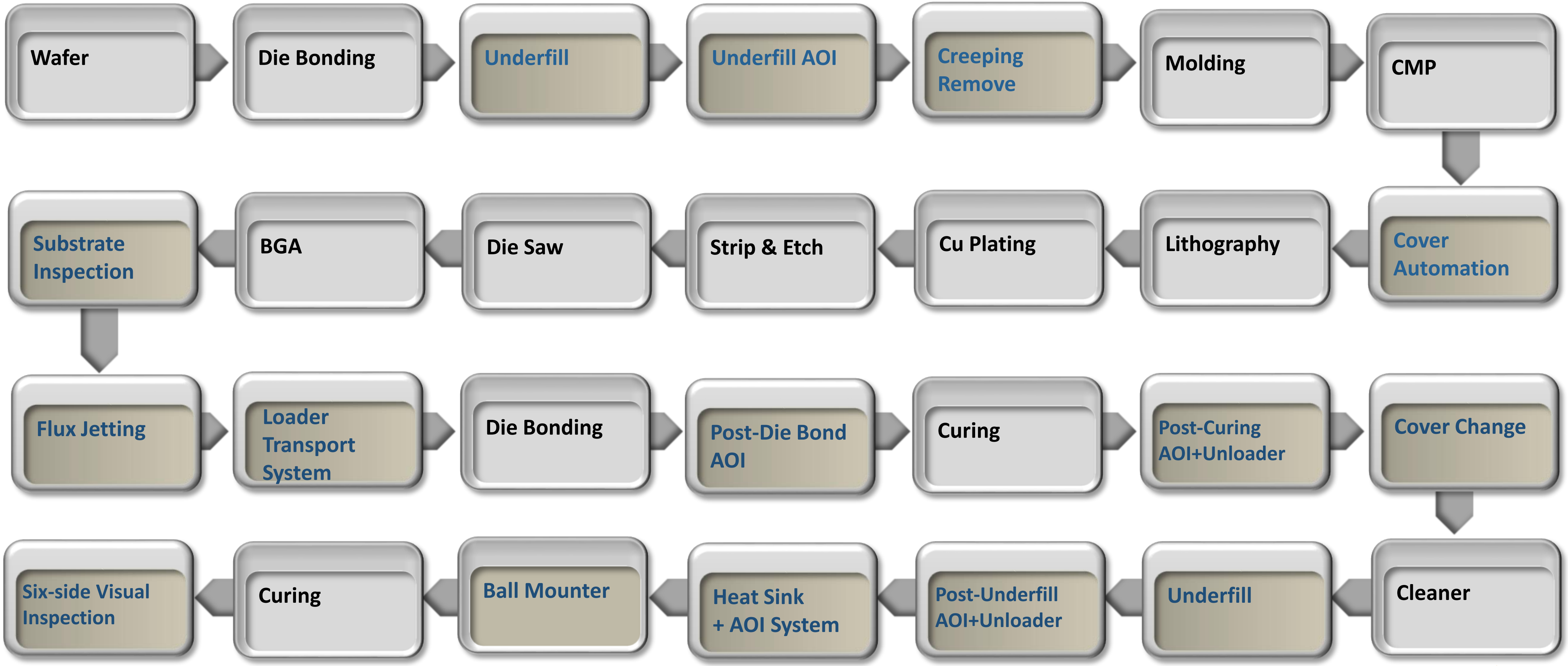
Advanced Packaging (BE 3D)

- InFO (Chip First)
  - InFO-R: RDL Interconnect
  - InFO-L: LSI + RDL Interconnect
- CoWoS® (Chip Last)
  - CoWoS®-S: Si Interposer
  - CoWoS®-R: RDL Interposer
  - CoWoS®-L: LSI + RDL Interposer

InFO: Integrated Fan-Out
CoWoS: Chip on Wafer on Substrate
RDL: Redistribution Layer
LSI: Local Si Interconnect

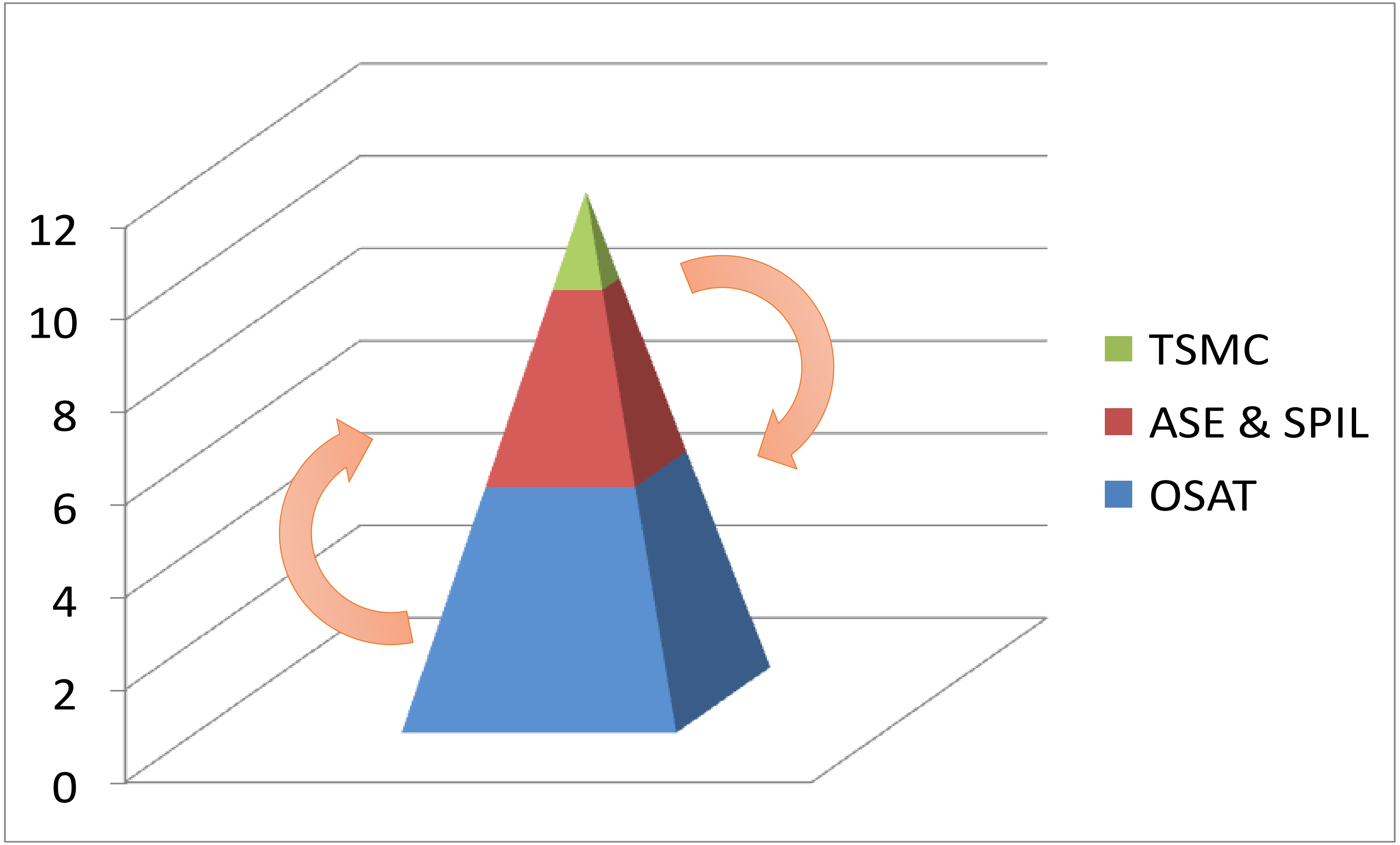
Source:TSMC

CoWoS 生產流程

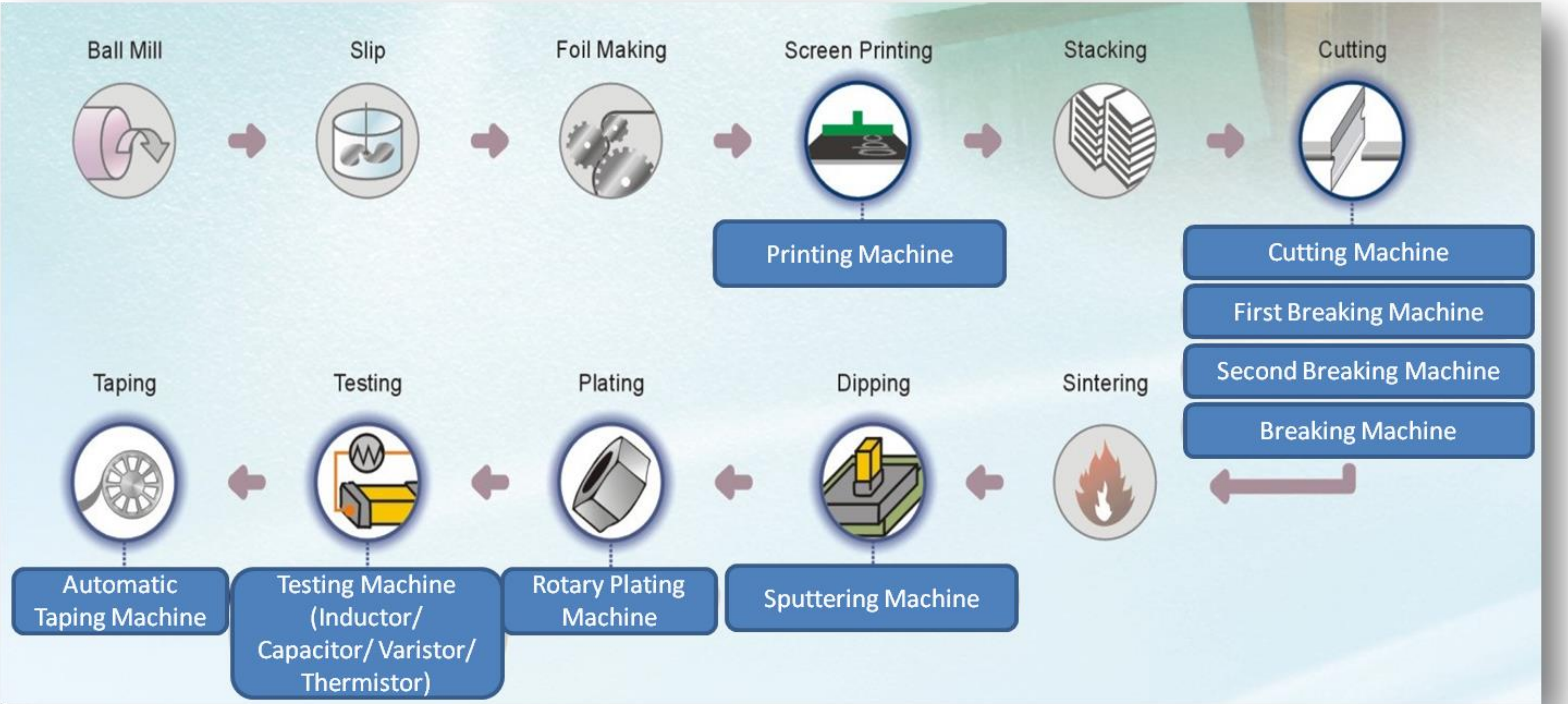


Wafer
Die Bonding
Underfill
Underfill AOI
Creeping Remove
Molding
CMP
Cover Automation
Lithography
Cu Plating
Strip & Etch
Die Saw
BGA
Substrate Inspection
Flux Jetting
Loader Transport System
Die Bonding
Post-Die Bond AOI
Curing
Post-Curing AOI+Unloader
Cover Change
Cleaner
Underfill
Post-Underfill AOI+Unloader
Heat Sink + AOI System
Ball Mounter
Curing
Six-side Visual Inspection

策略目標

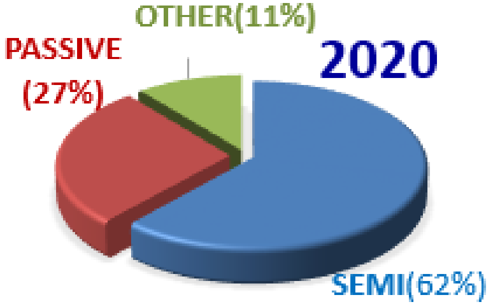


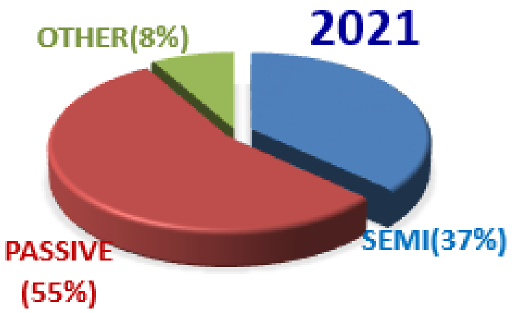
被動元件生產流程

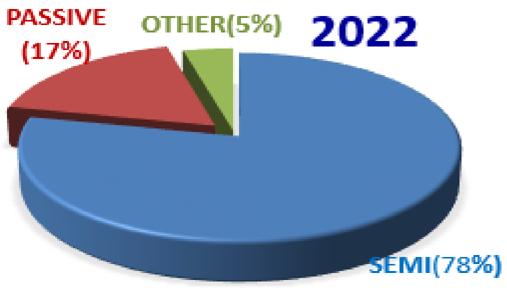


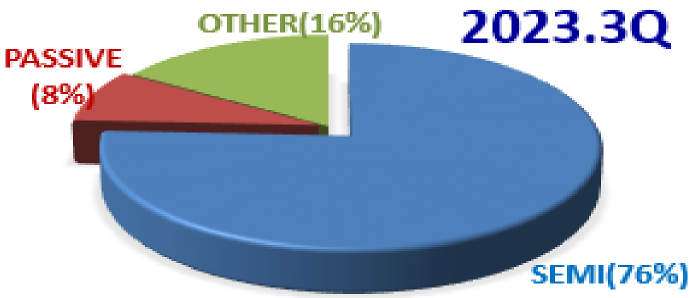
Ball Mill
Slip
Foil Making
Screen Printing
Stacking
Cutting
Printing Machine
Cutting Machine
First Breaking Machine
Second Breaking Machine
Breaking Machine
Taping
Testing
Plating
Dipping
Sintering
Automatic Taping Machine
Testing Machine (Inductor/ Capacitor/ Varistor/ Thermistor)
Rotary Plating Machine
Sputtering Machine

財務資料





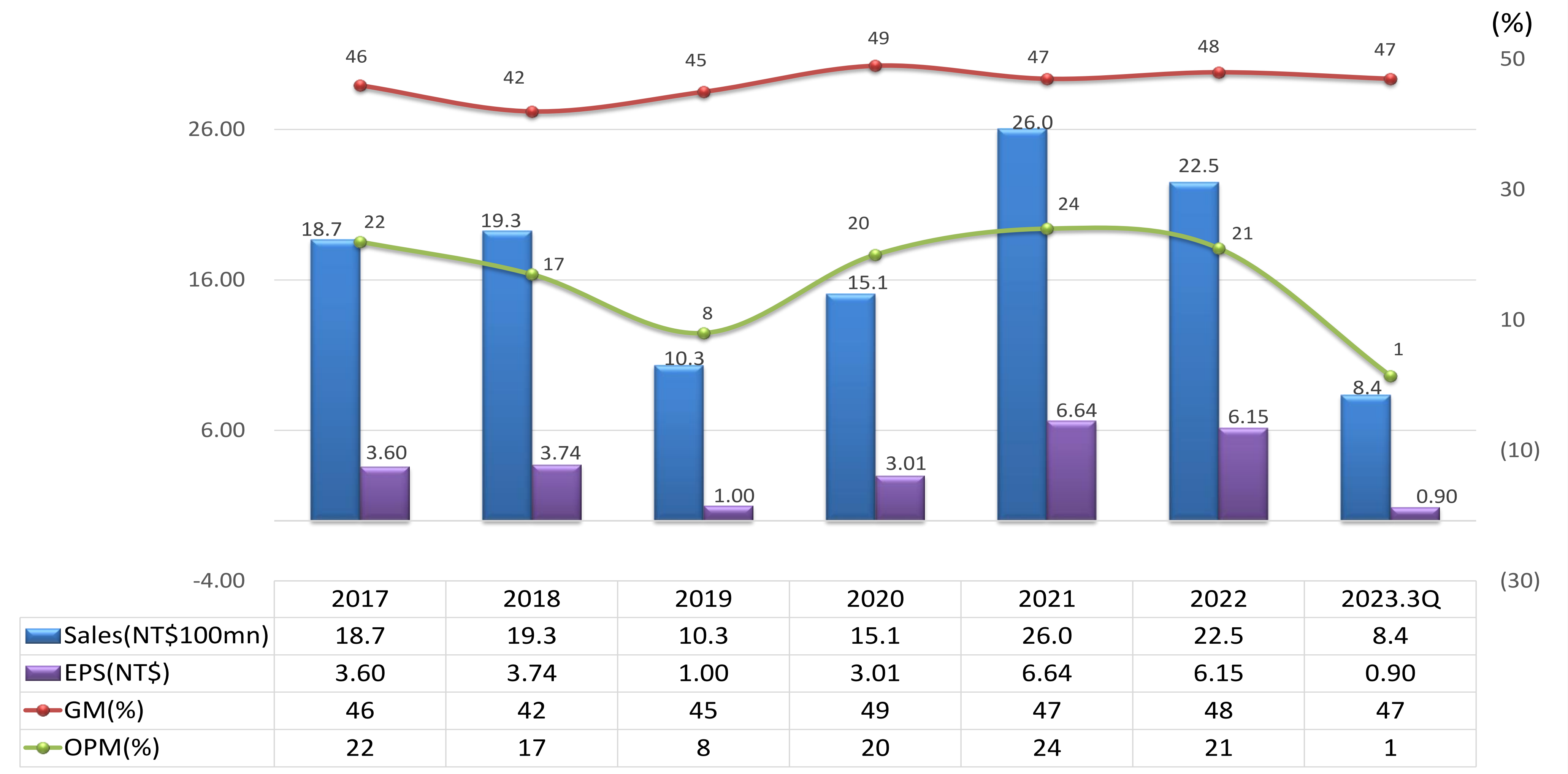




NT$100M

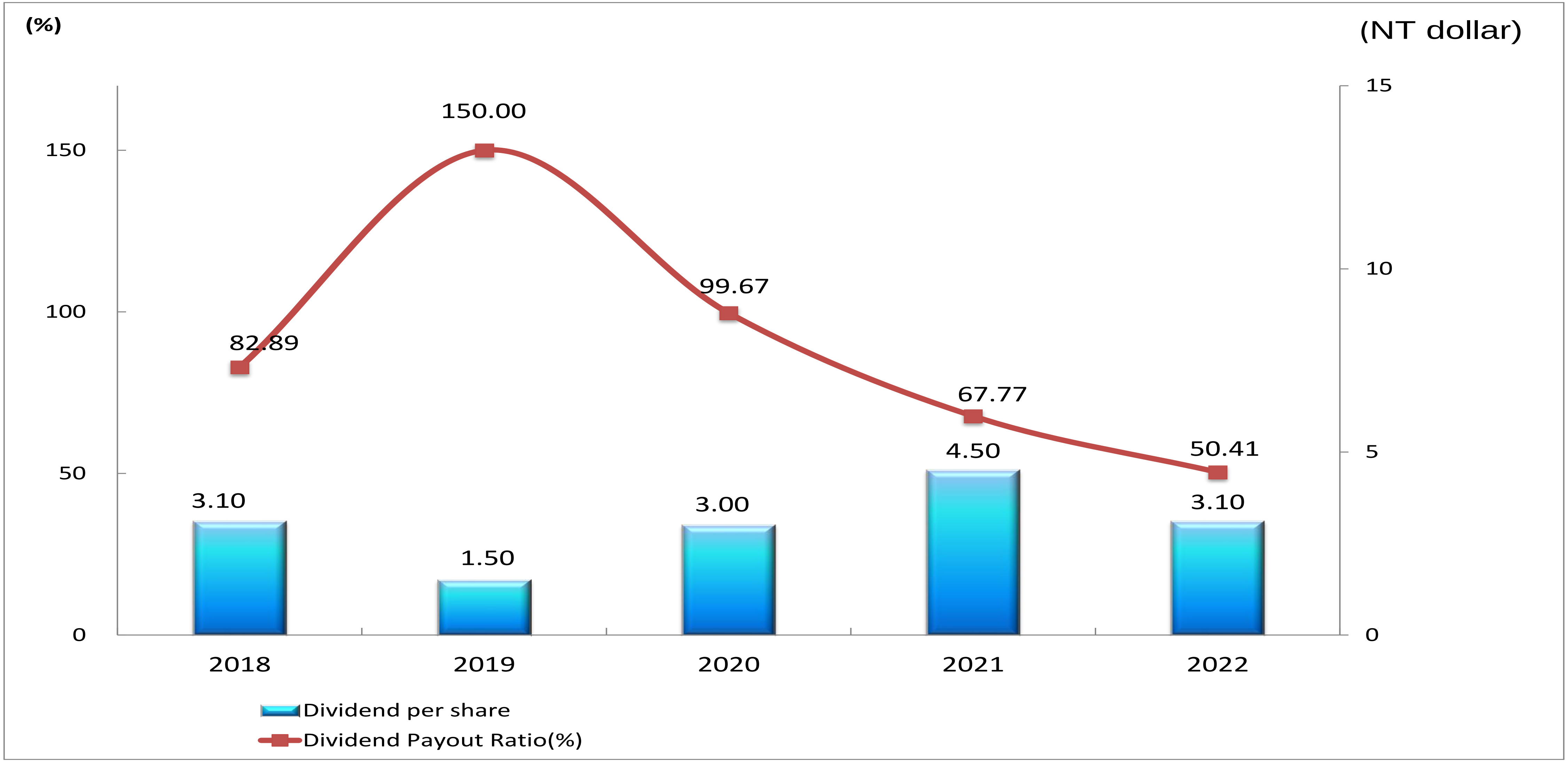
	2020		2021		2022		2023.3Q	
SEMI	9.28	62%	9.60	37%	17.63	78%	6.33	76%
PASSIVE	4.14	27%	14.29	55%	3.93	17%	0.70	8%
OTHER	1.64	11%	2.15	8%	0.92	5%	1.32	16%
TOTAL	15.06	100%	26.04	100%	22.48	100%	8.35	100%

財務資料



	2017	2018	2019	2020	2021	2022	2023.3Q
🟦Sales(NT$100mn)	18.7	19.3	10.3	15.1	26.0	22.5	8.4
🟪EPS(NT$)	3.60	3.74	1.00	3.01	6.64	6.15	0.90
-●-GM(%)	46	42	45	49	47	48	47
-●-OPM(%)	22	17	8	20	24	21	1

財務資料


(%)
(NT dollar)
150
100
50
0
15
10
5
0
150.00
82.89
99.67
67.77
50.41
3.10
1.50
3.00
4.50
3.10
2018
2019
2020
2021
2022
Dividend per share
Dividend Payout Ratio(%)

Q&A
Thank you!