

致茂電子股份有限公司

2020年第4季公司業績說明電話會議

財務長 應正

董事長兼總經理 黃欽明

2021年02月25日

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**This presentation contains some forward-looking statements that are subject to substantial risks and uncertainties. Typically, these statements contain words such as “anticipate”, “believe”, “could”, “estimate”, “expect”, “intend”, “plan”, “forecast”, “project”, “predict”, “potential”, “continue”, “may”, “should”, “will”, and “would” or similar words. You should consider these forward-looking statements carefully because such statements are only our expectations or projections about future events, and actual results may differ materially from those expressed or implied by such statements. The forward-looking statements in this presentation include, but are not limited to, growth rates for various markets estimated by third party sources, future products and technology development, widespread market acceptance of the hosted delivery model, future revenue growth and profitability. You should be cautioned that the forward-looking statements are no guarantee of our future performance. The forward-looking statements contained in this presentation are made only as of the date of this presentation and we undertake no obligation to update the forward-looking statements to reflect subsequent events or circumstances, except as required by law.**

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- 公司簡介
- 財務數據
- 營運概況
- 問與答



Chroma

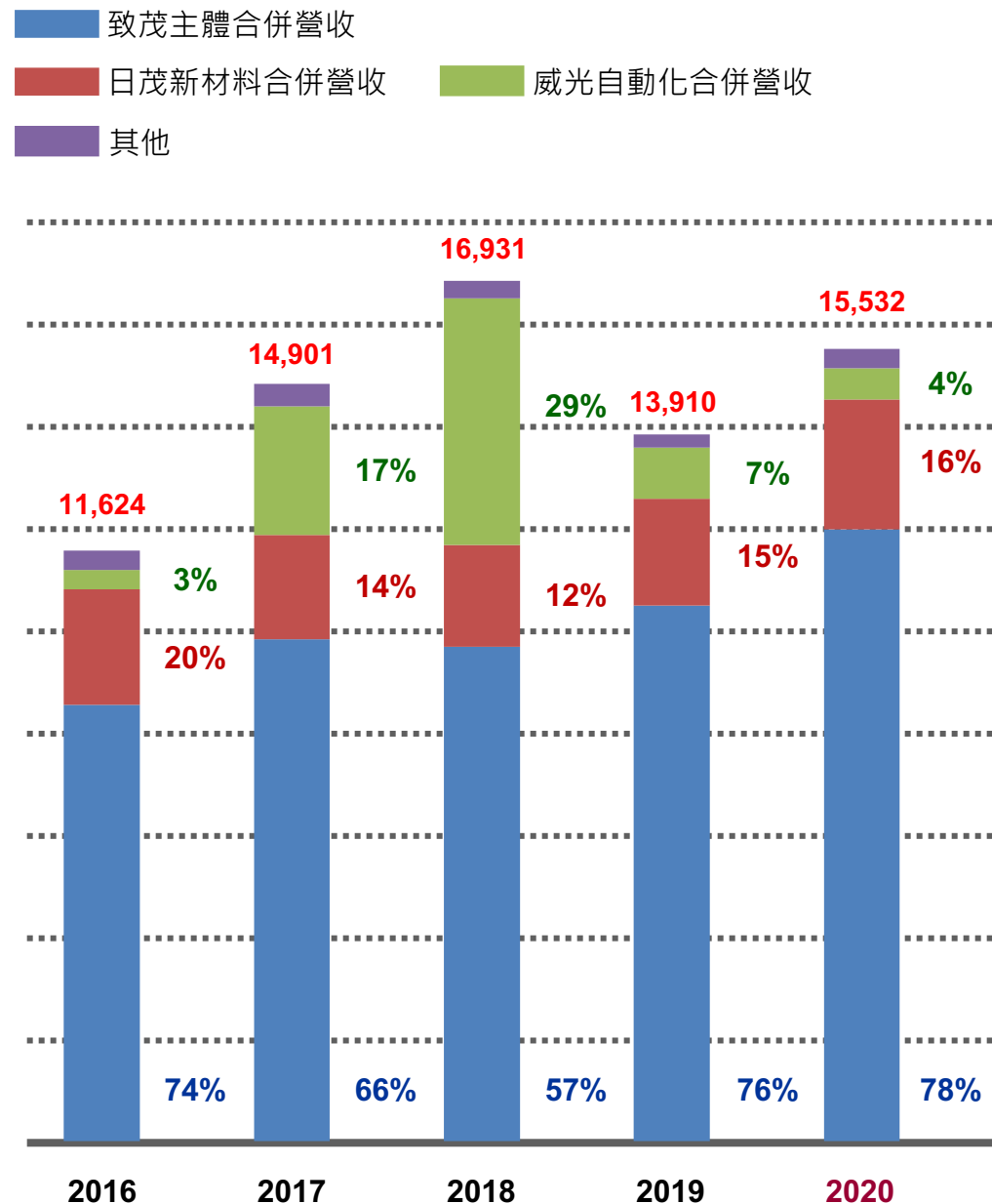
## 公司簡介

Test  
and  
Auto  
Solution  
providers



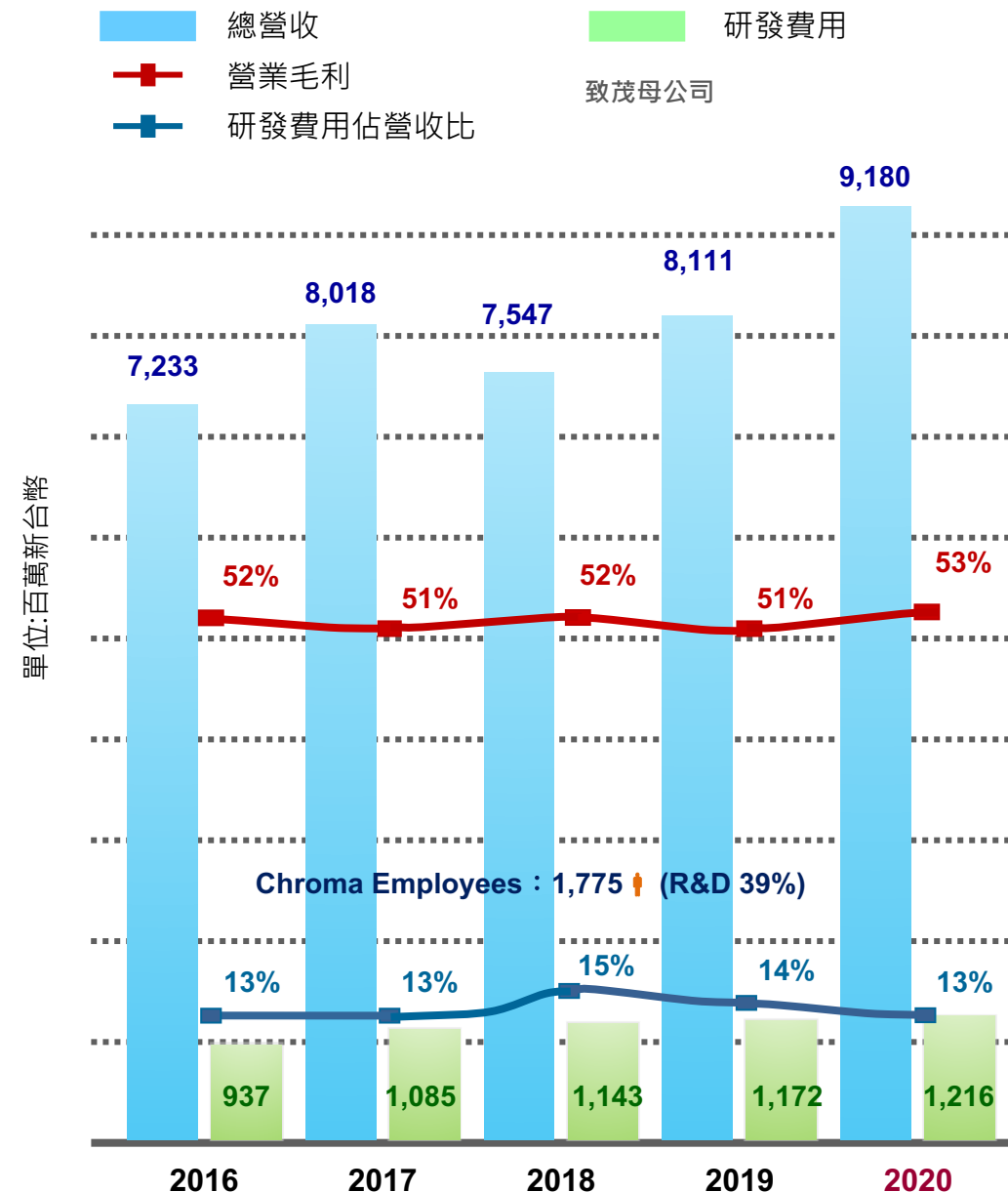
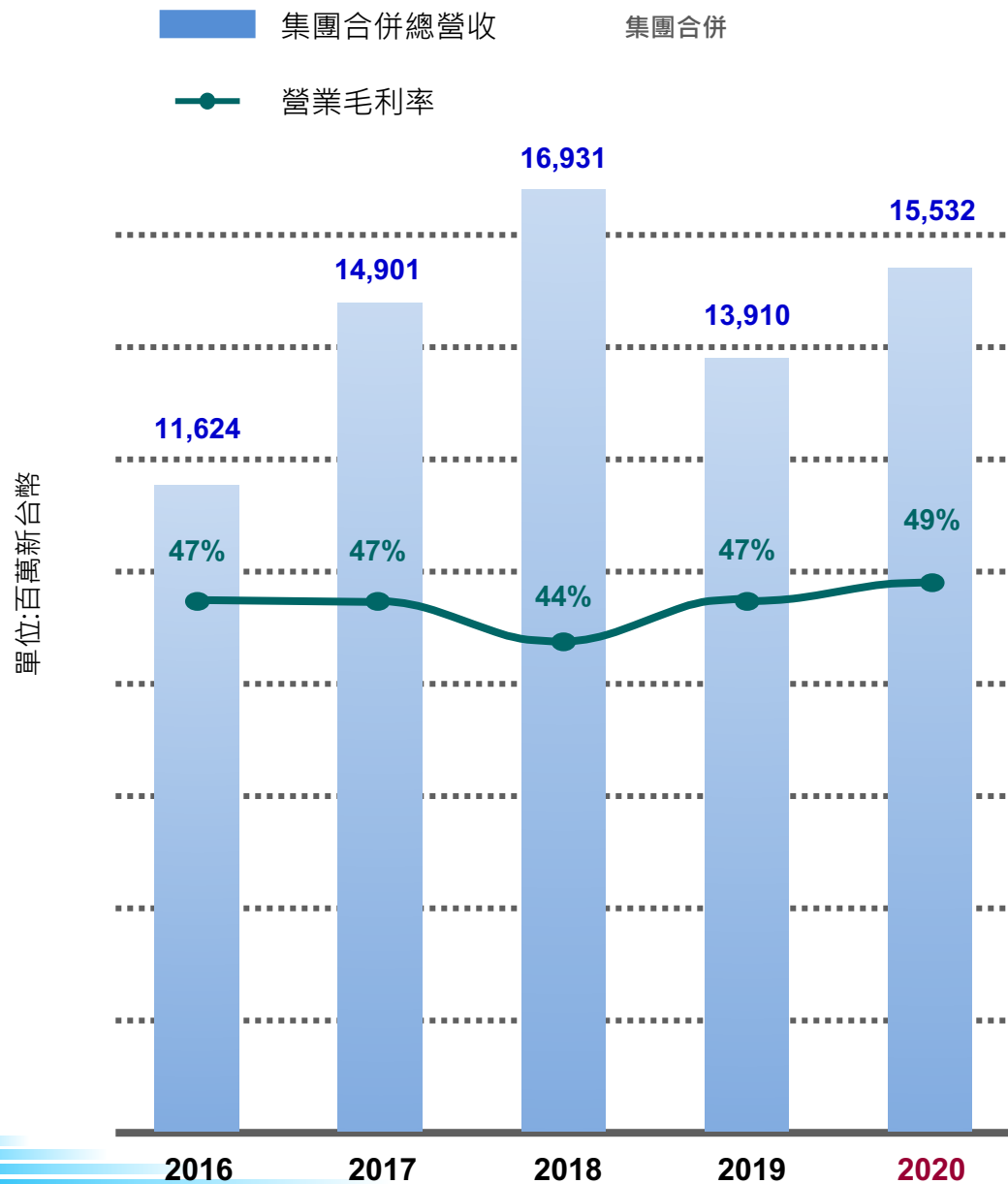
# 公司簡介

- 致茂電子成立於1984，為自有品牌之自動化量測解決方案供應商。商品包含提供產業相關之檢測儀器與設備及整合性自動化測試解決方案。
- 經營宗旨：精密、可靠、創新。
- 致茂集團包含致茂主體，威光自動化及日茂新材料三個事業體。
- 2020年合併營收為155億新台幣。
- 2020年淨利為23億新台幣。
- 致茂集團截至2020年12月底員工總數為3,019人。

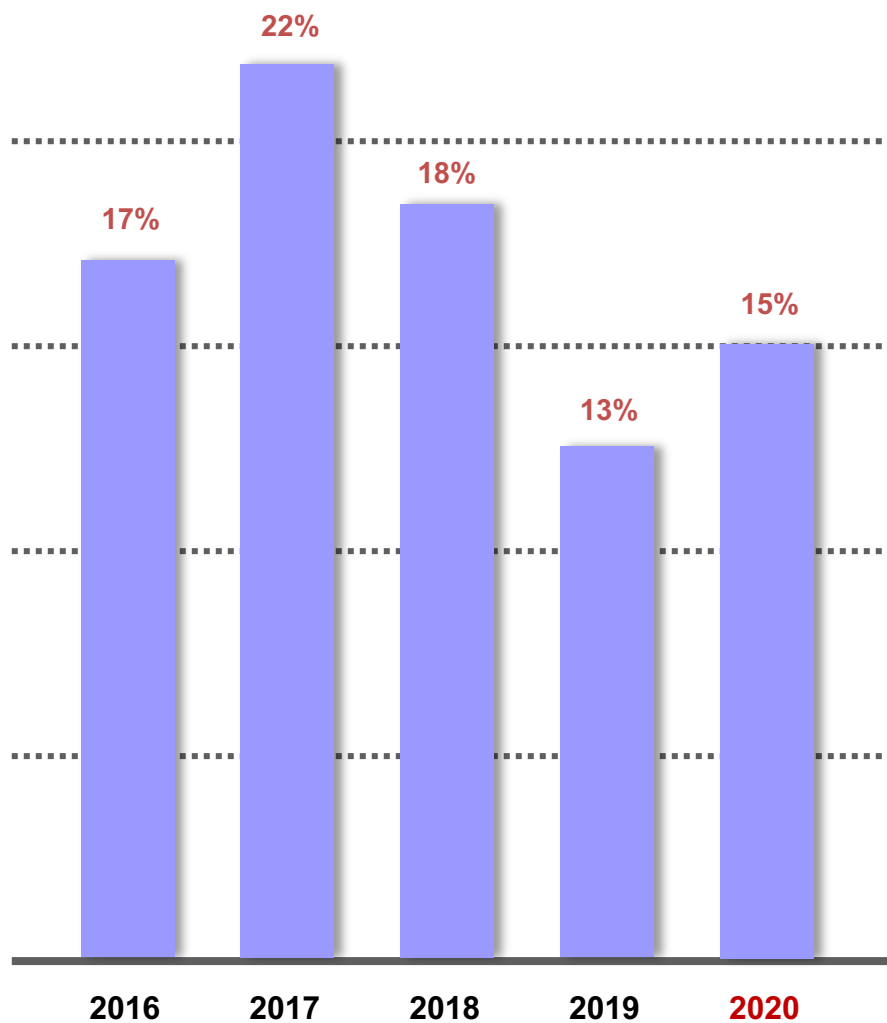


單位:百萬元新台幣

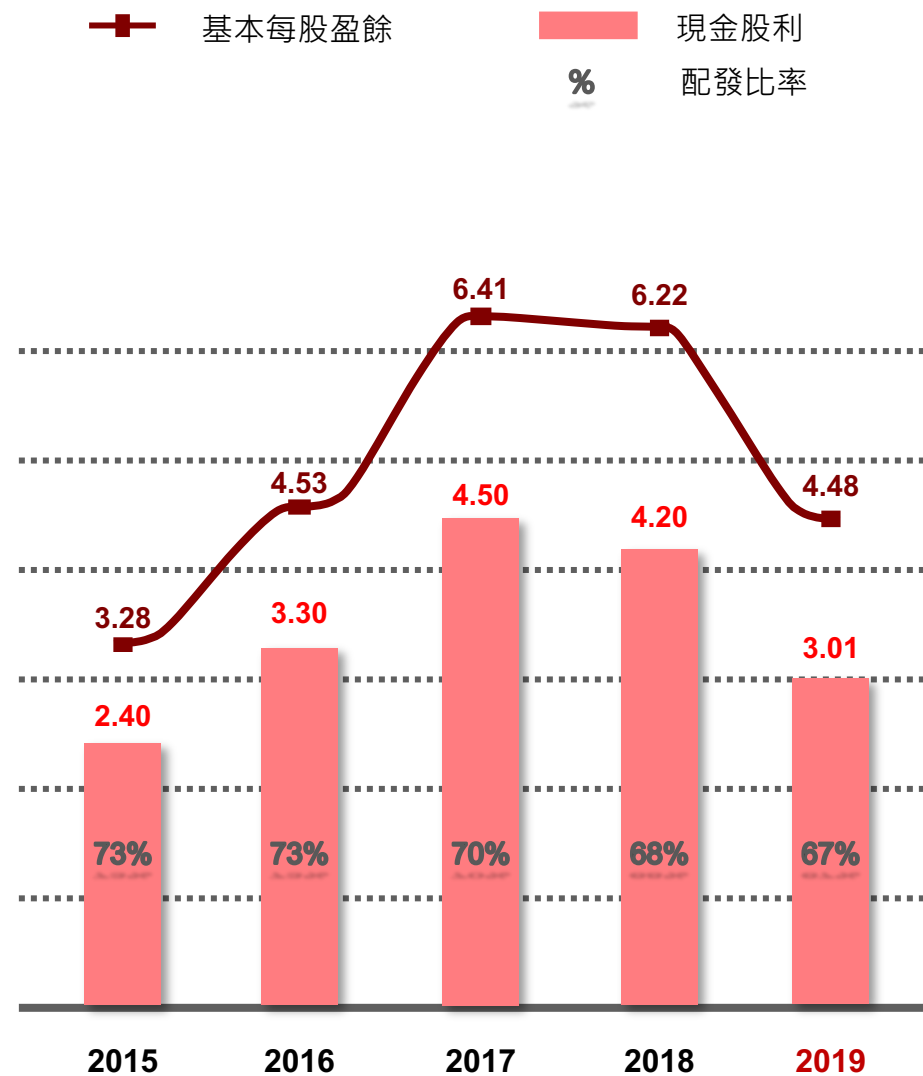
# 財務表現



## 股東權益報酬率



## 股利政策



每股盈餘: 元



# 致茂電子全球據點



50

Operation Sites

93

Distributors

EST. 1999



Netherlands:  
Ede

EST. 2017



Germany:  
Augsburg

EST. 2008



Japan:  
Shin-Yokohama/  
Nagoya/ Osaka

EST. 2018



Korea:  
Pango

EST. 1993



United States:  
Irvine, CA  
Santa Clara, CA  
Chandler, AZ  
Allentown, PA  
Albany, NY

EST. 2001



United States:  
Foothill Ranch, CA  
Marlborough, MA  
Detroit, MI  
Mexico :  
Ciudad Juarez

EST. 1998



China/ Shenzhen

EST. 1999



China/ Beijing

EST. 2000



China/ Shanghai

EST. 2001



China/ Dongguan



Taiwan: Taoyuan (Headquarters)

EST. 2003



Taiwan: Hsinchu

EST. 2009



Taiwan: Kaohsiung

EST. 2006



China/ Suzhou

EST. 2011



China/ Xiamen

EST. 2011



China/ Chongqing

EST. 2016



Quantel : Singapore

Others:

India: New Delhi/ Mumbai/ Bangalore  
Thailand: Bangkok  
Vietnam: Hanoi/ Ho Chi Minh  
Malaysia: Kuala Lumpur/ Penang  
Philippines: Manila/ Cebu  
Indonesia: Jakarta

Others: Qingdao/ Zhengzhou/ Xian/Hefei/ Chengdu/ Wuhan/ Hangzhou/ Changsha/ Guangzhou/ Hong Kong

Chroma

## 財務數據

Test  
and  
Auto  
Solution  
providers

# 2020年全年合併損益表摘要

## 合併損益表

(單位: 佰萬新台幣, 除每股盈餘為新台幣元)

	2020	%	2019	%	YoY %
<b>淨營業收入</b>	<b>15,532</b>	<b>100%</b>	<b>13,910</b>	<b>100%</b>	<b>12%</b>
量測儀器事業部之合併營收(淨值)	12,045	78%	10,546	76%	14%
威光自動化事業部之合併營收	618	4%	1,009	7%	(39%)
日茂特殊材料事業部之合併營收	2,551	16%	2,097	15%	22%
其他	318	2%	258	2%	23%
營業成本	(7,988)	(51%)	(7,329)	(53%)	9%
<b>營業毛利</b>	<b>7,544</b>	<b>49%</b>	<b>6,581</b>	<b>47%</b>	<b>15%</b>
營業費用					
推銷管理費用	(3,405)	(22%)	(3,238)	(23%)	5%
研發費用	(1,342)	(9%)	(1,283)	(9%)	5%
<b>營業淨利</b>	<b>2,797</b>	<b>18%</b>	<b>2,060</b>	<b>15%</b>	<b>36%</b>
營業外收入及支出	232	2%	279	2%	(17%)
稅前淨利	3,029	20%	2,339	17%	29%
所得稅費用	(648)	(5%)	(449)	(3%)	44%
<b>本期淨利</b>	<b>2,381</b>	<b>15%</b>	<b>1,890</b>	<b>14%</b>	<b>26%</b>
其他綜合損益淨額	78	1%	(250)	(2%)	n/a
<b>綜合損益總額</b>	<b>\$ 2,459</b>	<b>16%</b>	<b>\$ 1,640</b>	<b>12%</b>	<b>50%</b>
淨利歸屬於:					
本公司業主	2,324	15%	1,854	14%	25%
非控制權益	57	-	36	-	58%
	<b>\$ 2,381</b>	<b>15%</b>	<b>\$ 1,890</b>	<b>14%</b>	<b>26%</b>
<b>每股盈餘 (基本)</b>	<b>\$ 5.56</b>		<b>\$ 4.48</b>		<b>24%</b>
<b>每股盈餘 (稀釋)</b>	<b>\$ 5.51</b>		<b>\$ 4.42</b>		<b>25%</b>



# 資產負債摘要及財務指標

集團合併 (單位：佰萬新台幣)	2020. 12月	2019. 12月	+ / - %
<b>資產負債摘要</b>			
現金及流動金融資產	4,442	3,455	29%
存貨	3,028	2,665	14%
短期負債	3,187	2,381	34%
長期負債	2,405	2,422	- 1%
股東權益	16,389	14,785	11%
<b>總資產</b>	<b>28,129</b>	<b>25,437</b>	<b>11%</b>
存貨週轉天數	130	127	
應收帳款週轉天數	120	133	
應付帳款週轉天數	122	129	
淨負債資產比(%)	7%	9%	
<b>股東權益報酬率 (%) ●</b>	<b>15%</b>	<b>13%</b>	
<b>資產報酬率 (%) ●</b>	<b>7%</b>	<b>8%</b>	

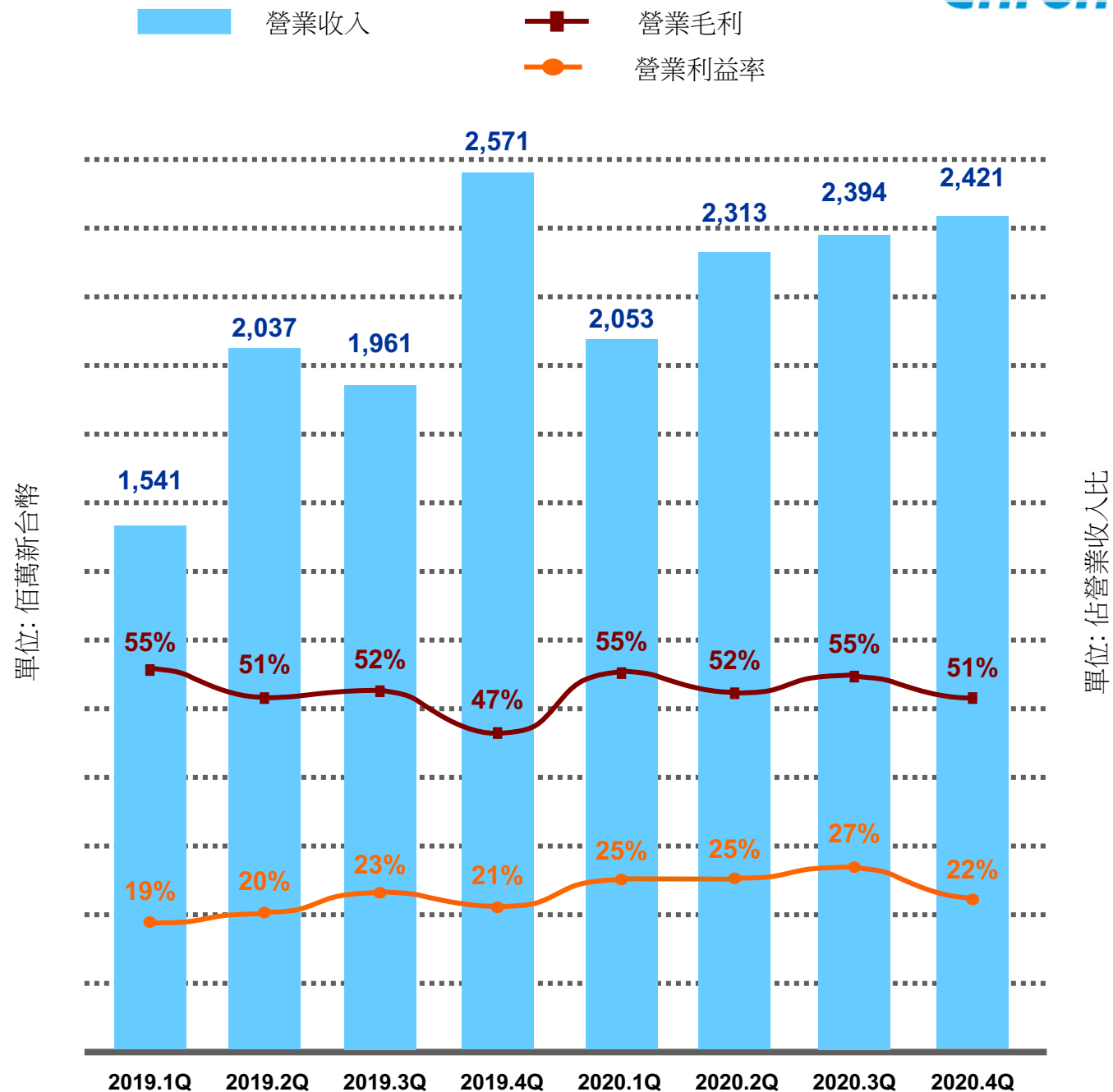
現金流量 (單位：佰萬新台幣)	2020. 全年	2019. 全年	YoY
未計利息稅項折舊及攤銷	3,527	2,839	24%
營業現金流入	2,712	1,365	99%
<b>自由現金流量 ●●</b>	<b>1,165</b>	<b>(902)</b>	<b>n/a</b>

- 股東報酬率及資產報酬率皆已年化。
- 自由現金流量 = 營運活動之淨現金流入 + (投資活動之淨現金流出)。

# 本季重點摘要

## 第4季重點摘要

- 總營業收入: \$24.2億新台幣，  
季上升1%，年下滑6%
- 營業毛利率: 51%
- 營業利益率: 22%
- 淨利: \$6.9億新台幣，  
季成長18%，年成長14%
- 2020年第4季摘要:
  - ✓ 本季主要營收貢獻自於Turnkey Solutions Projects。



# 2020年第4季損益表摘要(母公司)

## 損益表摘要(母公司)

(單位: 佰萬新台幣, 除每股盈餘為新台幣元)

	2020.4Q	%	2020.3Q	%	QoQ	2019.4Q	%	YoY
					%			%
淨營業收入	2,421	100%	2,394	100%	1%	2,571	100%	(6%)
營業成本	(1,184)	(49%)	(1,088)	(45%)	9%	(1,370)	(53%)	(14%)
營業毛利	1,237	51%	1,306	55%	(5%)	1,201	47%	3%
營業費用								
推銷管理費用	(365)	(15%)	(353)	(15%)	3%	(339)	(13%)	8%
研發費用	(329)	(14%)	(307)	(13%)	7%	(311)	(13%)	6%
營業淨利	543	22%	646	27%	(16%)	551	21%	(1%)
營業外收入及支出 ●	275	11%	50	2%	450%	195	8%	41%
稅前淨利	818	33%	696	29%	18%	746	29%	10%
所得稅費用	(132)	(5%)	(113)	(5%)	17%	(142)	(6%)	(7%)
本期淨利	\$ 686	28%	\$ 583	24%	18%	\$ 604	23%	14%
其他綜合損益淨額	105	4%	47	2%	123%	(211)	(8%)	n/a
綜合損益總額	\$ 791	32%	\$ 630	26%	26%	\$ 393	15%	101%
每股盈餘 (基本)	\$ 1.64		\$ 1.39		18%	\$ 1.45		13%
每股盈餘 (稀釋)	\$ 1.62		\$ 1.38		17%	\$ 1.43		13%

● 100%持有之子公司淨利認列, 日茂為損益兩平, 威光為獲利2仟7佰萬 (年下滑45%)。



# 2020年全年損益表摘要(母公司)

## 損益表摘要(母公司)

(單位: 佰萬新台幣, 除每股盈餘為新台幣元)

	2020	%	2019	%	YoY %
淨營業收入	9,180	100%	8,111	100%	13%
營業成本	(4,313)	(47%)	(4,018)	(50%)	7%
營業毛利	4,867	53%	4,093	50%	19%
營業費用					
推銷管理費用	(1,390)	(15%)	(1,231)	(15%)	13%
研發費用	(1,217)	(13%)	(1,172)	(14%)	4%
營業淨利	2,260	25%	1,690	21%	34%
營業外收入及支出 ●	535	5%	460	6%	16%
稅前淨利	2,795	30%	2,150	27%	30%
所得稅費用	(471)	(5%)	(296)	(4%)	59%
本期淨利	\$ 2,324	25%	\$ 1,854	23%	25%
其他綜合損益淨額	89	1%	(246)	(3%)	n/a
綜合損益總額	\$ 2,413	26%	\$ 1,608	20%	50%
每股盈餘 (基本)	\$ 5.56		\$ 4.48		24%
每股盈餘 (稀釋)	\$ 5.51		\$ 4.42		25%

● 100%持有之子公司淨利認列，日茂為獲利2仟萬新台幣(年下滑31%)，威光為虧損1億3仟6佰萬新台幣。

# 資產負債摘要及財務指標

母公司 (單位：佰萬新台幣)	<u>2020. 12月</u>	<u>2019. 12月</u>	+ / - %
<b>資產負債摘要</b>			
現金及流動金融資產	902	459	97%
存貨	2,331	2,026	15%
短期負債	2,420	1,615	50%
長期負債	2,230	2,285	- 2%
股東權益	16,063	14,489	11%
<b>總資產</b>	<b>24,406</b>	<b>21,803</b>	<b>12%</b>
存貨週轉天數	184	178	
應收帳款週轉天數	106	123	
應付帳款週轉天數	96	102	
淨負債資產比(%)	23%	24%	
<b>股東權益報酬率 (%) ●</b>	<b>15%</b>	<b>13%</b>	
<b>資產報酬率 (%) ●</b>	<b>10%</b>	<b>9%</b>	
<b>現金流量 (單位：佰萬新台幣)</b>	<b><u>2020. 全年</u></b>	<b><u>2019. 全年</u></b>	<b>YoY</b>
未計利息稅項折舊及攤銷	3,053	2,400	27%
營業現金流入	2,049	1,537	33%
<b>自由現金流量 ●●</b>	<b>606</b>	<b>(218)</b>	<b>n/a</b>

● 股東報酬率及資產報酬率皆已年化。

●● 自由現金流量 = 營運活動之淨現金流入 + (投資活動之淨現金流出)。

Chroma

## 營運概況

Test  
and  
Auto  
Solution  
providers

# 2020年全年產品銷售佔比與合併營收明細

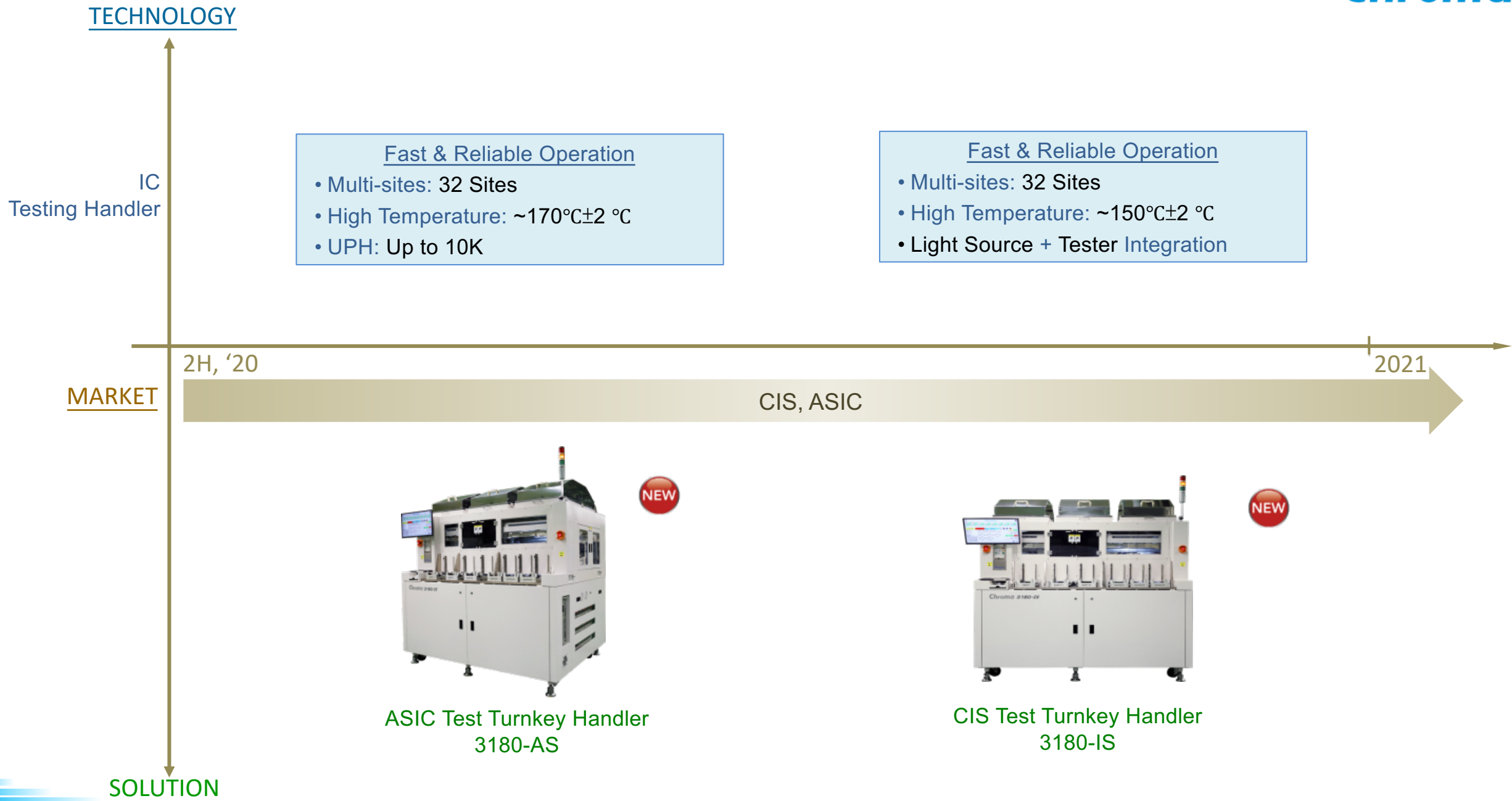
(單位: 百萬新台幣)

	<u>2020</u>	<u>%</u>	<u>YoY</u>	<u>2019</u>	<u>%</u>
量測及自動化檢測設備	4,849	53%	5%	4,605	57%
半導體 / Photonics 測試解決方案	3,025	33%	31%	2,311	28%
Turnkey Solutions	456	5%	(28%)	632	8%
其它	850	9%	51%	563	7%
母公司營業收入	<b>9,180</b>	<b>100%</b>	<b>13%</b>	<b>8,111</b>	<b>100%</b>
+ 量測事業體海外據點及測試設備相關子公司	2,865		18%	2,435	
致茂電子檢測設備事業體 (含海外量測事業子公司)	<b>12,045</b>	<b>78%</b>	<b>14%</b>	<b>10,546</b>	<b>76%</b>
威光自動化	618	4%	(39%)	1,009	7%
日茂新材料	2,551	16%	22%	2,097	15%
其它	318	2%	23%	258	2%
<b>集團合併營收</b>	<b>15,532</b>	<b>100%</b>	<b>12%</b>	<b>13,910</b>	<b>100%</b>

## 2021年營運展望

- 致茂電子集團2020年全年累計合併營收達155億新台幣，較去年同期成長12%。母公司量測事業體2020年年營收創歷史新高達92億新台幣，較去年同期增加13%，半導體及Photonics測試解決方案為主要營收成長動能，該產品線較2019年同期成長31%。
- 2021年營運展望
  - ✓ 受惠於全球半導體晶片短缺、5G相關晶片與high performance chip (HPC)應用快速發展，半導體及Photonics測試設備需求仍舊強勁，主要營收動能來自於：
    - IC產品的可靠性測試: Burn-in Test, SLT Test及溫控檢測設備。
    - 無線通訊RF及MCU測試解決方案。
    - CIS / VCSEL / ToF 測試設備。
    - Semiconductor inspection and metrology solutions。
  - ✓ 量測及自動化檢測設備持續聚焦於綠能科技相關之檢測設備，包含電動車相關零組件、電池芯/電池模組/電池包、智慧電網及5G / 伺服器等相關產業之電力電子測試需求。

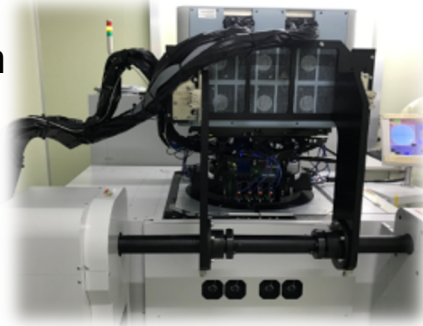
# Semiconductor Test Solution





## CMOS Image Sensor 32 site CP Test

- ✓ **High pixel, high resolution** sensors
- ✓ **Wafer level** packaging
- ✓ **32-site** direct mount test
- ✓ Based on **3380 VLSI** Test System
- ✓ Integrated CRAFT Software



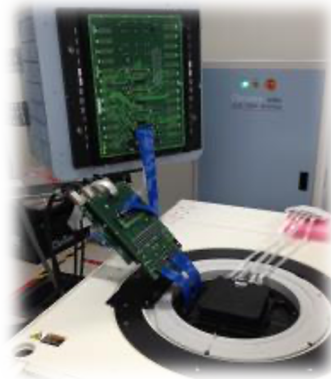
## CMOS Image Sensor FT Test

- ✓ **High pixel, high resolution** sensors
- ✓ **Packaged** sensors
- ✓ **Flexible #** of parallel test sites
- ✓ Based on **3300 PXIe** platform
- ✓ Integrated CRAFT Software



## CMOS Image Sensor 8 site CP Test

- ✓ Surveillance, **<10M pixel** sensors
- ✓ **Wafer level** sampling test
- ✓ **4-8 site** cable mount test
- ✓ Based on **3380 VLSI** Test System
- ✓ Integrated CRAFT Software



## CMOS Image Sensor FT Test with SLT Handler

- ✓ Surveillance, **<10M pixel** sensors
- ✓ **Packaged** sensors
- ✓ **6-12 site** parallel test
- ✓ Based on **3300 PXIe** platform
- ✓ Integrated CRAFT Software



# Photonics Test Solution

## TECHNOLOGY

Photonics Testing

### Photonics Wafer Tester

- LIV & NF 2-in-1 test with one probe mark
- Measureable Optical Power Range: 1mW~5W
- Throughput: 2300UPH

### High Voltage SMU

- High Voltage Source: Up to 80V DC
- Measurement Accuracy : 0.02uA
- DUT Protection: Spike Free

### Photonics Module Tester

- Max. 4 different optical heads
- Measureable Optical Power Range: 1uW~20W
- Wavelength Resolution: 0.05nm

2H, '20

2021

## MARKET

3D Sensing, LiDAR, Optical Fiber Communication



NEW

Photronics Device Probing LIV & NF Test System  
58635-LN



NEW

Photronics Module Semi-Automatic Test System  
58625

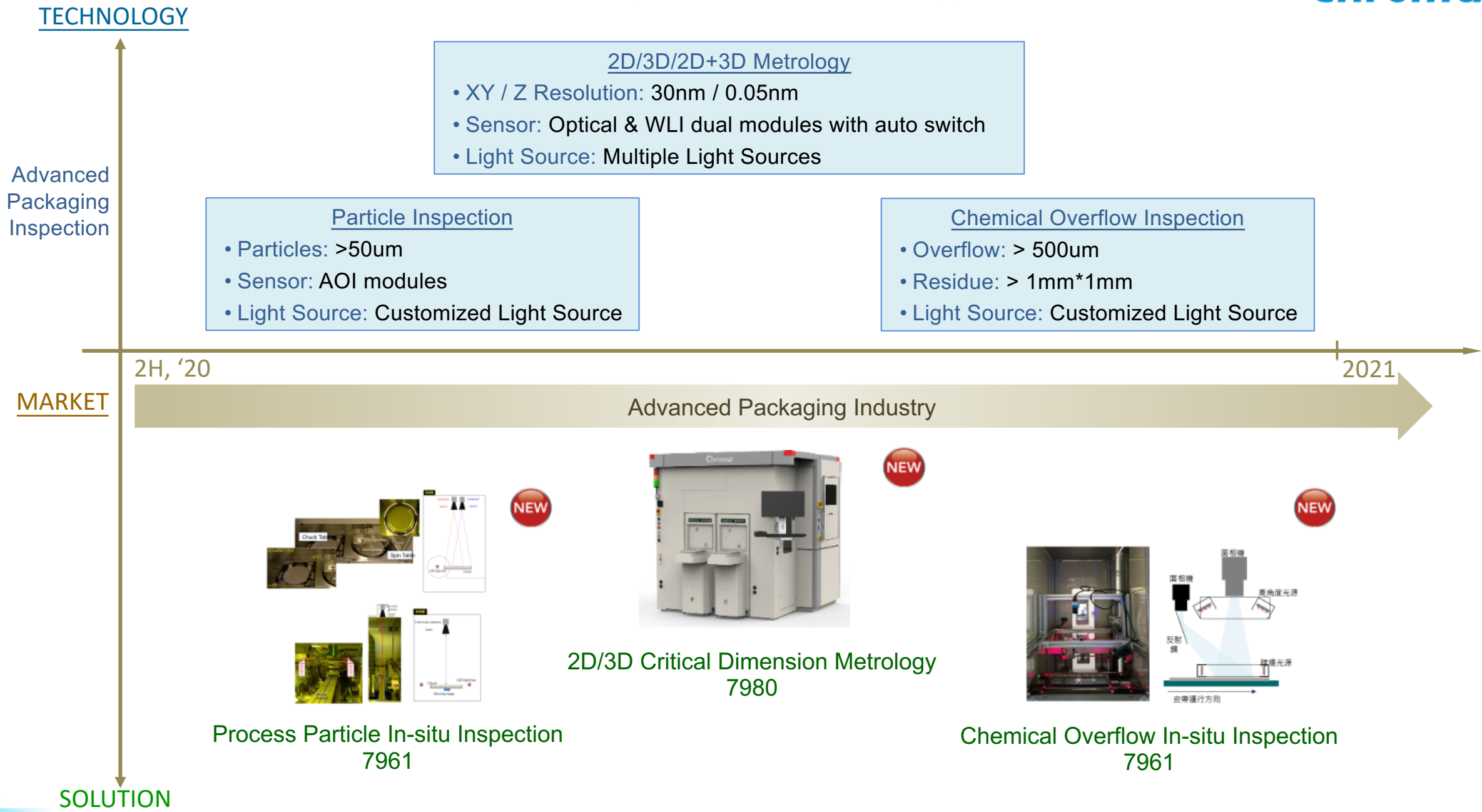


NEW

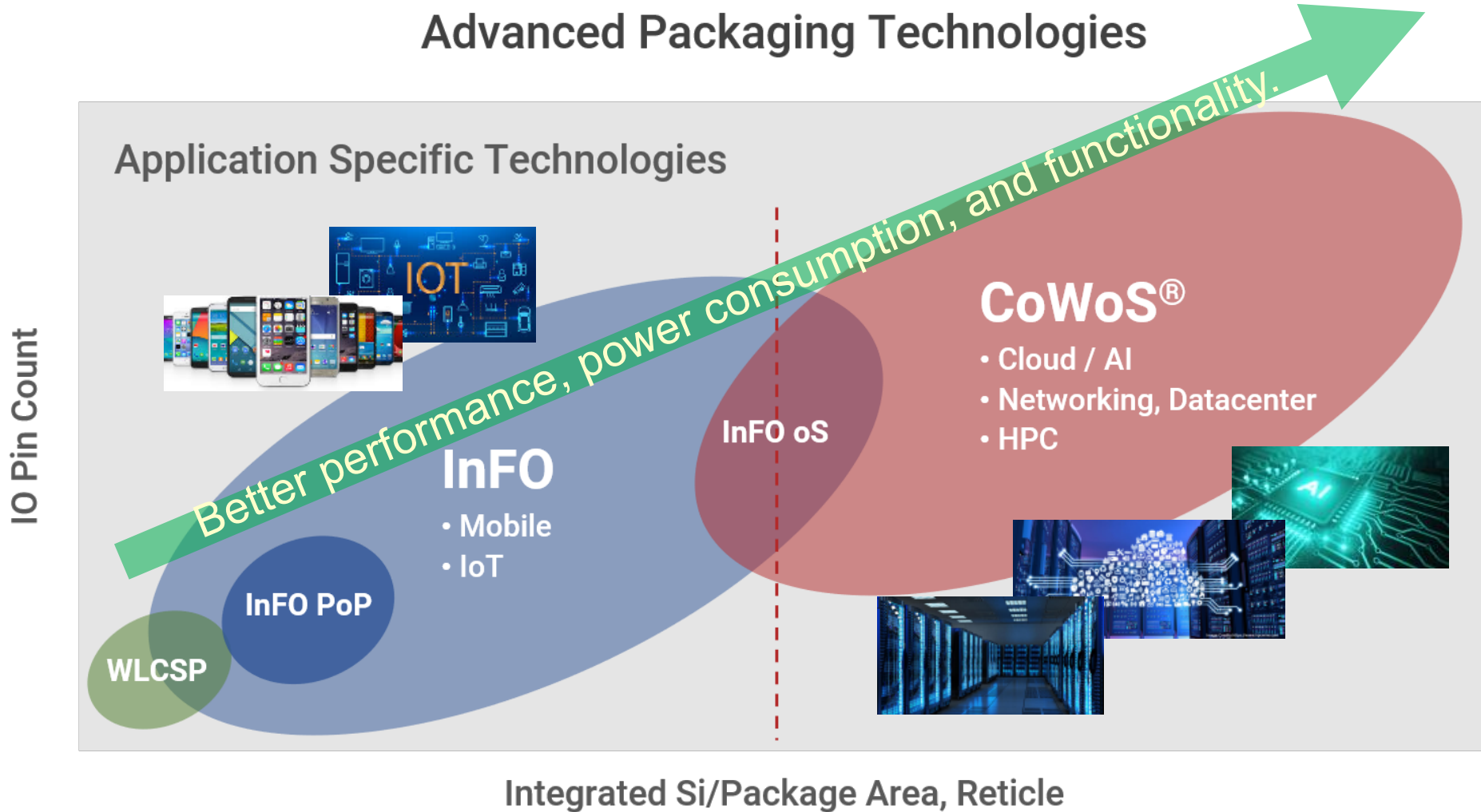
PD/APD Burn-in & Reliability Test System  
58606

## SOLUTION

# Semiconductor Inspection & Metrology Solution

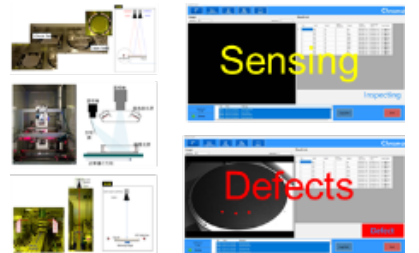


## Advanced Packaging Technologies



### Measurement

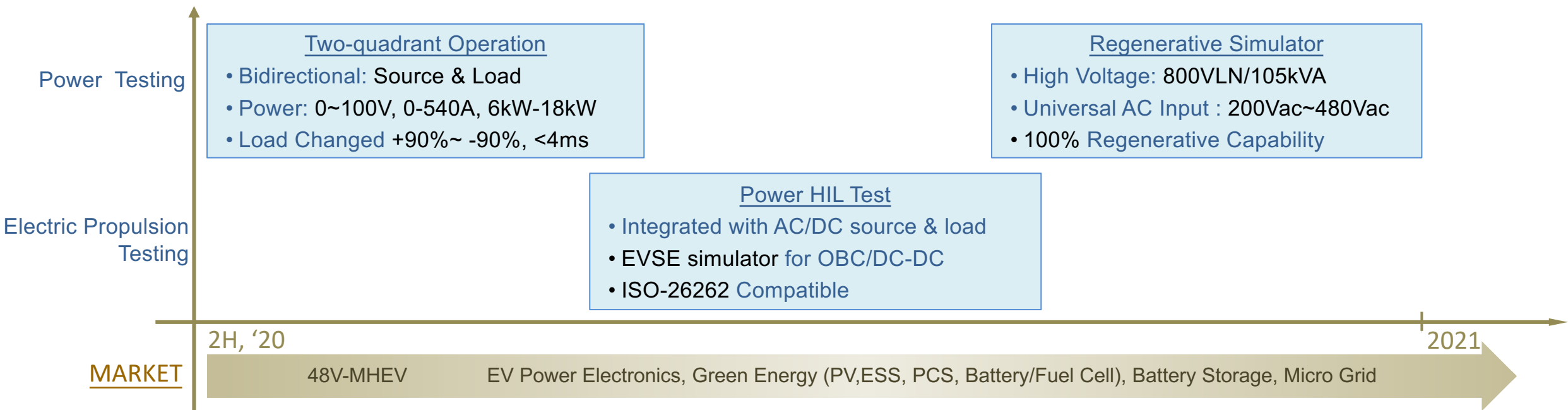
- ✓ Critical Dimension
- ✓ TSV
- ✓ Overlay
- ✓ Film Thickness



### Process In-situ Inspection

- ✓ SAW Particle
- ✓ Underfill Glue Residue
- ✓ Flux Particle
- ✓ Trim Particle
- ✓ Mount Particle
- ✓ Plating Chemical Residue
- ✓ Grinding Tape Residue

Source: tsmc Website  
 3DFabric™ for HPC - Taiwan Semiconductor Manufacturing Company Limited (tsmc.com)



Two-quadrant Operation

- Bidirectional: Source & Load
- Power: 0~100V, 0-540A, 6kW-18kW
- Load Changed +90%~ -90%, <4ms

Regenerative Simulator

- High Voltage: 800VLN/105kVA
- Universal AC Input : 200Vac~480Vac
- 100% Regenerative Capability

Power HIL Test

- Integrated with AC/DC source & load
- EVSE simulator for OBC/DC-DC
- ISO-26262 Compatible

MARKET

2H, '20 → 2021

48V-MHEV EV Power Electronics, Green Energy (PV,ESS, PCS, Battery/Fuel Cell), Battery Storage, Micro Grid



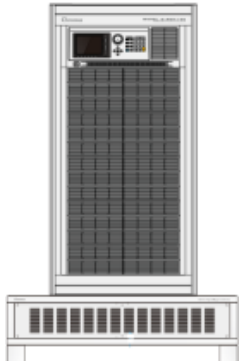
**NEW**

Bidirectional DC Power Supply  
62180D-100



**NEW**

OBC & DC-DC Converter Power HIL Testbed  
8620

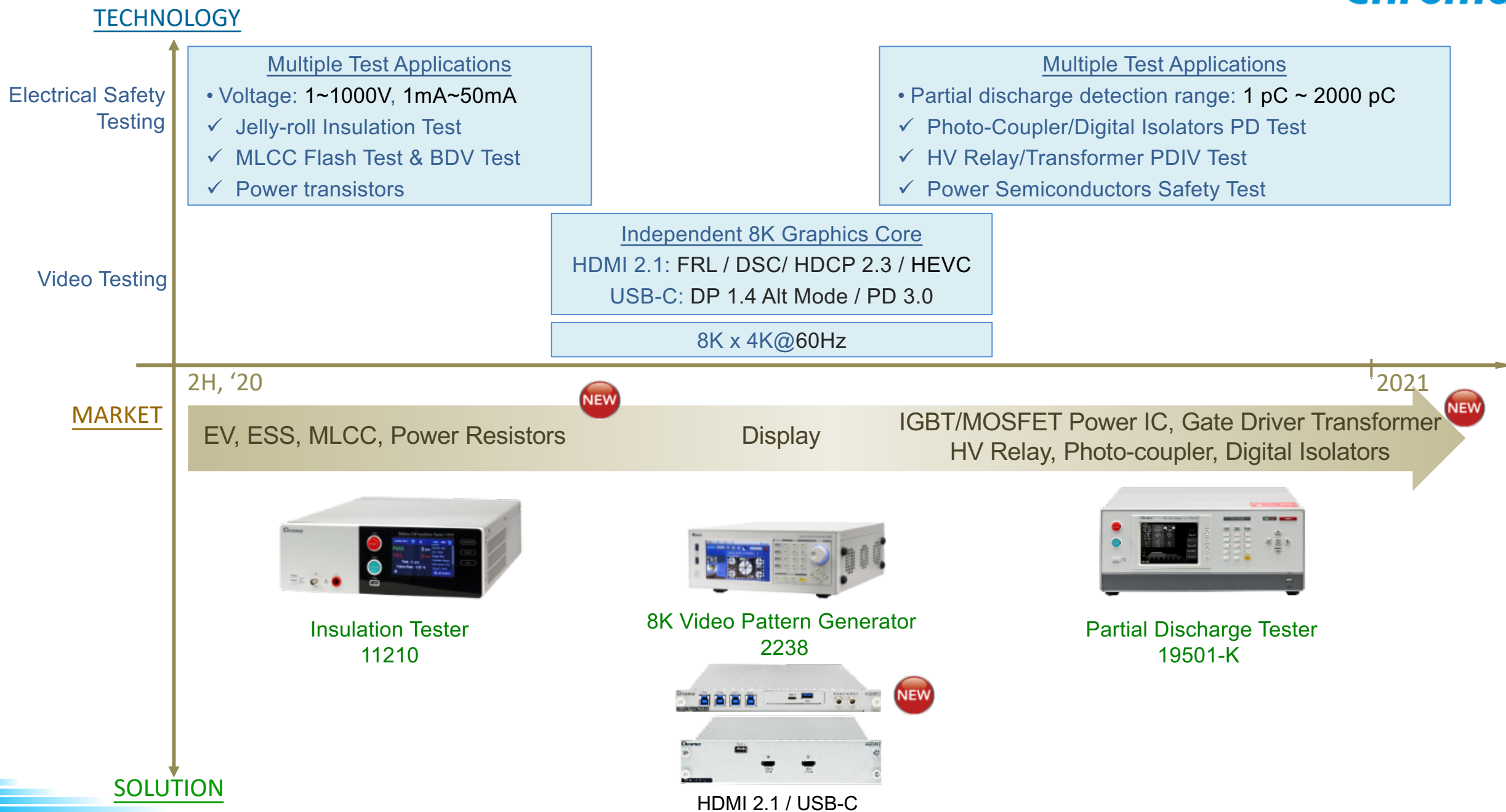


**NEW**

Regenerative Grid Simulator  
61800-100HV

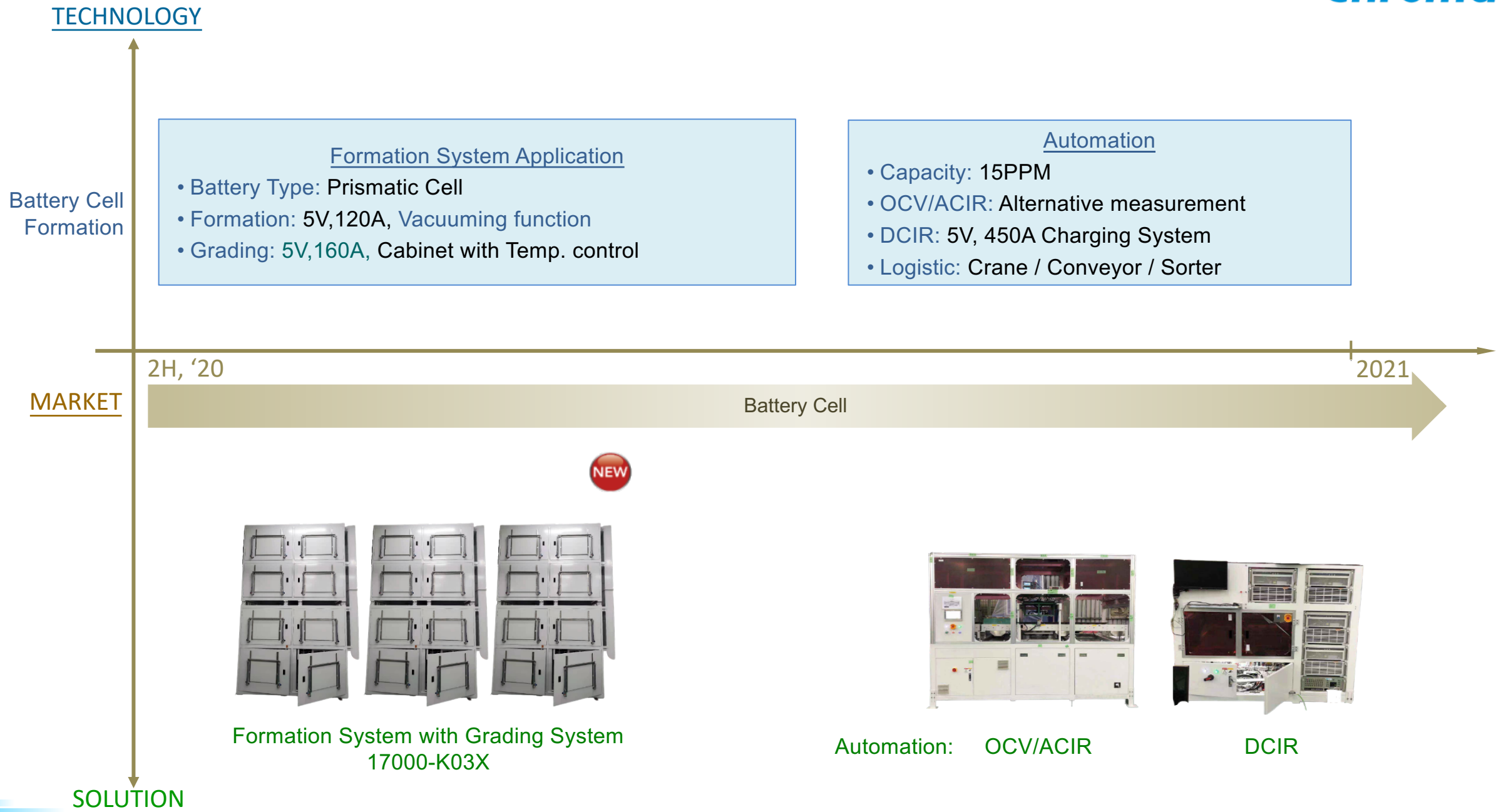
SOLUTION

# Test Instruments & ATS





# Turnkey Solution



# SuperSizer™ Series

The Unprecedented Yield Enhancer in the Nanometer Range



## SuperSizer™ V

Semi S2 certified  
TS explosion-proof certified  
For IPA/Organics

US Pat. No 10545082B2  
US Pat. No 9625365B2

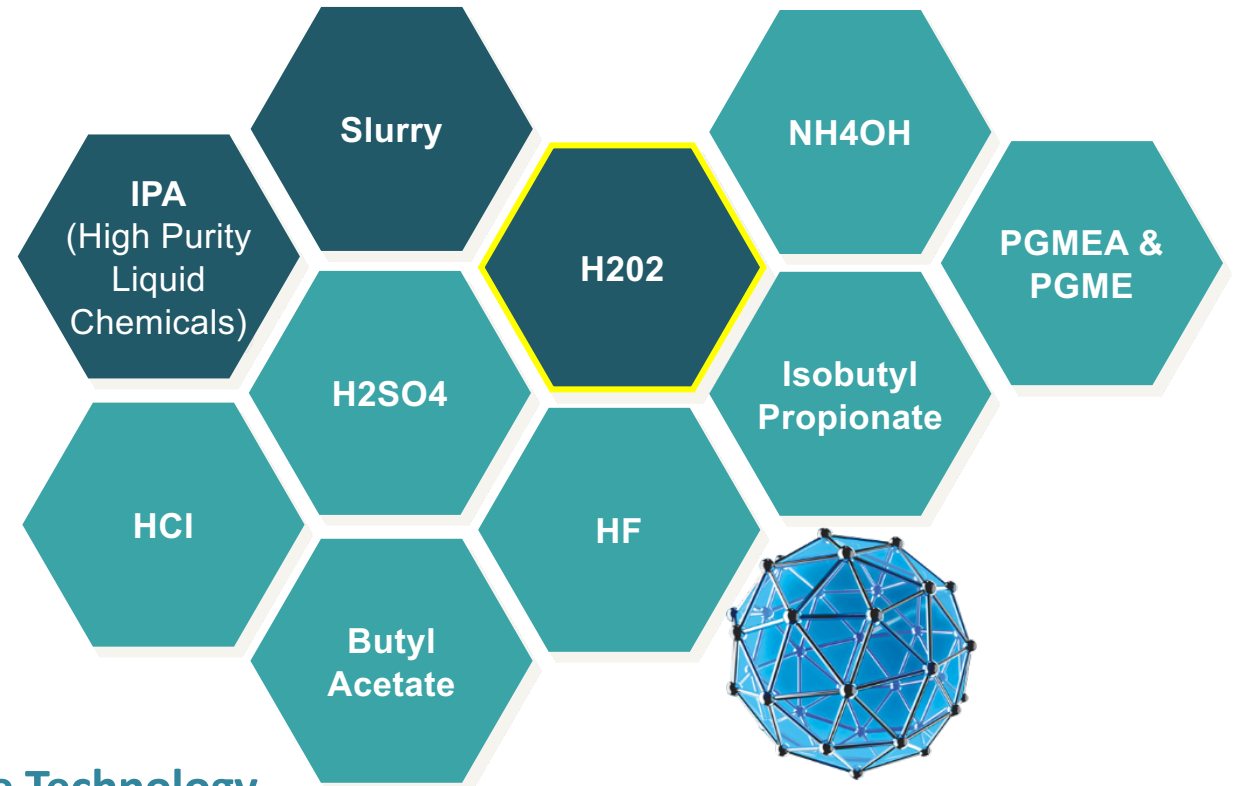


## SuperSizer™ VI

Semi S2 certified  
For H<sub>2</sub>O<sub>2</sub> /UPW

TW Pat. No I583439B  
TW Pat. No I549745B

### Monitoring Materials



### Core Technology

Aerosol Measurement Technology

### Target

Particles (hard particles)  
Impurities (soft particles)

### Advantage

No Bubble Interference

### Resolution

~1nm@20nm  
(at 20nm, the scale gap is around 1nm)

### Report

Particle Size Distribution  
Total Count

Keep going beyond



Thank  
You !