

長華科技可持續性的成長

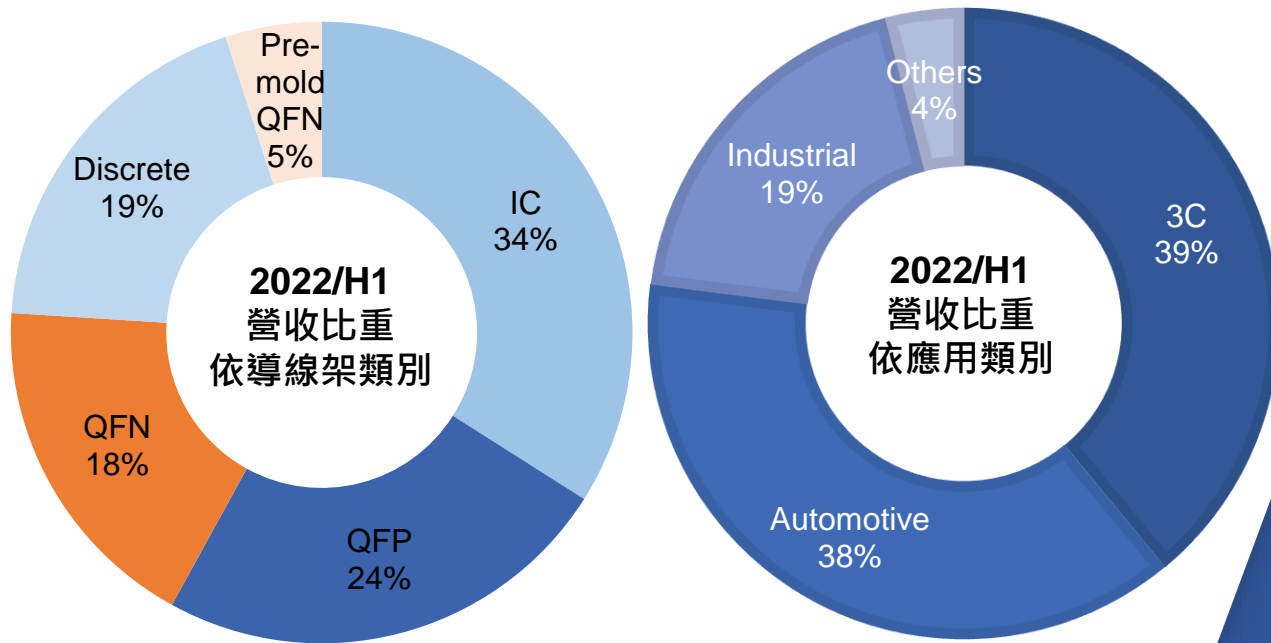
2022投資者簡報
長華科技 (6548 TT) 董事長 黃嘉能

前瞻性聲明

Information included in this press release that are not historical in nature are "forward looking statements". CWTC cautions readers that forward looking statements are based on CWTC's reasonable knowledge and current expectations and are subject to various risks and uncertainties. Actual results may differ materially from those contained in such forward looking statements for a variety of reasons including without limitation, risks associated with demand and supply change, manufacturing and supply capacity, design win, time to market, market competition, industrial cyclicalities, customer's financial condition, exchange rate fluctuation, legal actions, amendments of the laws and regulations, global economy change, natural disasters, and other unexpected events which may disrupt CWTC's business and operations. Accordingly, readers should not place reliance on any forward looking statements. Except as required by law, CWTC undertakes no obligation to update any forward looking statement, whether as a result of new information, future events, or otherwise.

支援所有IC應用的導線架解決方案領先者

- 股票代號：6548 TT
- 市值 (2022/9/15): US\$1.05bn
- 客戶族群：IC封裝測試(OSAT)，整合元件製造廠(IDM)與IC設計



QFN：Quad-Flat No-Leads. Discrete：Small-Outline transistor, SOT
QFP：Quad Flat Package
IC：SOP, TSSOP, TSOP,....etc.

超過30年

導線架經驗

美金4.47億元

2021年營收

90+

導線架全球專利數量

2,000+

全球員工數量

我們的執行計畫

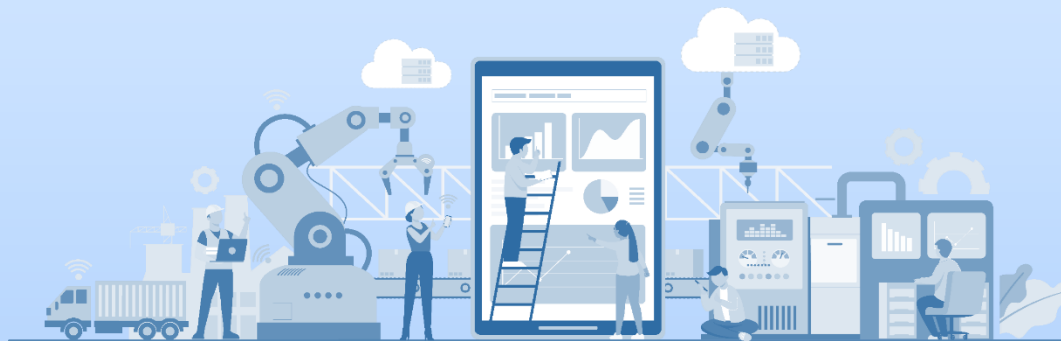
QFP

QFN

aQFN

Pre-mold

SOT



沖壓

蝕刻

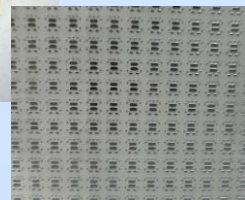
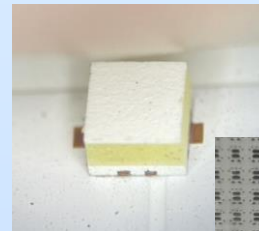
電鍍

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多元化的導線架

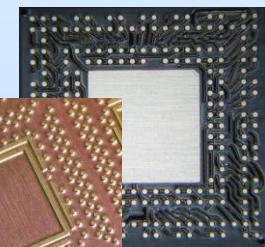
有紀律地投資

領先的導線架科技



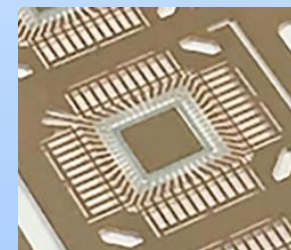
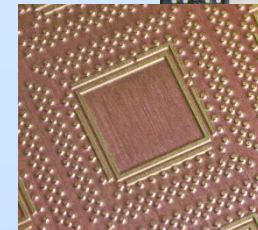
Pre-mold QFN

- 領先世界的 EME-filled QFN
- 卓越的散熱效率與結構剛性
- 提供IC、Mini LED背光、感應器與微機電應用更高的生產效率
- 取代入門等級塑膠基板



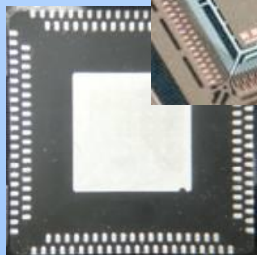
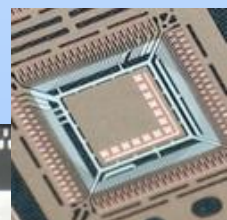
aQFN

- I/O數量: **100-400**
- 世界領先且獨家供應之QFN導線架
- 取代BGA
- 台灣廠4Q21已開始量產



QFN

- I/O數量: **32-180**
- 取代SOP與QFP和Low-end BGA共存



QFP

- I/O數量: **32-256**
- 可彈性調配之沖壓與蝕刻製程
- 來自IDM與OSAT的客戶需求持續增加



簡報摘要

導線架的成長動力

有紀律地投資

對長期股東的承諾

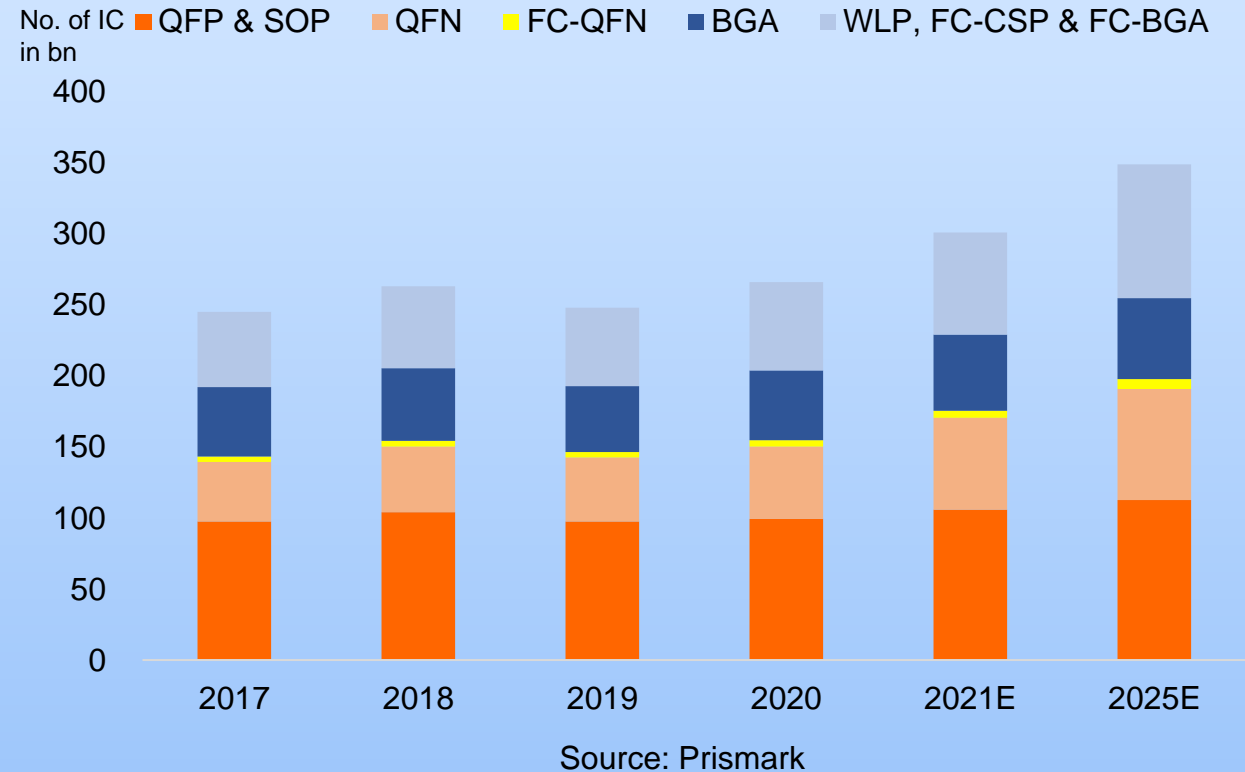
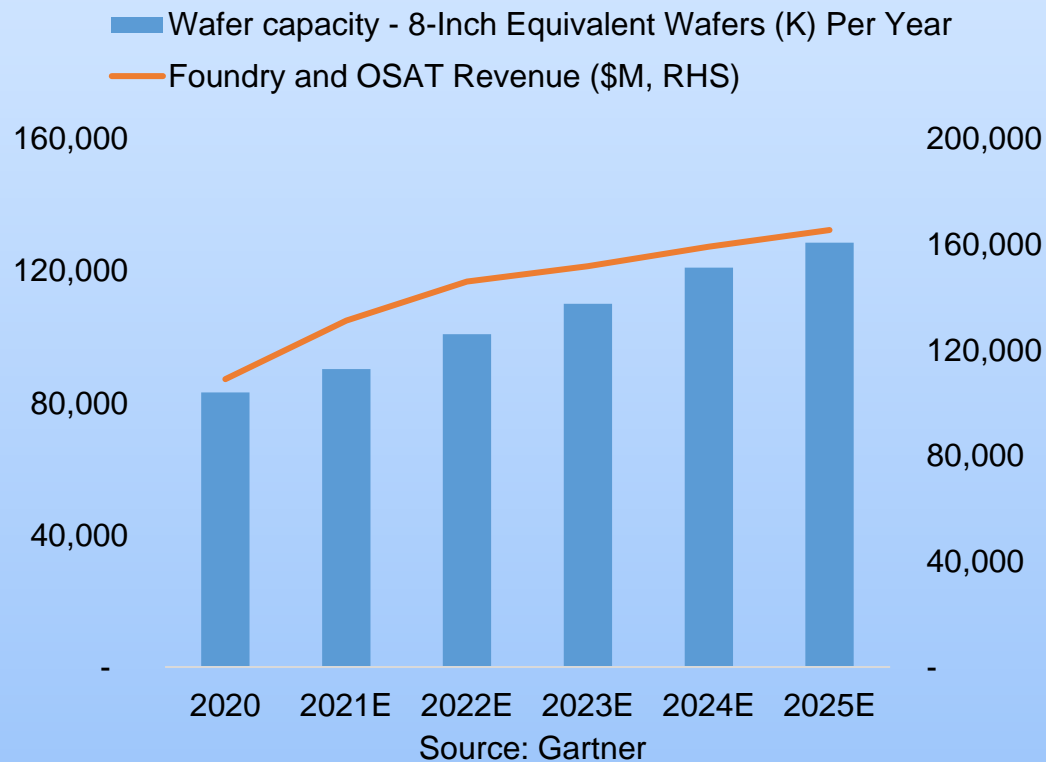
財務表現

導線架的成長動力

長期成長的導線架需求

未來全球晶圓廠產能估計將有**9%**之年複合成長率，而全球**IC**總量因晶圓製程升級將具有更高的成長率，如**65/40nm**升級至**28/22nm**。

與產業趨勢一致，我們已觀察到全球一級IDM、OSAT與IC設計客戶對於**QFP**與**QFN**的需求持續增加。



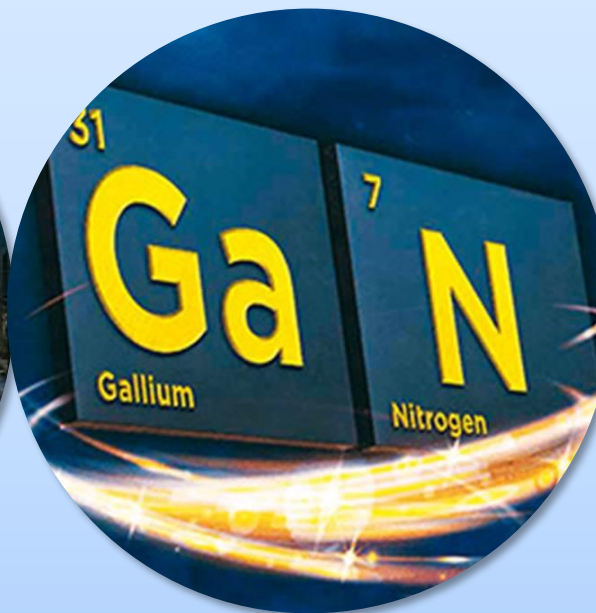
產品應用領域



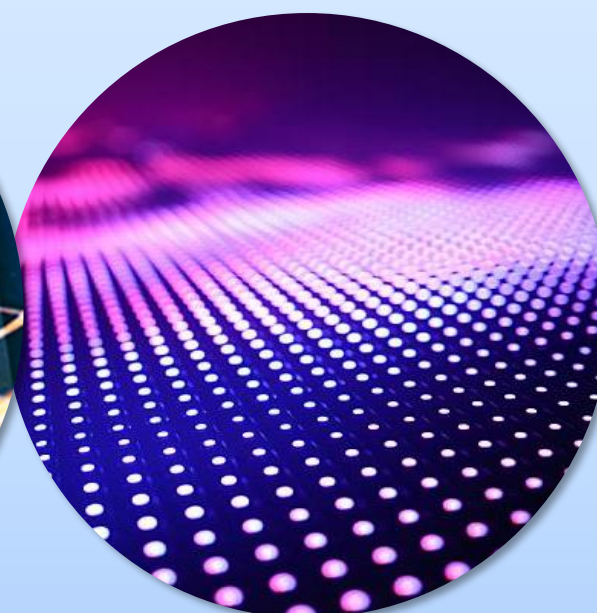
車用



5G & WiFi



III-V 族半導體



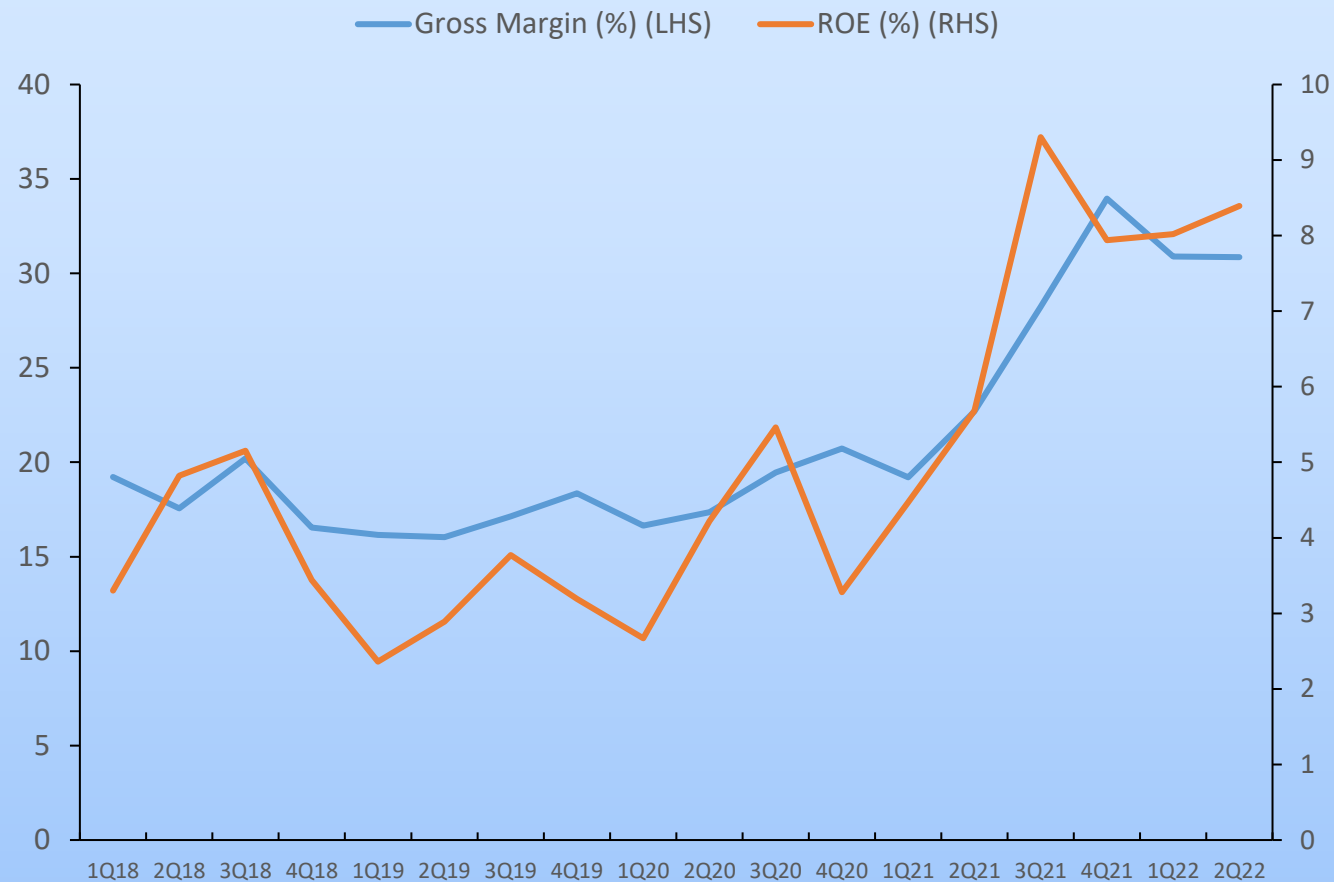
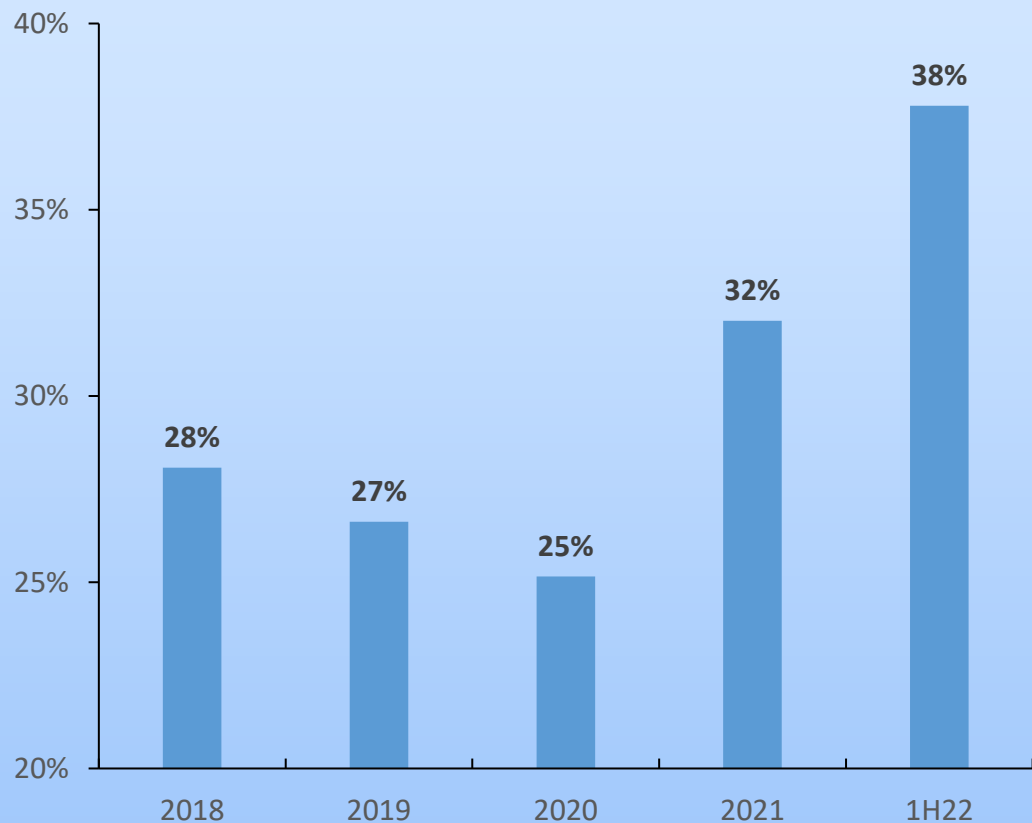
Mini LED

多元化的導線架規格要求: I/O數量, 尺寸規格, 可靠度, 熱傳導效能及電氣性能

長華科的車用事業逐年成長

長華科車用營收佔比從2018年的28%上升至1H22的38%。我們預期車用事業將持續作為驅動獲利成長的主要動能之一。

Automotive Business Revenue Share



有紀律地投資

多元化的製造流程

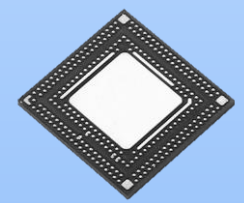
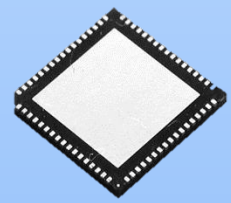
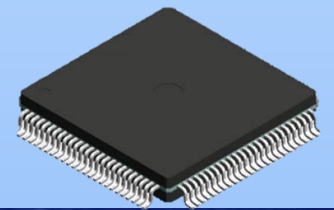
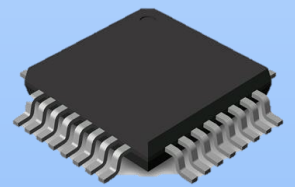
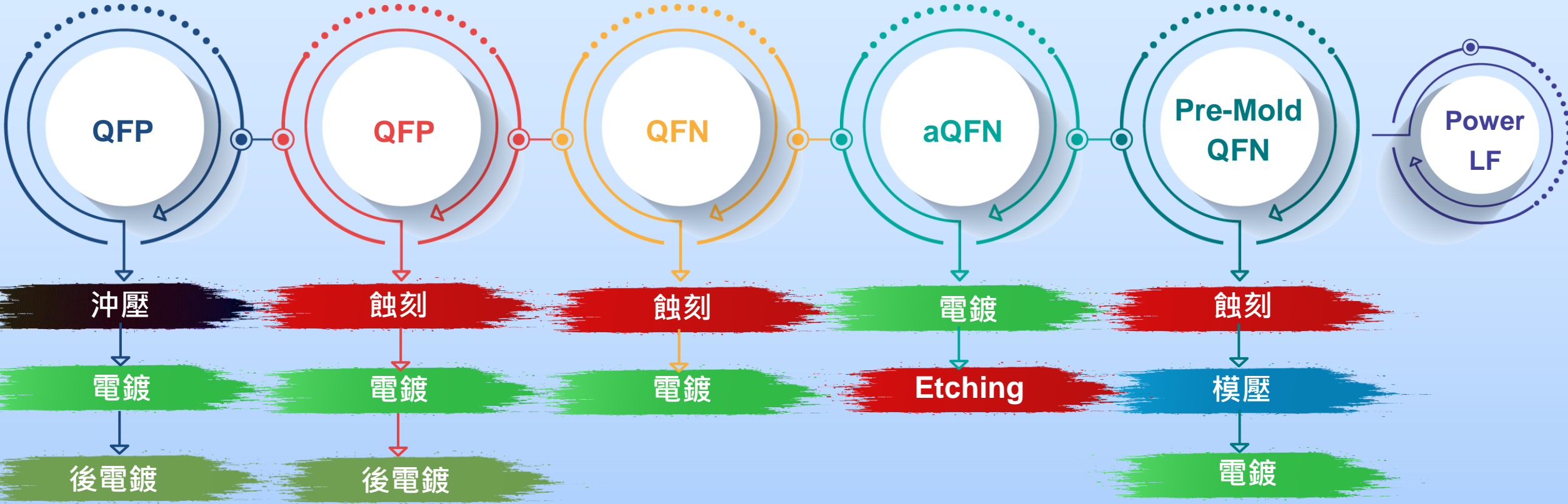


Photo: CWTC and ASE & Infineon

對長期股東的承諾

我們致力於產生優於業界的高報酬率

藉由高效率的資本支出與多元化的導線架，我們預期長華科技未來五年的成長率可望優於半導體製造業，目標在往後五年中持續創造高於20%的股東報酬率。

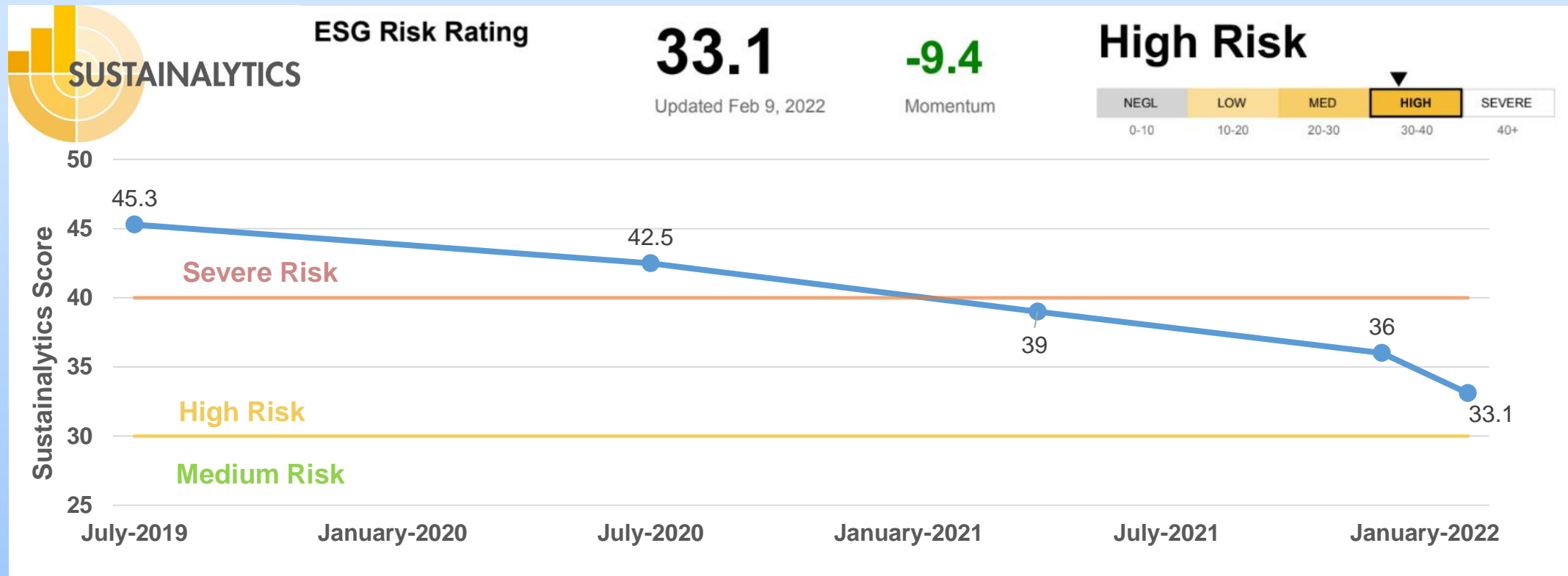
2021E-2025E	資本支出佔營收比率	資本支出效率*		營收複合年增率	毛利複合年增率	自由現金流複合年增率
長華科技	中至高個位數百分比%	2~3x		優於產業平均成長		
晶圓代工產業	36%	0.4x		14%	14%	12%
封測產業	11%	1.0x		7%	8%	24%

* 資本支出效率: 第N+1年之營收增長 / 第N年之資本支出

資料來源: Bloomberg 與 Gartner. 晶圓代工產業包含台積電、聯電與世界先進；封測產業包含日月光、力成、京元電、頤邦、南茂與超豐。

我們不斷進步的ESG表現

- Year over year improvement in our Sustainalytics ESG Score
- We expect further improvement into the medium risk category by 2022



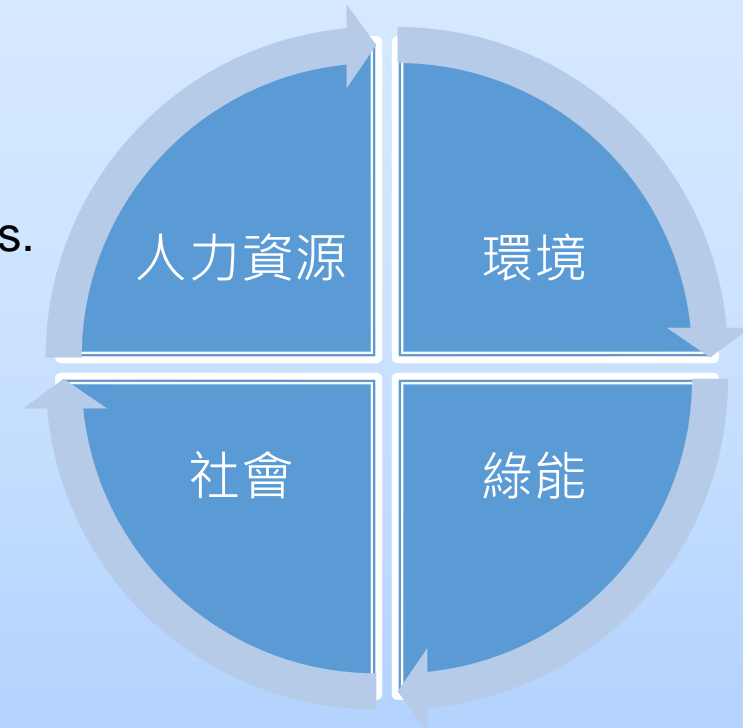
我們追求對環境友善的可持續性成長

環境與綠能:

- Reclaimed water usage reached **20%** in 2021 vs. 13.6% in 2019.
- **4%** of electricity demand at the new factory will be supplied from solar energy vs. existing factory of only 0.3%.

社會與人力資源:

- We are committed to complying with the Responsible Business Alliance (RBA), the Global e-Sustainability Initiative (GeSI), and also the Responsible Minerals Initiative (RMI).
- ESOP program transferred over **1,341,000** shares to employees
- Our new fab expect to create more than **150** new job opportunity.
- Stringent Environmental, Health, & Safety Policy across all of our Asia factories.

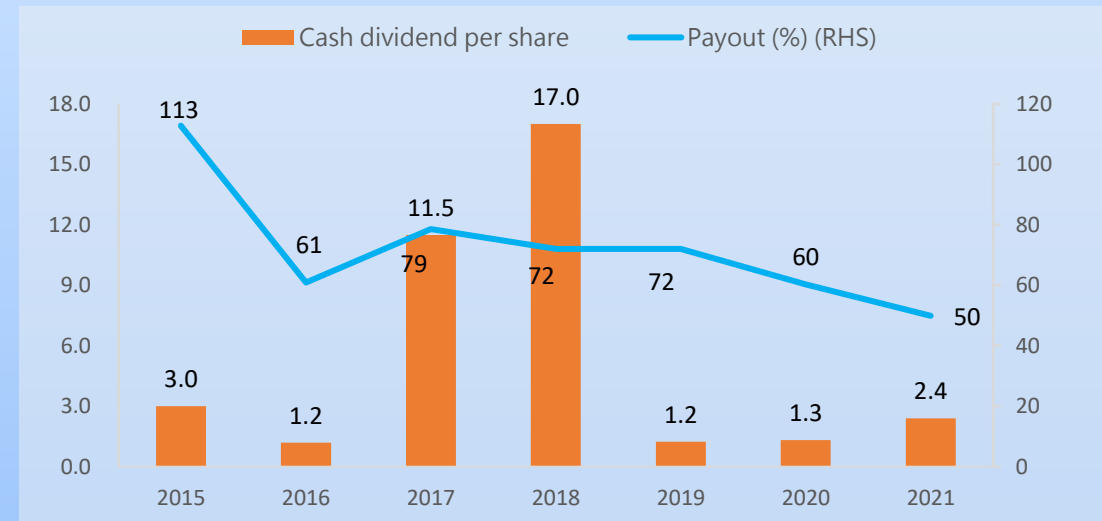
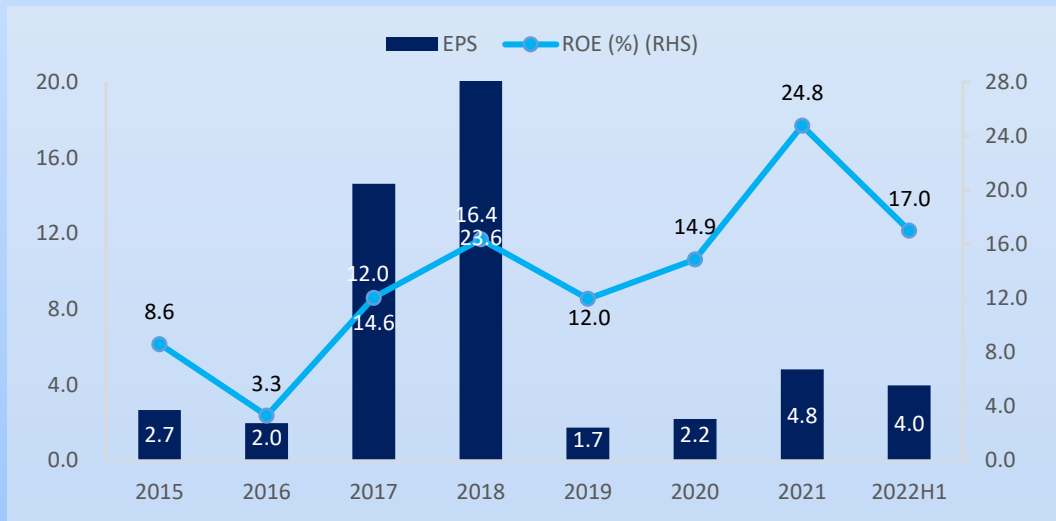
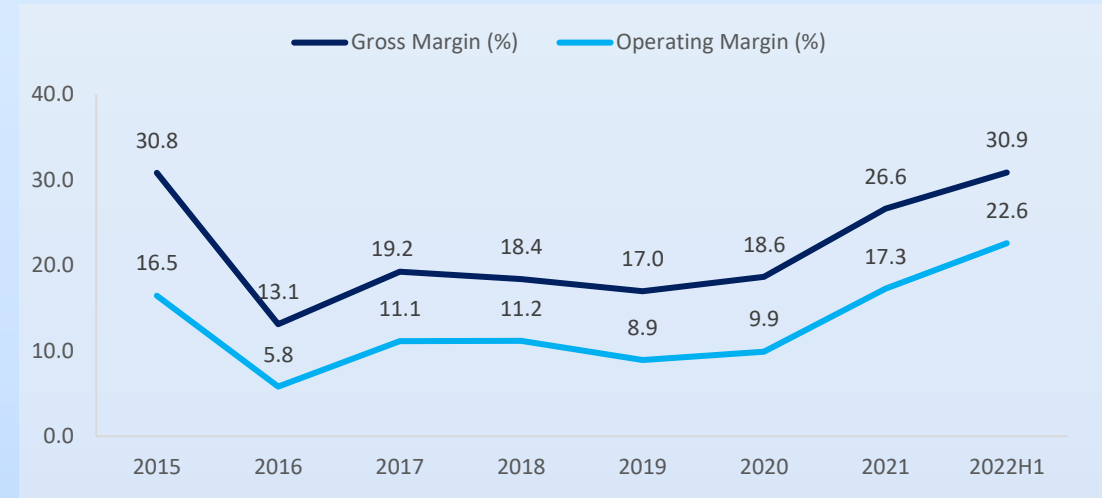
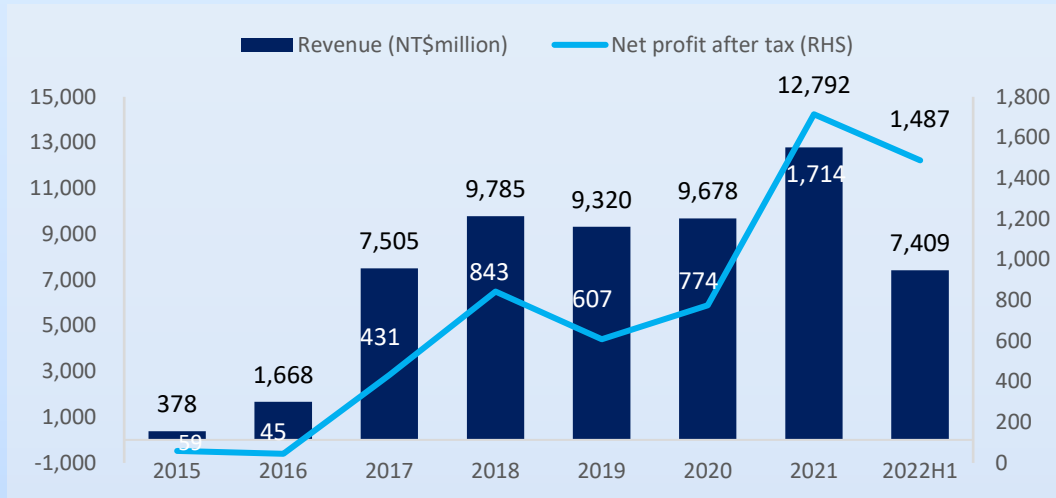


CWTC 2021
ESG
Report



財務表現

強勁的財務表現



*Since Sep. 9th. 2019, CWTC changed the par value of stock from NT\$10 to NT\$1. The EPS and dividend are one-tenth of the original numbers.
 Note: 2022H1 financial data is unaudited and may be changed after being reviewed by the account.

2017-1H22 損益表

NT\$m	2017	2018	2019	2020	2021	1H22	YoY (%)					
							2017	2018	2019	2020	2021	1H22
Revenue	7,505	9,785	9,320	9,678	12,792	7,409	350.0	30.4	-4.7	3.8	32.2	27.9
Gross Profit	1,444	1,802	1,581	1,805	3,406	2,287	559.6	24.8	-12.3	14.2	88.7	87.6
Operating Expenses	- 607	- 708	- 748	- 845	- 1,196	-614	397.9	16.5	5.7	12.9	41.6	32.6
Operating Profit	837	1,094	833	960	2,210	1,673	763.1	30.7	-23.9	15.3	130.1	121.3
Pretax Income	1,071	1,206	899	966	2,249	1,895	362.6	12.6	-25.4	7.5	132.7	161.0
Tax Expenses	- 251	- 354	- 280	- 176	- 511	-393	955.8	40.9	-20.8	-37.3	190.8	138.2
Net Income to Parent	431	843	607	774	1,714	1,487	858.0	95.5	-27.9	27.4	121.5	170.9
Basic EPS (NT\$)	14.62	23.60	1.72	2.19	4.81	3.96	642.1	61.4	-92.7	27.3	119.6	155.5
Key Financial Ratios (%)												
Gross Margin	19.2	18.4	17.0	18.6	26.6	30.9						
Operating Expense Ratio	8.1	7.2	8.0	8.7	9.3	8.3						
Operating Margin	11.1	11.2	8.9	9.9	17.3	22.6						
Effect Tax Rate	23.4	29.3	31.2	18.2	22.7	20.7						
Net Margin	5.7	8.6	6.5	8.0	13.6	20.3						

2017-1H22 資產負債表

NT\$m	2017	2018	2019	2020	2021	1H22	YoY (%)					
							2017	2018	2019	2020	2021	1H22
Total Assets	9,100	9,788	10,544	12,164	14,842	17,858	290.1	7.6	7.7	15.4	22.0	33.1
Cash	2,131	2,304	3,076	2,502	3,796	5,173	244.7	8.1	33.5	-18.7	51.7	79.2
AR & NR	1,825	1,927	2,003	2,114	2,858	3,251	248.6	5.6	4.0	5.5	35.2	31.8
Inventories	1,267	1,437	1,296	1,437	2,196	2,589	1456.6	13.4	-9.8	10.9	52.9	41.0
Fixed Assets	2,318	2,441	2,210	2,252	2,475	2,995	615.4	5.3	-9.5	1.9	9.9	27.2
Total Liabilities	3,970	4,617	5,558	6,738	6,430	8,140	1229.0	16.3	20.4	21.2	-4.6	5.5
AP & NP	957	1,019	1,148	1,105	1,337	1,485	430.7	6.5	12.6	-3.8	21.0	19.3
Total Equity	5,130	5,171	4,986	5,426	8,412	9,718	152.2	0.8	-3.6	8.8	55.0	70.6
Key Financial Ratios												
A/R Turnover Days	56.3	69.0	75.9	76.6	70.0	75.3						
Inventory Turnover Days	40.0	61.0	63.5	62.5	69.7	85.2						
A/P Turnover Days	33.8	44.6	50.4	51.5	21.2	50.3						
Cash Conversion Days	62.6	85.4	89.0	87.5	118.4	110.2						
ROE (%)	12.0	16.4	12.0	14.9	24.8	17.0						
ROA (%)	7.5	8.9	6.0	6.8	12.7	9.3						

Appendix

詞彙表

- SO/SOP: Small Outline and Small Outline Package
- TSSOP: Thin Shrink Small Outline Package
- TSOP: Thin Small Outline Package
- COL: Chip-n-Lead
- QFP: Quad Flat Package
- SQFP: Small Quad Flat Package
- TQFP: Thin profile Quad Flat Package
- LQFP: Low profile Quad Flat Package
- PDIP: Plastic Dual In-line Package
- PLCC: Plastic Leaded Chip Carrier
- VSO: Very Small Outline Package
- PMFP: Plastic Micro Flat Package
- BCC: Bump Chip Carrier

- QFN: Quad Flat No-lead
- DRQFN: Dual Row Quad Flat No-Lead Package
- aQFN: advanced Quad Flat No-lead
- VQFN: Very Thin Quad Flat No-lead Package