



# ITEQ Corporation

2023 Second Quarter Investor Presentation

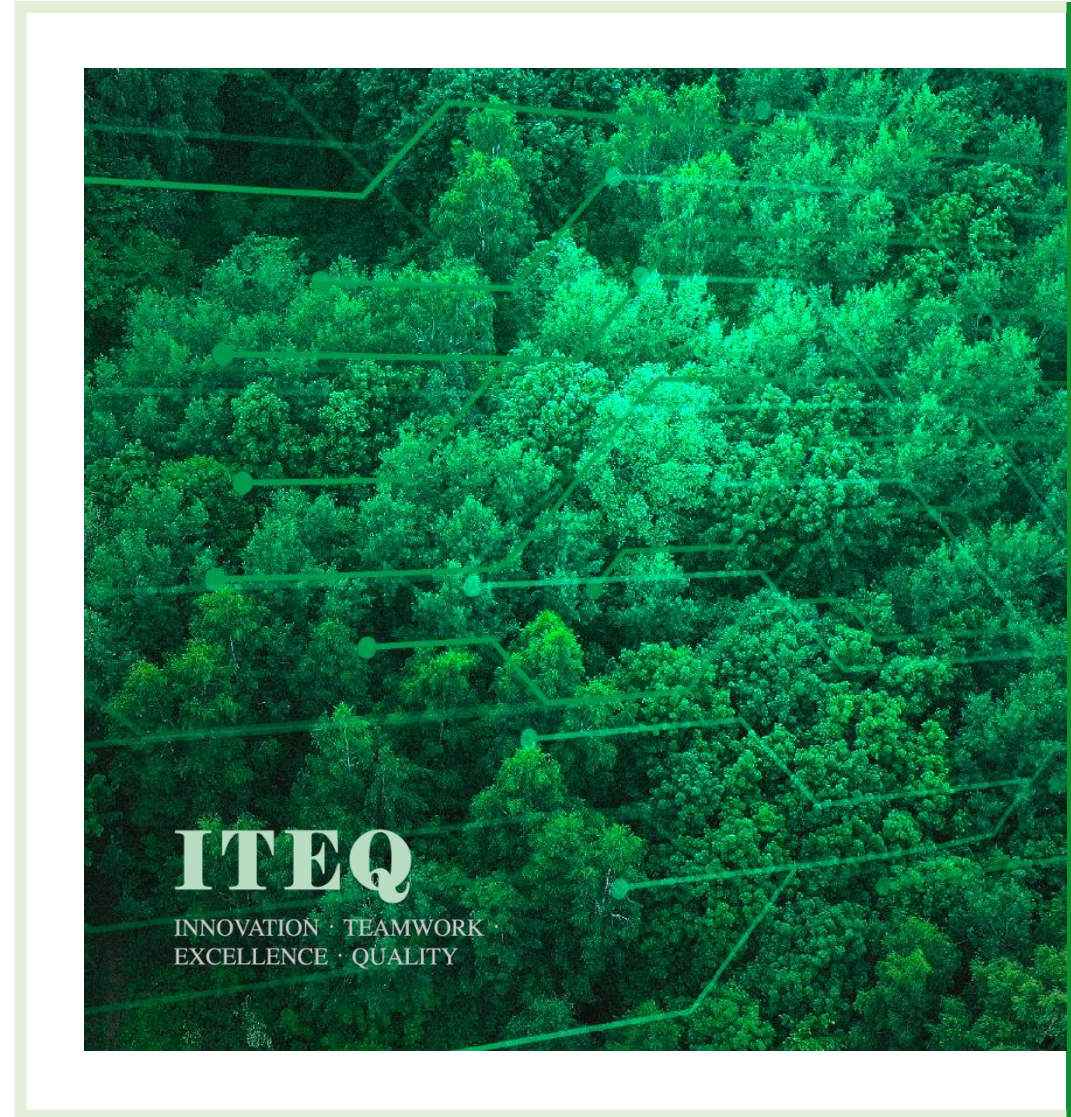
**ITEQ**

INNOVATION. TEAMWORK. EXCELLENCE. QUALITY

September 2023

# Disclaimer Statement

- This presentation and release contain “forward-looking statements” which may include projections of future results of operations, financial condition or business prospects based on our own information and other sources.
- Our actual results of operations, financial condition or business prospects may differ from those expressed or implied in these forward-looking statements for a variety of reasons, including but not limited to market demand, price fluctuations, competition, international economic conditions, supply chain issues, exchange rate fluctuations and other risks and factors beyond our control.
- The forward-looking statements in this release reflect the current belief of ITEQ as of the date of this release. ITEQ undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such date.



## Company Overview



**Establishment**  
April 10<sup>th</sup>, 1997



**Headquarters**  
HsinChu, Taiwan



**Capital**  
NT\$3,630 million



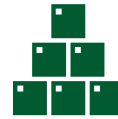
**Employees**  
~4,000



**Chairman**  
Dennis Chen



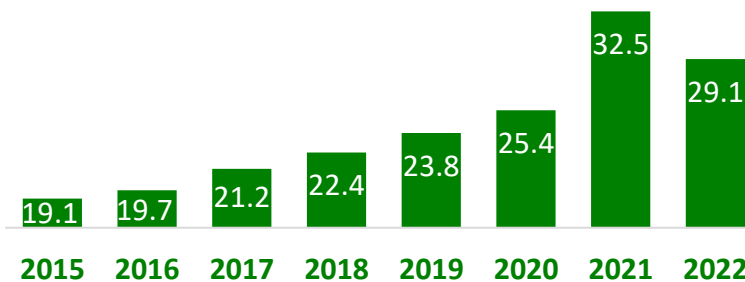
**CEO**  
Audrey Tsai



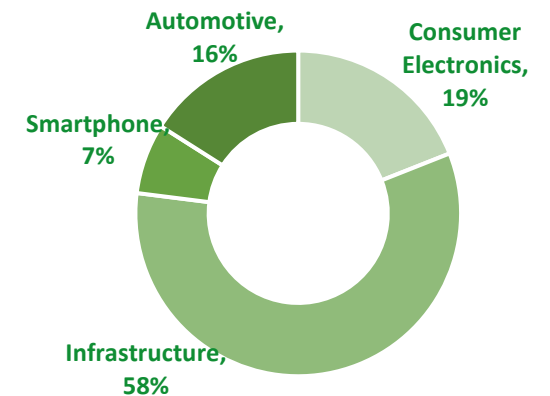
### Main Products

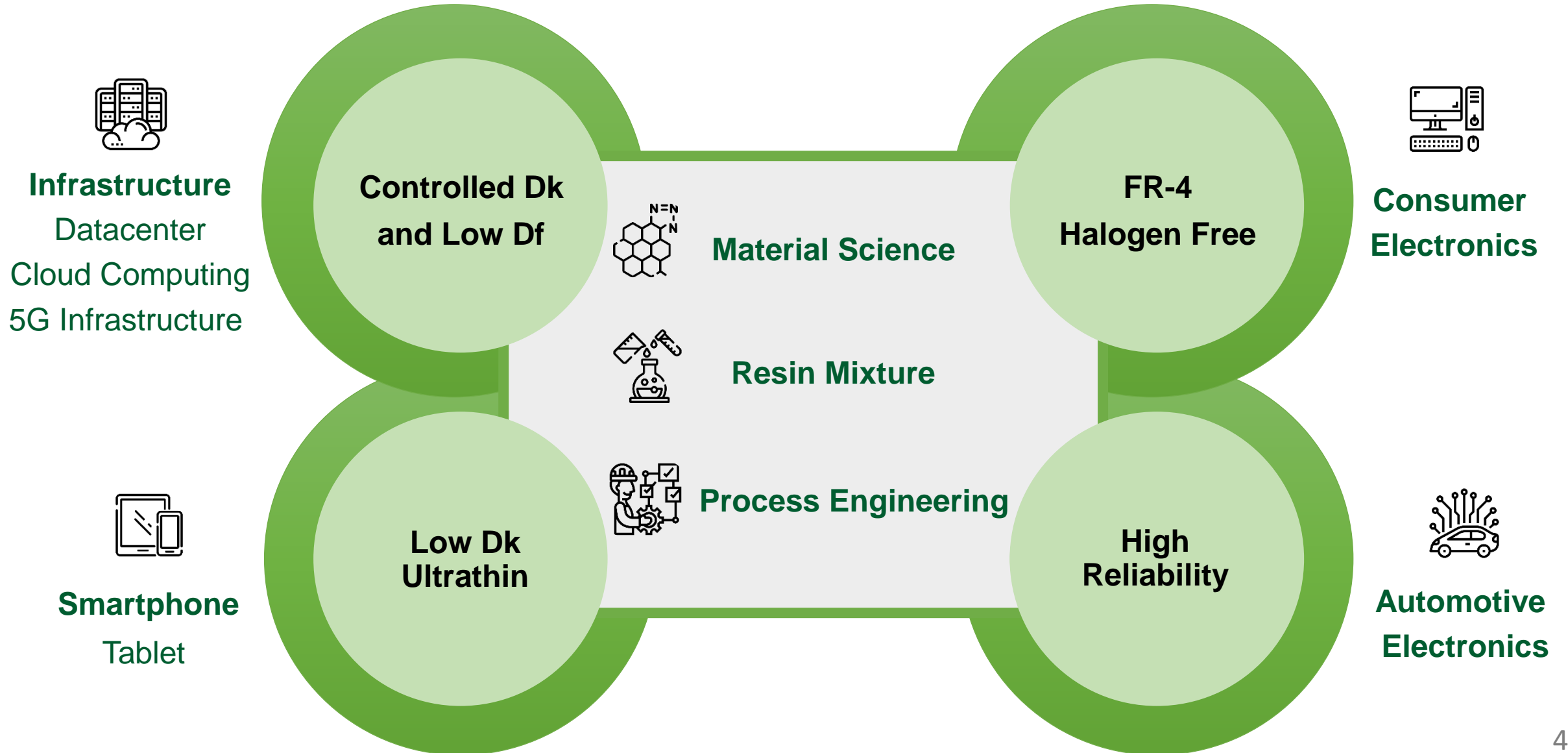
Copper Clad Laminate (CCL) & Prepreg (PP) | Masslam service | Flexible CCL

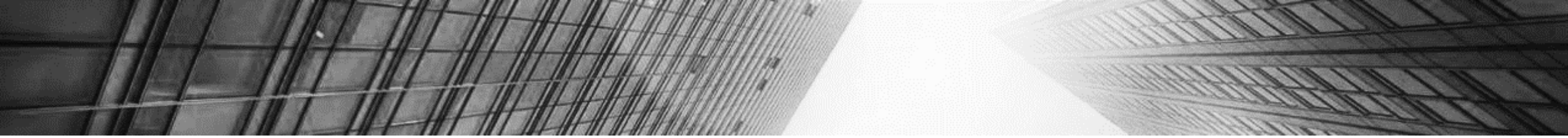
### Revenue (NT\$ billion)



### Revenue by Application (FY22)







# Growth Strategy Blueprint

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# Path of Innovation

Widely adopted in consumer electronics



Engaged with tier 1 automotive players



Enhanced ultra-thin dielectric capability for handheld devices



Biz kick-off with top server OEMs & ODMs



Dominant CCL supplier for Intel Purley server platform



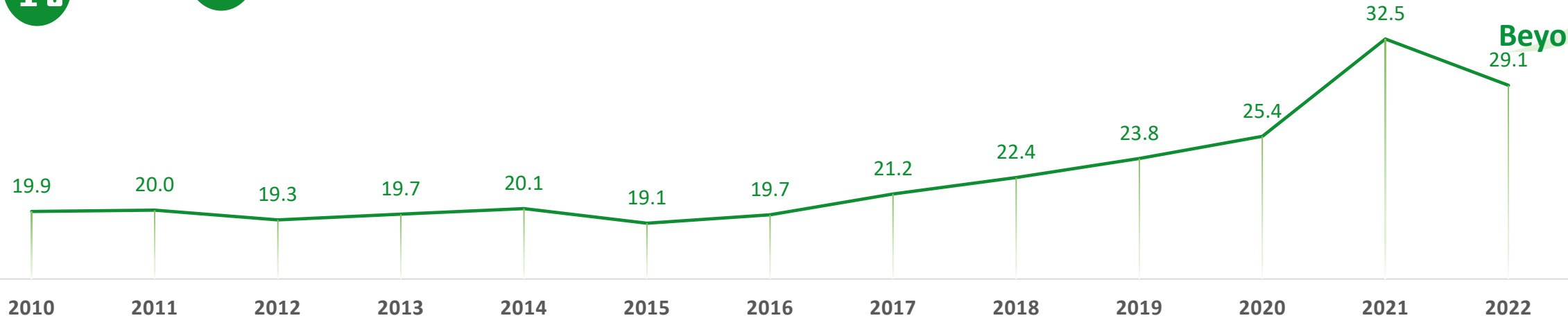
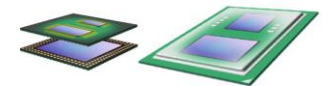
No. 1 Taiwan CCL supplier for 5G base station



New product for HDI PCB: Resin Coated Copper (RCC)

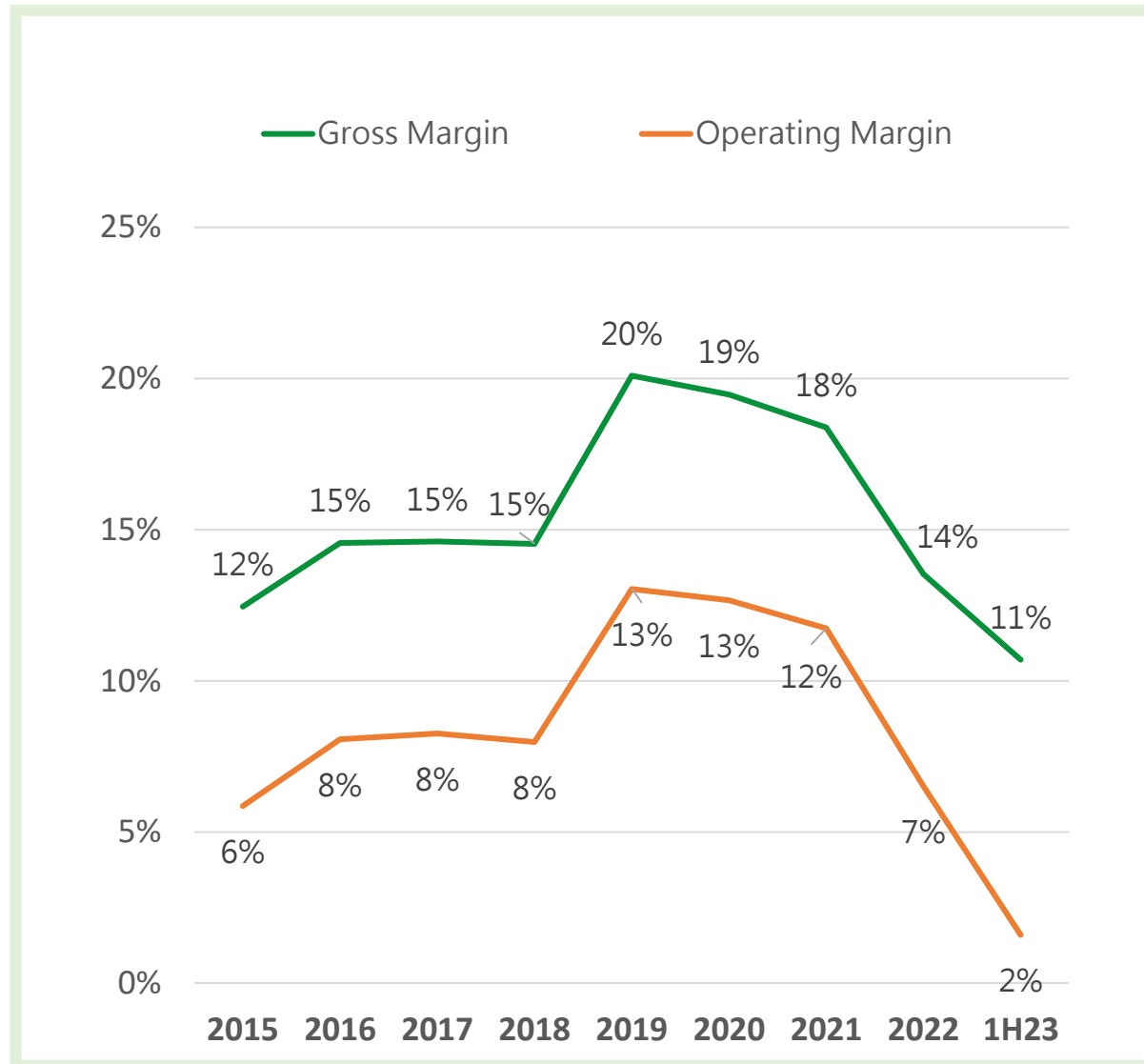
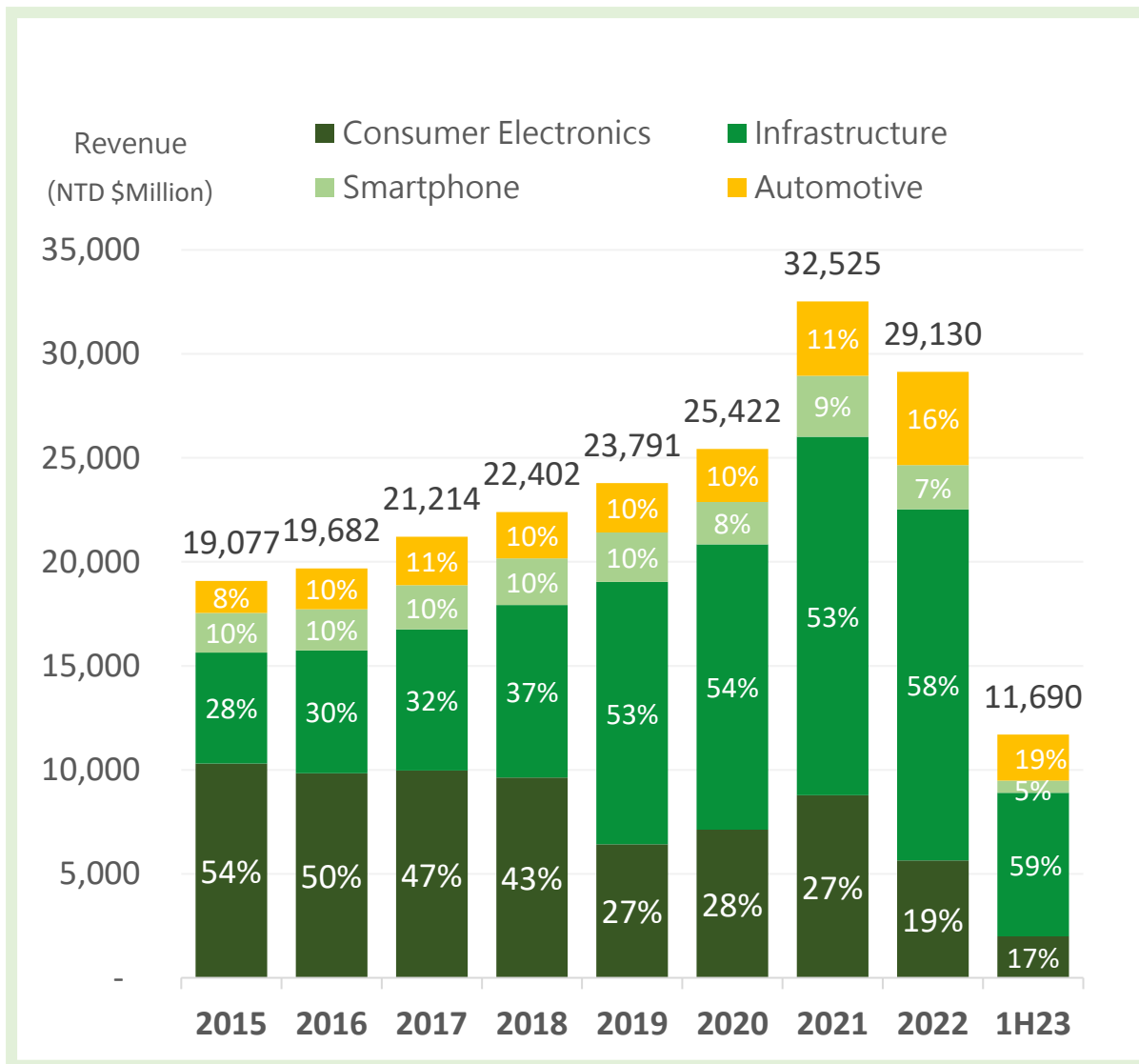


Substrate Like PCB (SLP) IC Packaging Substrate Laminate

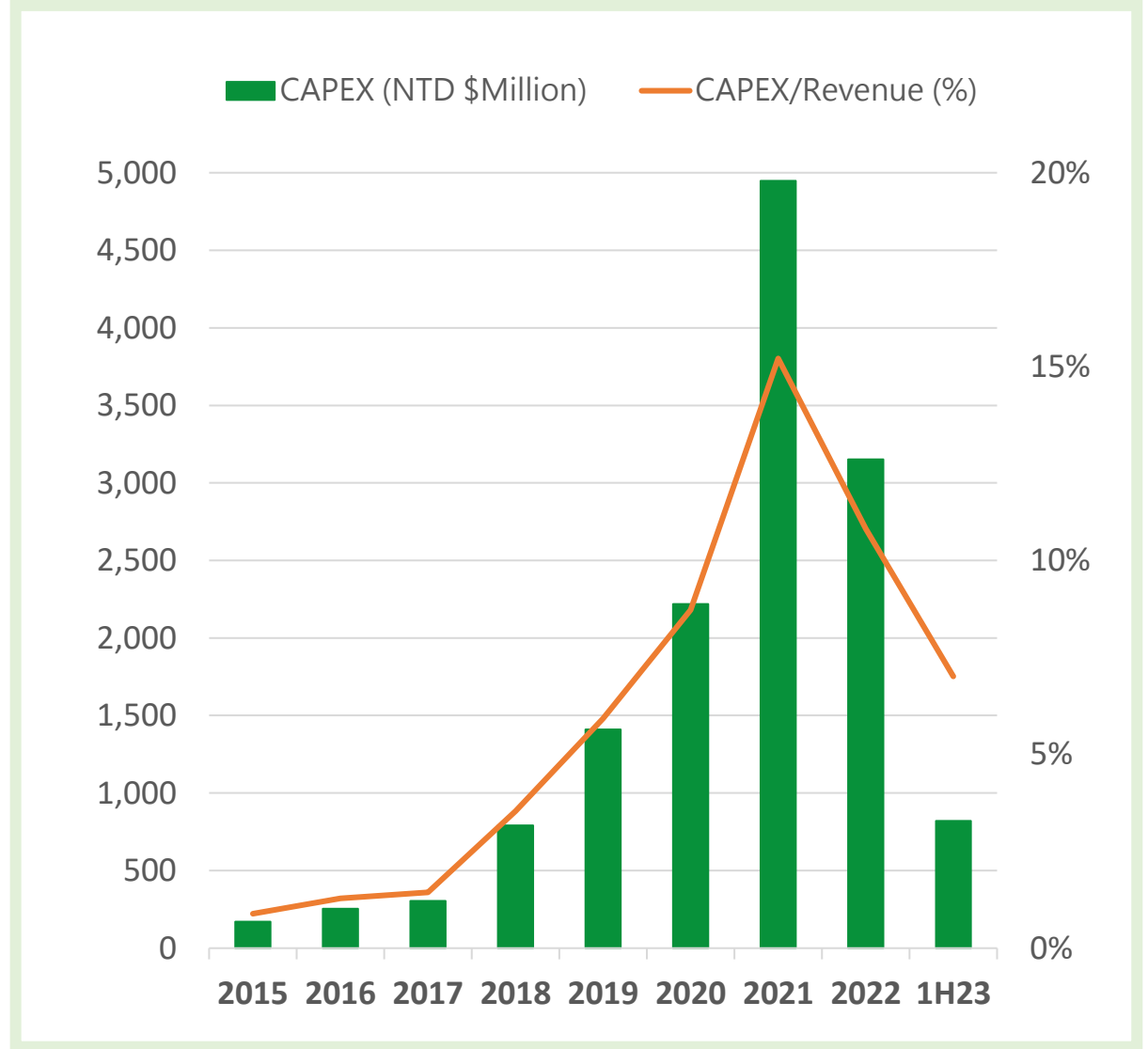
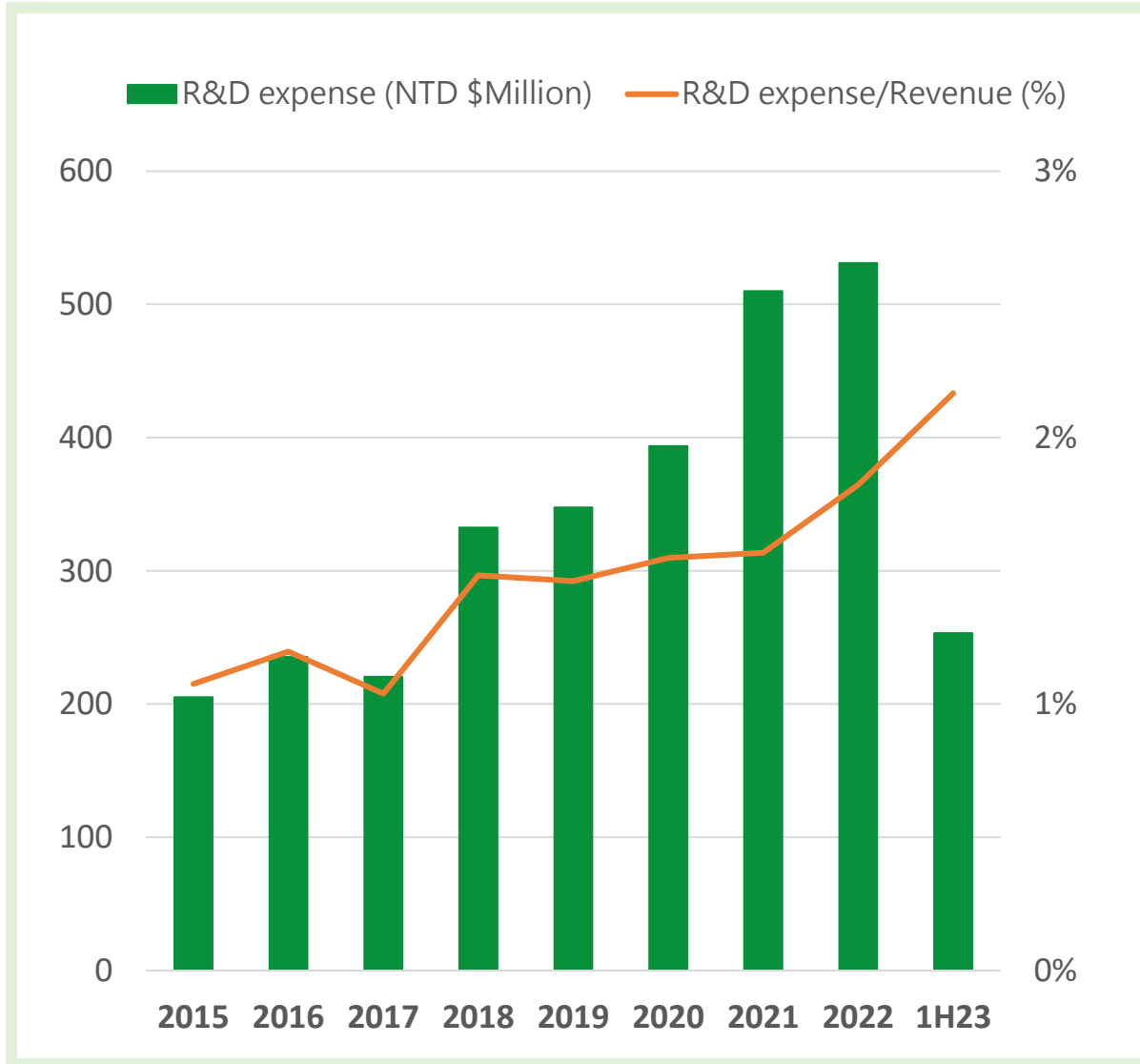


— 營收 (NT\$ 十億元)

# Optimized Mix with Product Innovation



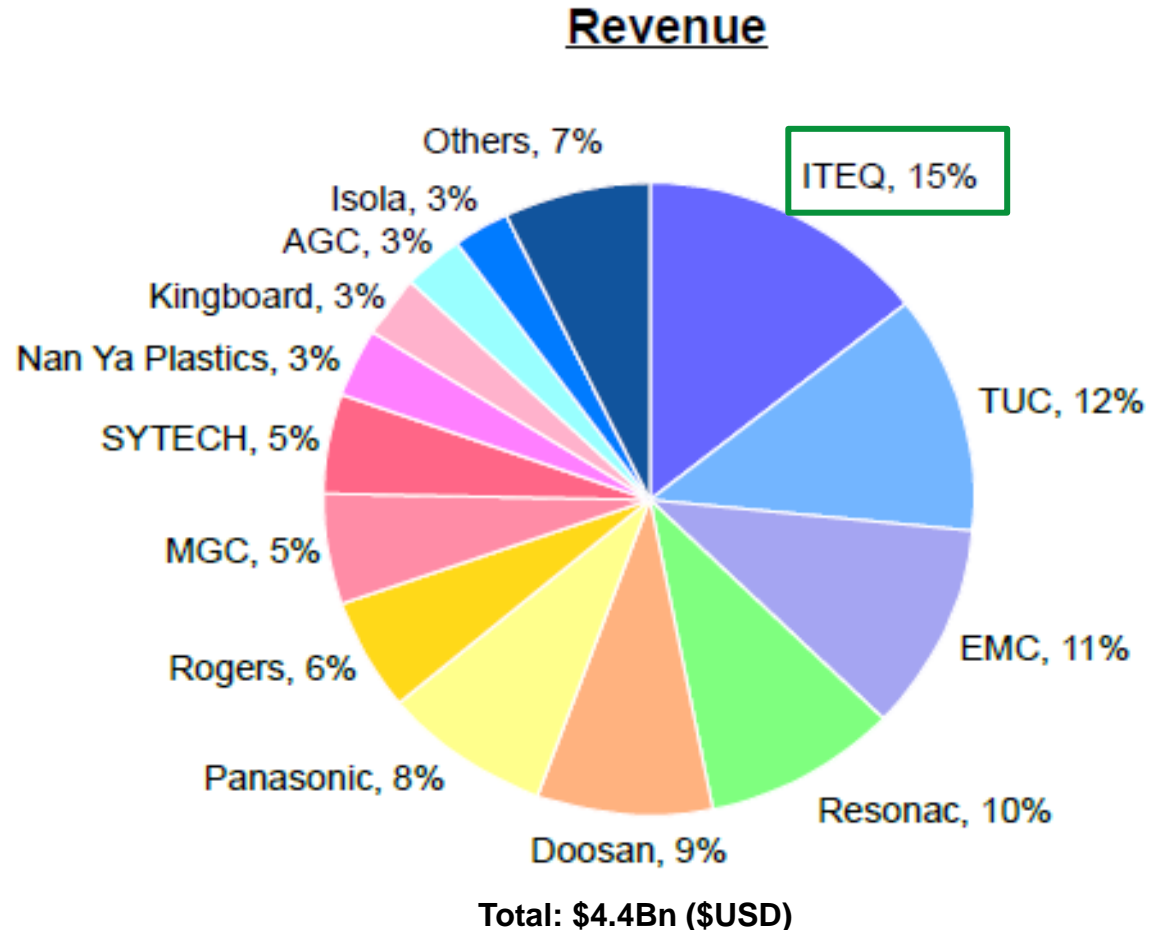
# R&D and Capex to Pursuit Sustainable Growth



\*1H23 CAPEX including the increase in prepayments for equipment NT\$348m.



## 2022 WW Specialty Laminate Market Share



## ITEQ: Leading CCL supplier

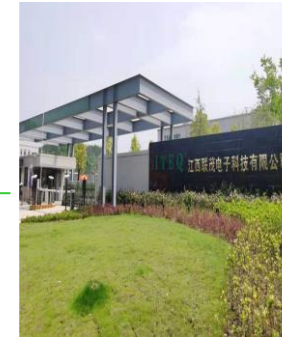
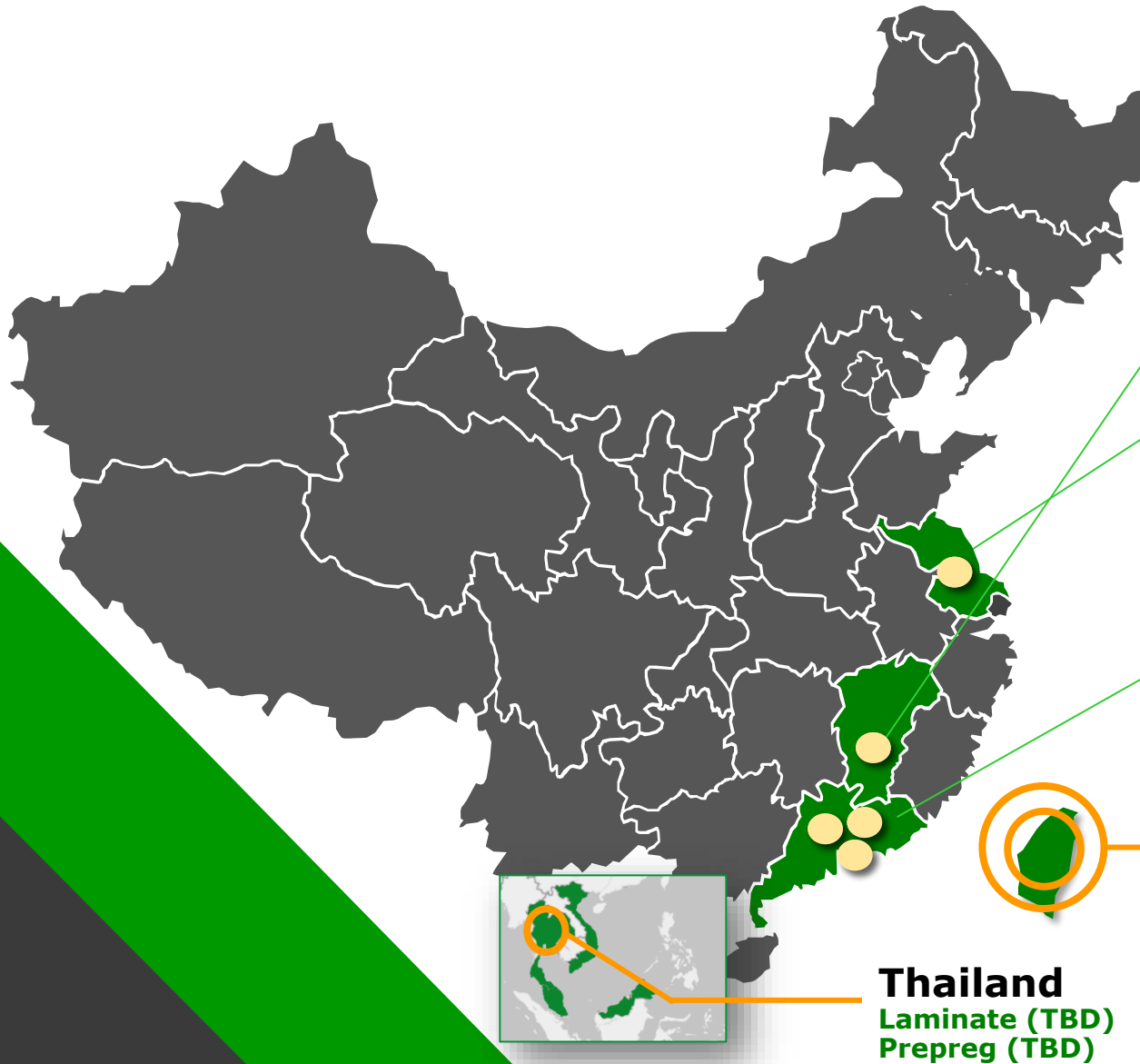
- Worldwide top supplier in high speed / frequency laminate
- Cutting-edge technology with MP track record
- Secular growth momentum in network infrastructure and data centers upgrading opportunities
- Rising EV market to boost demand for high speed / frequency automotive CCL



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\*Specialty Laminate includes: High speed, package substrate, RF  
Source: Prismark Report, 2023/06

# Manufacturing Site & Capacity – Expansion Plan ITEQ



**JiangXi Plant**  
(Phase I) - 2020  
Laminate (600K SHT/Month)  
Prepreg (3,500K M/Month)  
(Phase II) - 2021  
Laminate (600K SHT/Month)  
Prepreg (3,500K M/Month)  
(Phase III) – 2022 & 2023  
Laminate (1,200K SHT/Month)  
Prepreg (5,000K M/Month)



**WuXi Plant**  
Laminate (1,650K SHT/Month)  
Prepreg (8,000K M/Month)



**DongGuan Plant**  
Laminate (1,000K SHT/Month)  
Prepreg (4,000K M/Month)



**GuangZhou Plant**  
FCCL (1,450 K M<sup>2</sup>/Month)



**HuangJiang Plant**  
Masslam Service (500K SQFT/Month)



**HsinChu (Headquarters)**  
Laminate (400K SHT/Month)  
Prepreg (2,400K M/Month)

Distributor/Agent: USA, Europe, Israel, Korea, Japan and Singapore



# Market Trend & Growth Drivers

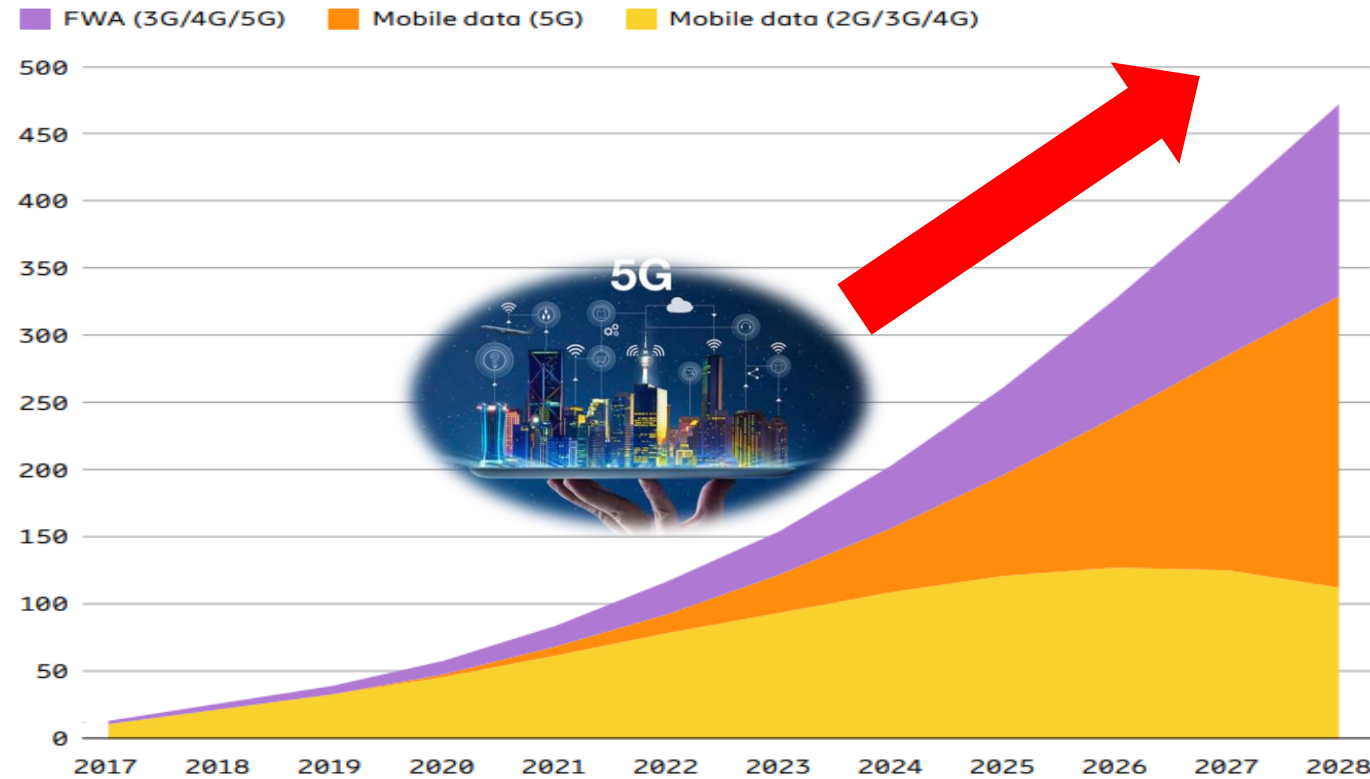
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## Global Mobile Network Data Traffic (EB per month)



Source : Ericsson Mobility Report, 2023/06

- The Expansion of Global Mobile Network Data Traffic Continues on the Rise
  - Telecommunications equipment & datacenter
    - Base station, ground satellite transceiver station
    - Core (traditional / cloud datacenter)
    - Edge computing (Enterprise enhanced infrastructure, such as data center & internal/external servers, signal transmission stations, etc.)
  - AI & High Performance Computing & Big Data Analysis
  - Cloud Computing and Cloud Storage
  - Internet of Vehicles (ADAS & Self-Driving)
  - End user products (computers, smartphones, IoT devices)
  - IoT related applications (Smart Home & Telemedicine)
  - Virtual Reality (VR) and Augmented Reality (AR)

- In 2027, all mobile data traffic growth will come from 5G, as 4G traffic declines.
- The expansion of global mobile network data traffic has driven network service operators, telecommunications companies and IoT & IoV manufacturers to expand/upgrade product specs to meet the needs of low latency, high reliability and high-speed computing processing

# Diversified High-Speed Materials for HPC/Datacenter ITEQ

High Speed Application

Super Ultra Low-loss

IT-999G

R&D

▲ Next

IT-998G

IT-998 / IT-998SE

IT-998SE : Low-Dk glass  
IT-998 : Low-Dk 2 glass

- 800G Ethernet
- 112Gbps

0.001

Ultra Low-loss 2  
(with Low Dk glass)

IT-988GSE

Intel EGS / BHS  
AMD Genoa / Turin

IT-968GSE

IT-968SE

- PCIe 5.0
- 200G Ethernet
- 400G Ethernet
- 56Gbps

0.002

0.003

Ultra Low-loss 1

IT-988G

Intel EGS / BHS  
AMD Genoa / Turin

IT-968G

IT-968

- PCIe 5.0
- 100G Ethernet
- 25~32Gbps

0.004

0.005

Very Low-loss

IT-150DA

Intel Whitley  
AMD Rome / Milan

IT-958G

IT-170GRA2

- PCIe 4.0
- 40G Ethernet
- 10~20Gbps

0.006

0.007

Low-loss

IT-170GRA1

Intel Purley  
AMD Naples

- PCIe 3.0

0.009

Mid-loss

Df @10GHz (RC 50%)

Loss Level

Halogen Free

Halogenated

Platform

Application

## AI Server CPU\*2 Mainboard (Content Value – mid)

(Used in both general type server and AI server)

**CPU MB**

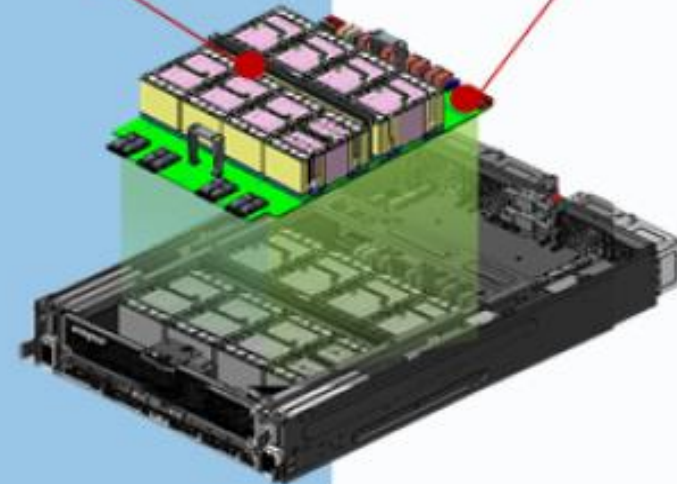


CCL: Very Low Loss  
Layer Count: 14 to 24

## AI Server GPU OAM\*8 (Content Value – highest)

(Used in accelerator card– AI server only)

**GPU Tray**



CCL: Ultra Low Loss  
Layer count: 20 to 30 (HDI)

## AI Server GPU UBB (Content Value – high)

(Used as GPU board– AI server only)

CCL: ULL / VLL  
Layer count: 20 to 30 (incl. HDI)

# Datacenter Server Platform Upgrade

Intel	Platform	Purley		Whitley	Eagle Stream		Birch Stream
	CPU	Skylake	Cascade Lake	Ice lake	Sapphire Rapids	Emerald Rapids	Granite Rapids
	Nano Process	14 nm	14 nm+	10 nm	Intel 7	Intel 7	Intel 3
	PCIe Gen	PCIe 3.0	PCIe 3.0	PCIe 4.0	PCIe 5.0	PCIe 5.0	PCIe 5.0
	MP Time	2017 Q3	2019 Q3	2021 Q1	2023 H1	2023 H2	2024
	CCL Material	Mid Loss	Mid Loss	Low Loss	Very Low Loss	Very Low Loss	TBD
	Layer count	8 to 12	8 to 12	12 to 16	16 to 20	16 to 20	TBD



AMD	Architecture	Zen	Zen2	Zen3	Zen4		Zen5
	CPU	Naples	Rome	Milan	Genoa	Bergamo	Turin
	Nano Process	14 nm (Global Foundries)	7 nm (TSMC)	7 nm (TSMC)	5 nm (TSMC)	5 nm (TSMC)	4 nm / 3 nm (TSMC)
	PCIe Gen	PCIe 3.0	PCIe 4.0	PCIe 4.0	PCIe 5.0	PCIe 5.0	PCIe 5.0
	MP Time	2017 Q3	2019 Q3	2020 Q4	2022 Q4	2023	2024
	CCL Material	Mid Loss	Low Loss	Low Loss	Very Low Loss	Very Low Loss	TBD
	Layer count	8 to 12	12 to 16	12 to 16	16 to 20	16 to 20	TBD

## Datacenter Equipment Cyclical Upgrade to Drive the Following;

- Corresponding CCL material upgrade
- Increase consumption and layer counts for CCL

## Green Power/EV



- Energy Conservation
- Power Charging
- High Current & Voltage
- Heavy Cu

High Tg material

## Internet of Vehicle

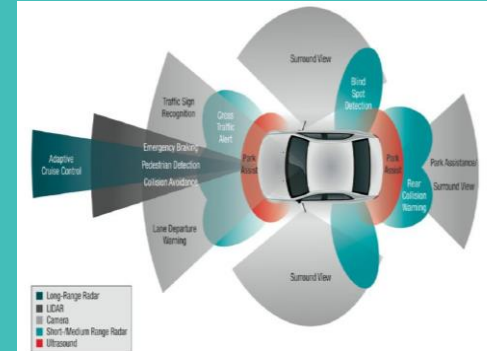


- Infotainment
- Networking

HDI

High Speed Material

## Active Safety



- Active Safety System
- ADAS
- Radar
- Antenna Module

High Speed Material

High Frequency Material

## Autonomous Driving



- HPC
- Graphic Processing
- Automated Driving Control Module

HDI

High Speed Material

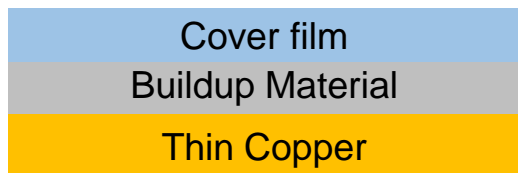
- EV, IoV and Active Safety to boost demand for high performance automotive CCL
- PCB usage for EV is 4 to 5 folds of conventional gasoline vehicle



# HDI New Product: Resin Coated Copper (RCC)

## Resin Coated Copper (RCC)

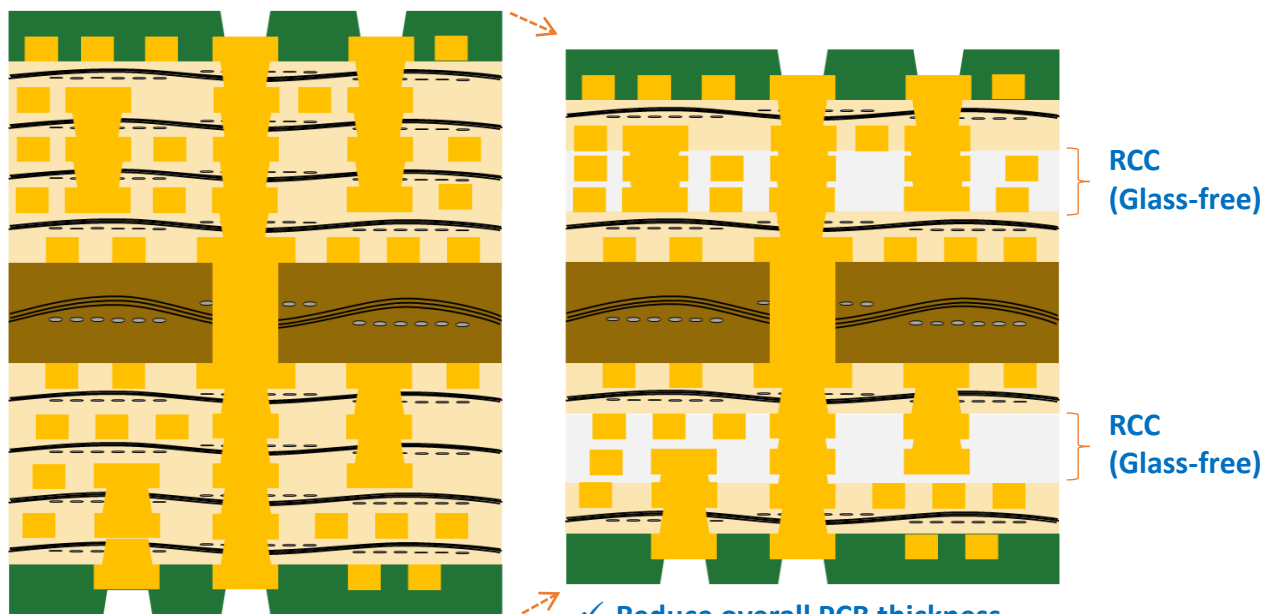
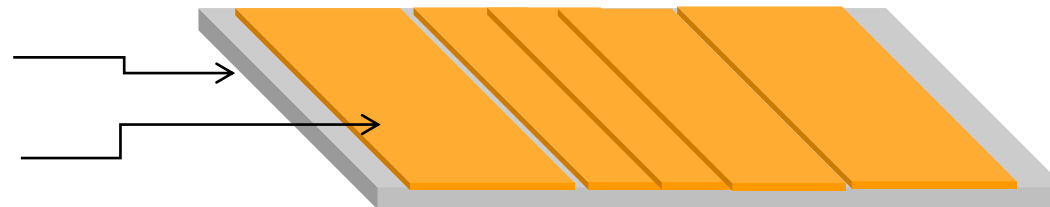
- ✓ Glass-free solution which enables further thickness reduction of dielectric layer while satisfies the needs towards fine-line pattern design (smaller form factor) and hybrid HDI/Substrate-Like PCB production.



**Dielectric Layer : 10~50um**

※ Available for thickness up to 150um

**Conductors : Copper Foil**



- ✓ Reduce overall PCB thickness
- ✓ Eliminate the fiber weave effect with enhanced reliability of signal transmission

## ITEQ RCC Advantages

### Glass-Free

Reduce thickness of the dielectric layer and overcome minimum thickness constraints (15-20um)

### Better Dielectric Constant (Dk) and Impedance Control

RCC uses pure glue material enabling stable dielectric constant

### Power Consumption Saving

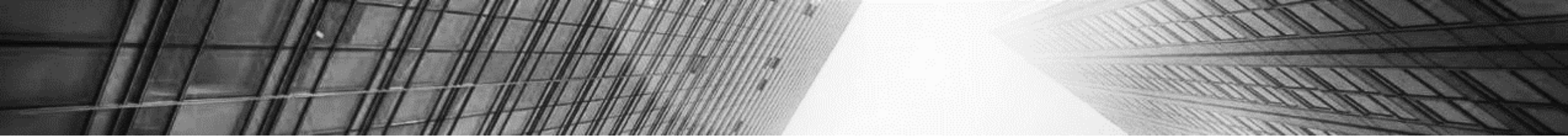
Lower voltage – extending battery life

### Better Laser Processability

RCC is a glass fiber free material, which is easier to form holes through laser drilling with more stable Via quality

### Simplify PCB Lamination process

Combine the processes of PP/Copper foil stack-up into one



# 2Q23 Financial Results

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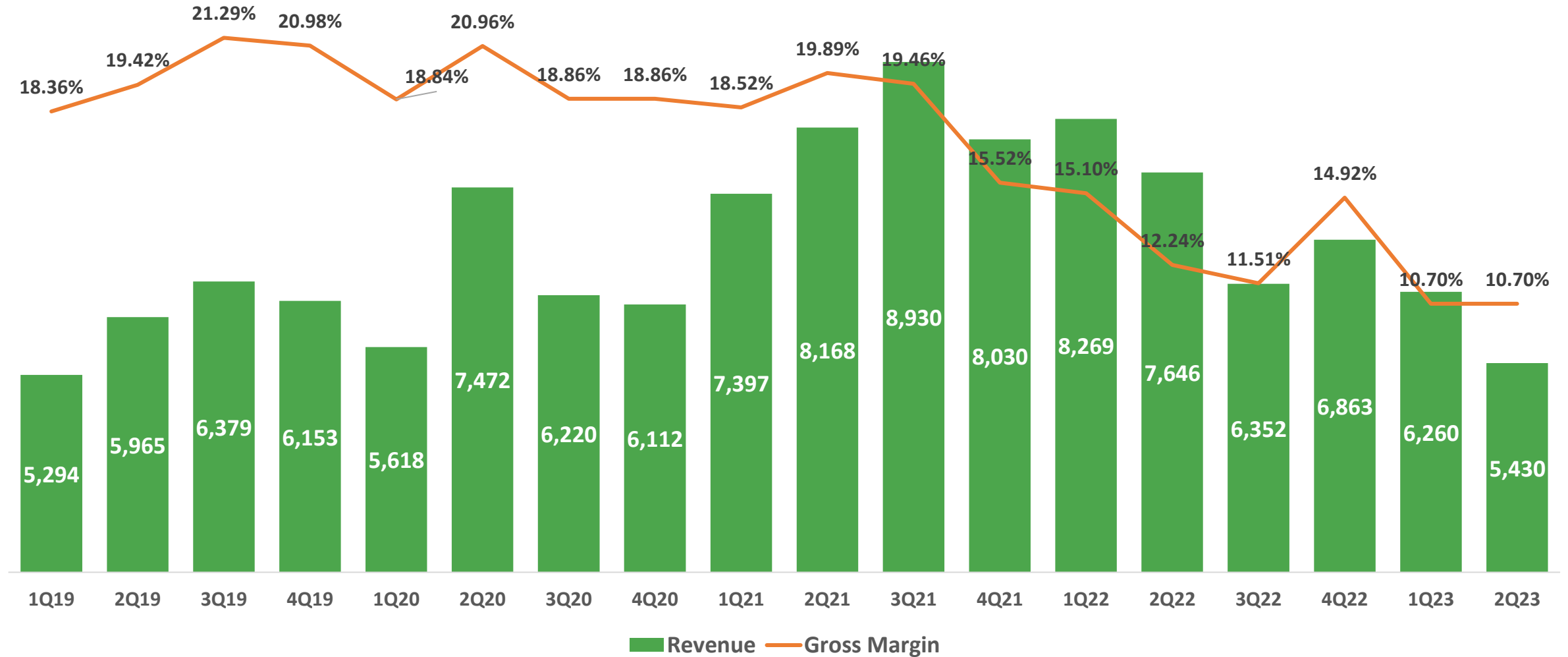
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# 2Q23 Income Statement

NTD \$Million	2Q23	1Q23	2Q22	QoQ	YoY
<b>Revenue</b>	<b>5,430</b>	<b>6,260</b>	<b>7,646</b>	<b>-13.3%</b>	<b>-29.0%</b>
Gross Profit	581	670	936	-13.3%	-37.9%
Operating Expense	523	542	486	-3.5%	-7.6%
<b>Operating Profit</b>	<b>58</b>	<b>128</b>	<b>450</b>	<b>-54.7%</b>	<b>-87.1%</b>
Non-Op Income / Loss	23	6	146		
Income before Tax	81	134	596	-39.6%	-86.4%
Tax Expense	40	60	161		
Net Income to Parent	42	74	435	-43.2%	-90.3%
<b>EPS(NT\$)</b>	<b>0.11</b>	<b>0.20</b>	<b>1.14</b>	<b>-45.0%</b>	<b>-90.4%</b>
<b>Key Financial Ratio</b>					
<b>Gross Margin</b>	<b>10.70%</b>	<b>10.70%</b>	<b>12.24%</b>		
Operating Expense Ratio	9.63%	8.66%	6.36%		
<b>Operating Margin</b>	<b>1.07%</b>	<b>2.04%</b>	<b>5.89%</b>		
Effective Tax Rate	49.38%	44.78%	27.01%		
<b>Net Margin</b>	<b>0.77%</b>	<b>1.18%</b>	<b>5.69%</b>		

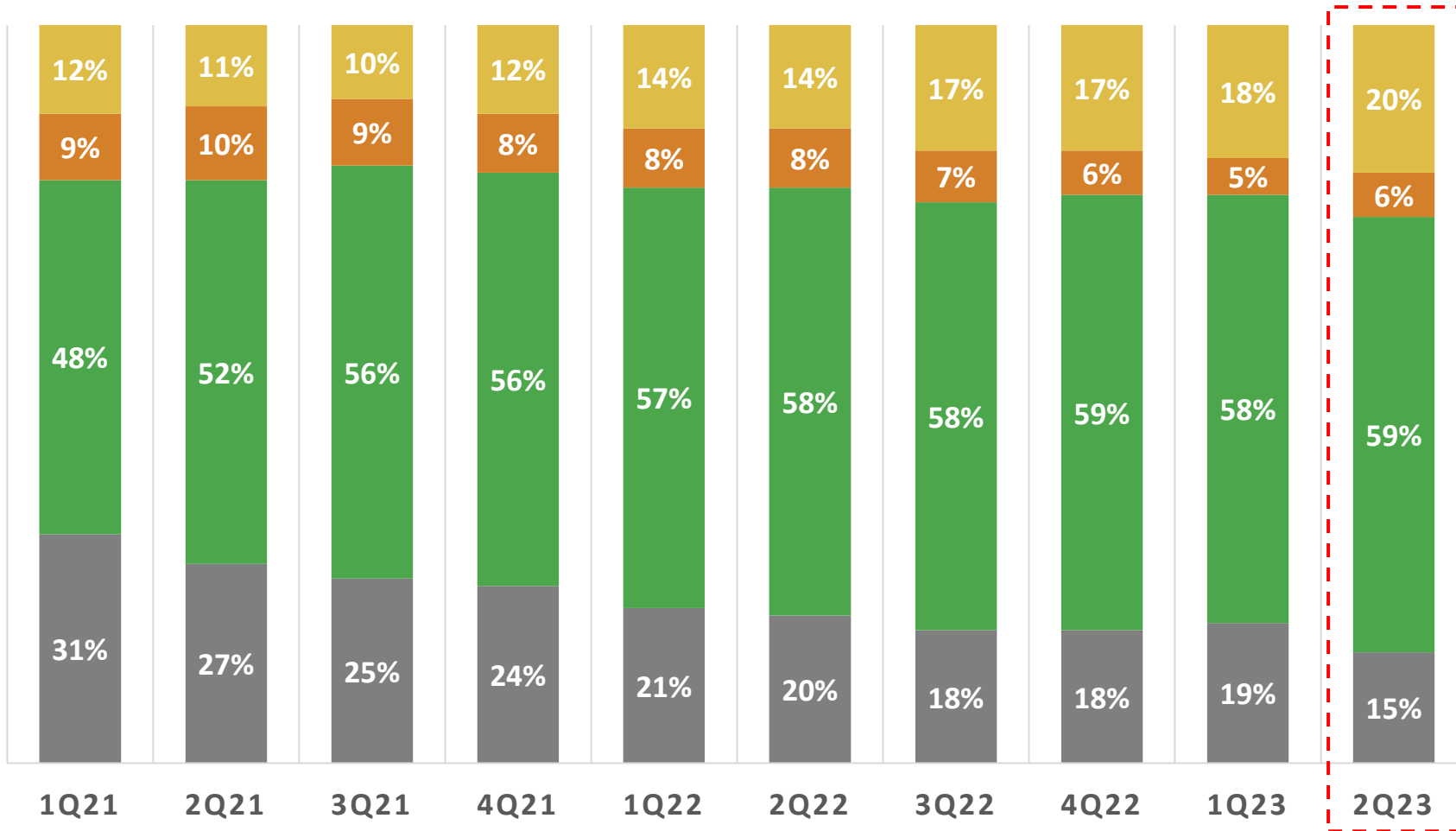
# Revenue & Gross Margin Rate

(Million \$NTD)



# Product Mix

■ Consumer Electronics   
 ■ Infrastructure   
 ■ Smartphone   
 ■ Automotive



2Q23 Product Growth %	QoQ	YoY
Automotive	-3.6%	+1.5%
Smartphone	+4.1%	-46.7%
Infrastructure	-11.8%	-27.8%
Consumer Electronics	-31.5%	-46.7%

# 2Q23 Balance Sheet

NTD \$Million	2Q23	1Q23	2Q22
<b>Total Assets</b>	<b>30,905</b>	<b>33,554</b>	<b>34,043</b>
Cash	4,692	5,681	3,873
NR / AR	10,365	11,692	13,799
Inventories	2,422	2,556	3,872
Fixed Assets	11,049	11,307	10,276
<b>Total Liabilities</b>	<b>12,189</b>	<b>14,354</b>	<b>13,092</b>
Short-term Debt	1,544	2,553	2,051
NP / AP	4,590	5,755	5,686
Long-term Debt	2,559	2,498	-
<b>Total Equity</b>	<b>18,716</b>	<b>19,200</b>	<b>20,951</b>
<b>Key Financial Index</b>			
Days Sales Outstanding	165	160	151
Days Sales of Inventory	49	46	64
Days Payable Outstanding	88	90	84
ROE (%)	3.74	5.70	13.60
ROA (%)	2.55	3.62	8.42
Debt ratio (%)	39.44	42.78	38.46

# 2016 – 2022 Dividend Policy

Year	EPS(NT\$)	Dividend(NT\$)	Cash Dividend(NT\$)	Pay-out Ratio(%)
2016	3.13	2.5	2.5	80%
2017	4.11	3.1	3.1	75%
2018	5.86	3.8	3.8	65%
2019	8.13	5.0	5.0	62%
2020	8.19	5.0	5.0	61%
2021	9.00	5.0	5.0	56%
2022	4.94	3.0	3.0	61%

\*New shares issuance of 30 million common shares concluded on March 31<sup>st</sup> 2020

\*\*New shares issuance of 50 million common shares concluded on September 2<sup>nd</sup> 2021

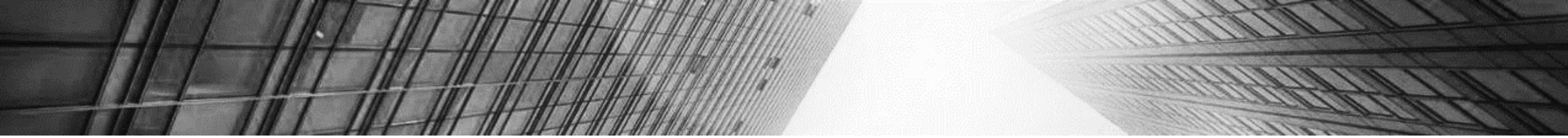
\*\*\*Factoring in the repurchase and cancellation of 20 million shares in 3Q22; current total outstanding common share: 363 million



# Thank you

Question and Comment





# Appendix

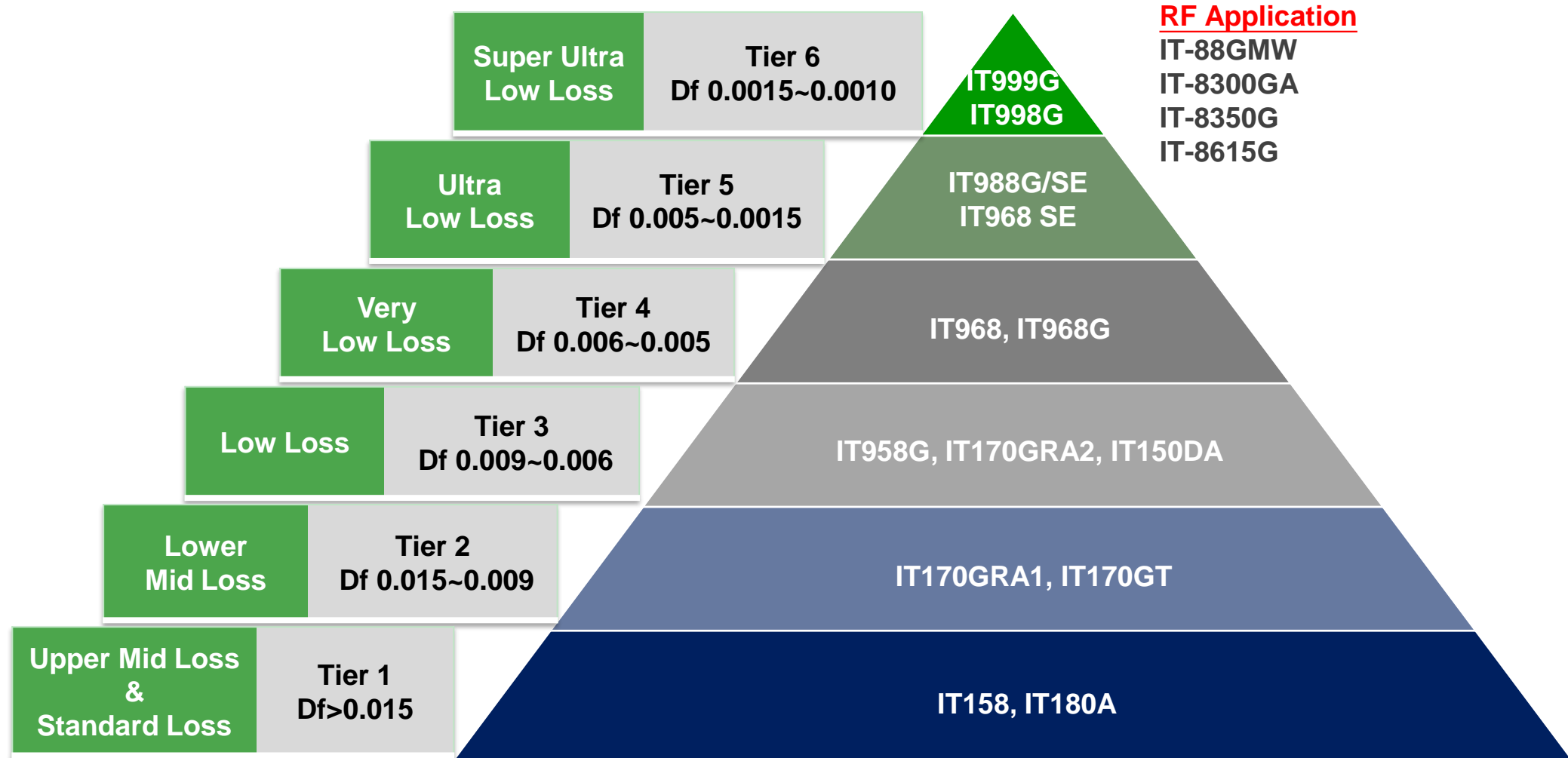
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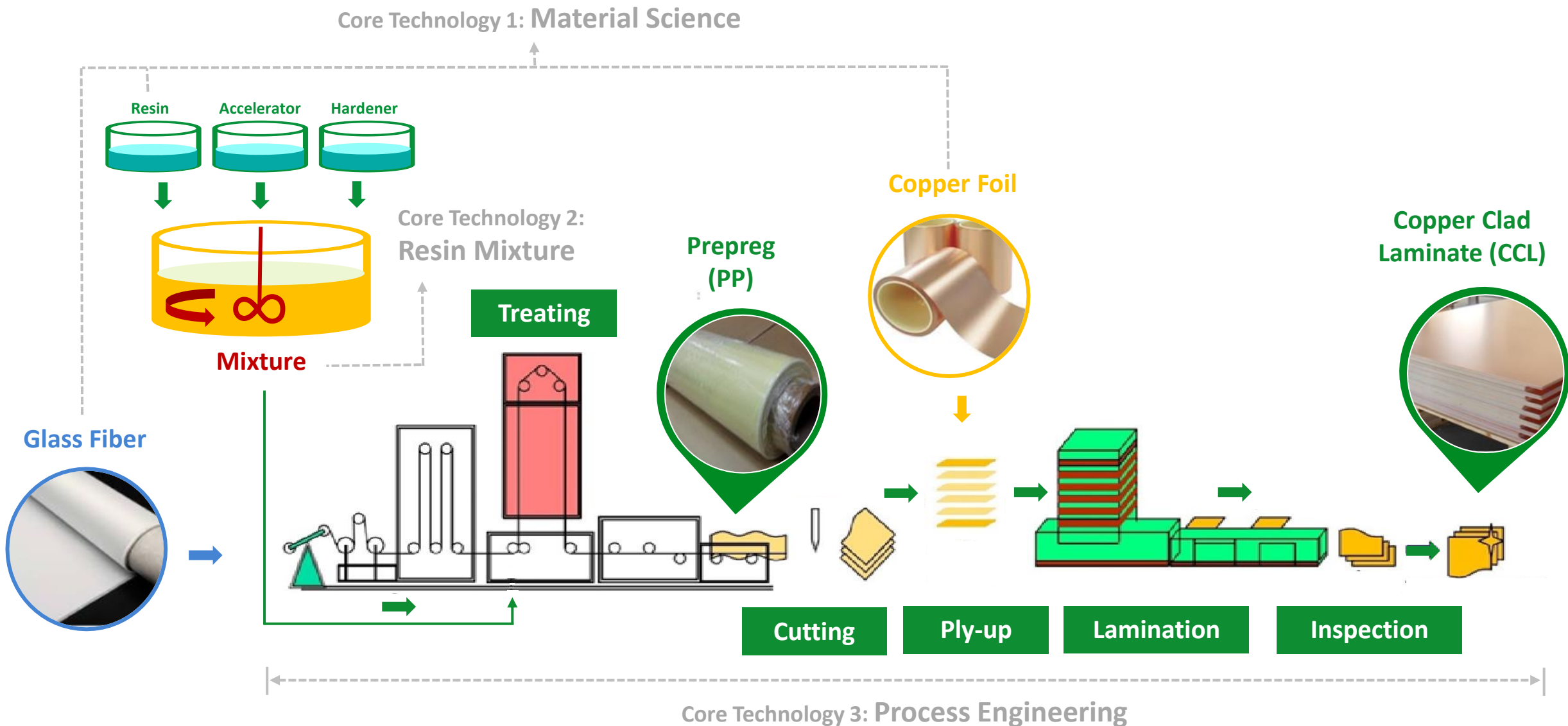
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# Well-Expanded Product Line



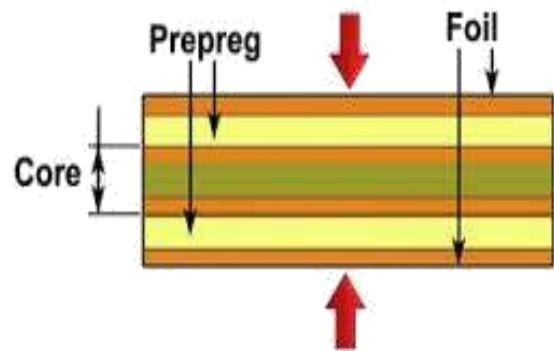
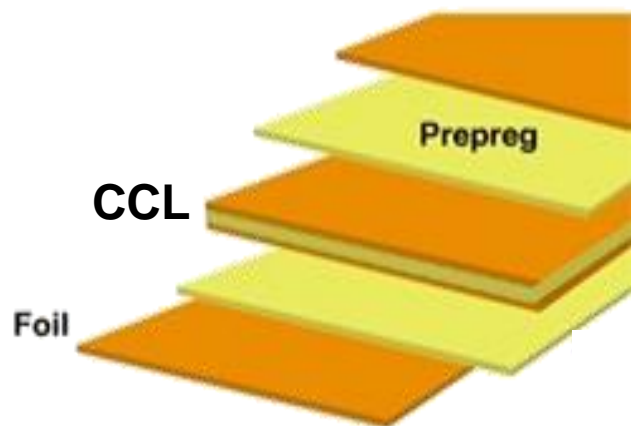
- The need for hyperscale data center and server upgrade to expedite the growth of high speed / frequency material demand
- ITEQ's market share in high speed / frequency material to uplift robustly

# CCL & PP Manufacturing Flow



# CCL & PP Composite Structure

## CCL/PP



## CCL Manufacturing Process

