



*Compound Semiconductor Solutions  
from RF to Lightwave*

**穩懋半導體**

**20**<sup>📶</sup>  
**YEARS**  
of  
III-V INNOVATION

# 穩懋半導體公司簡介

2020年11-12月



# 免責聲明

- 本資料可能包含對於未來展望的表述。該類表述是基於對現況的預期，但同時受限於已知或未知風險或不確定性的影響。因此實際結果將可能明顯不同於表述內容。
- 除法令要求外，公司並無義務因應新資訊的產生或未來事件的發生主動更新對未來展望的表述。

- 市場概況
- 技術藍圖
- 營運策略
- 營運結果與展望
- Q&A

# 市場概況

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**5G + Wi-Fi 6**



**Infrastructure**



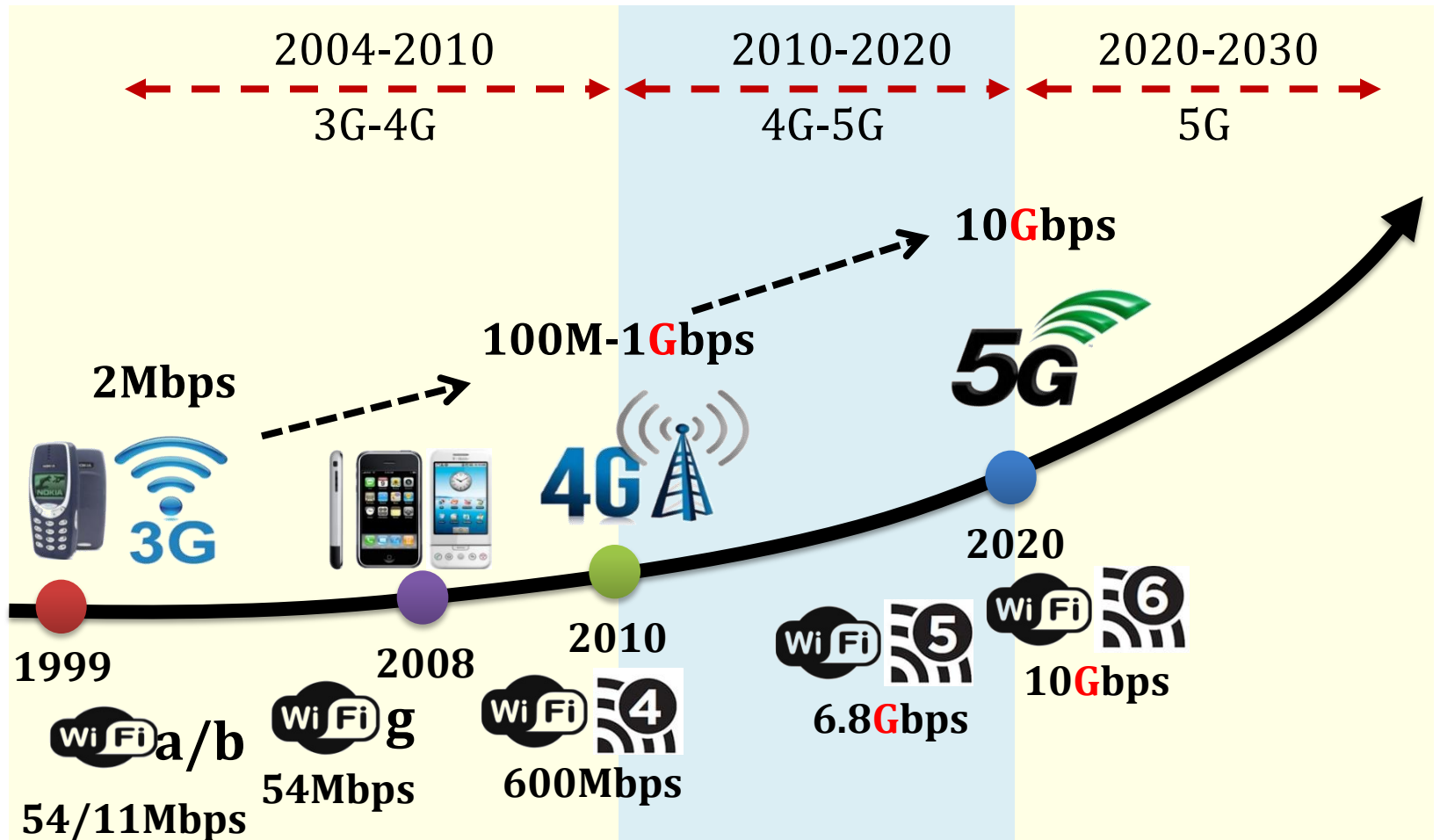
**Optical Devices**



# Performance(性能)

超高速

在**無線通訊**的必要性，與化合物半導體特性優勢相符



Y2019-20

商用建設期

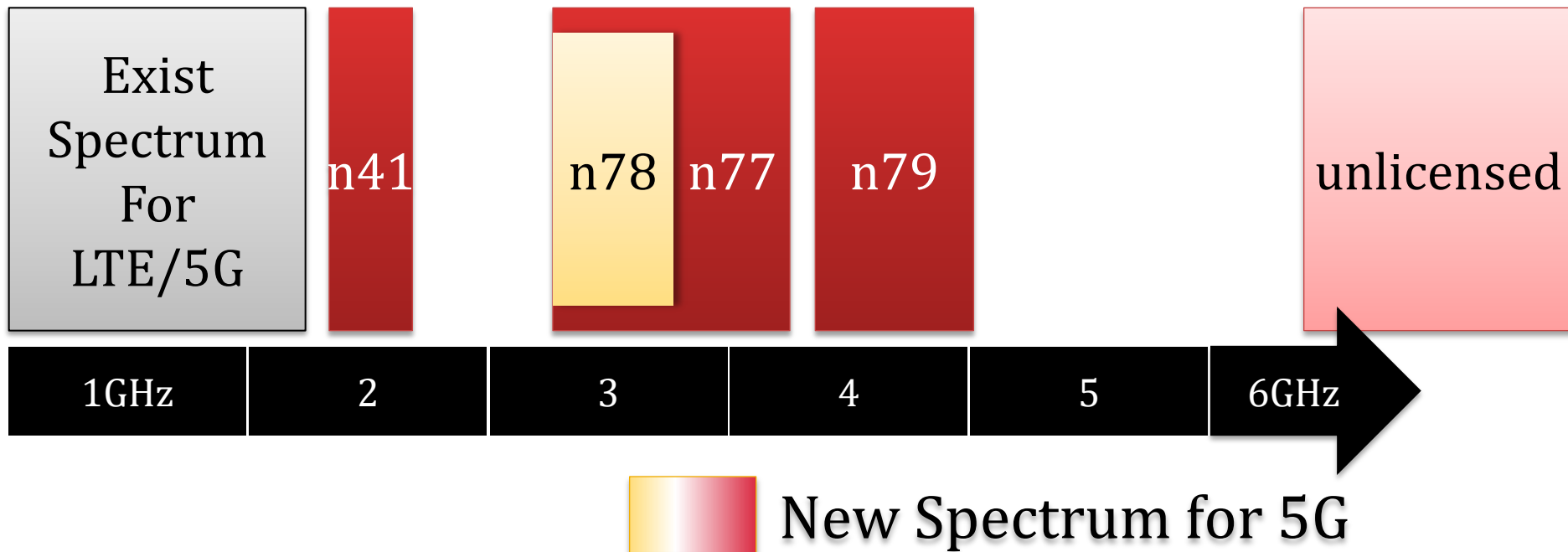
Y2021-25

需求爆發期

|          | Mobile Device   | Infrastructure/CPE   |
|----------|---|--|
| Sub-6GHz | <ul style="list-style-type: none"> <li>• GaAs HBT</li> </ul>                              | <ul style="list-style-type: none"> <li>• GaN HEMT</li> <li>• GaAs pHEMT</li> </ul> |
| mmWave   | <ul style="list-style-type: none"> <li>• Integrated compound semi technologies</li> </ul> | <ul style="list-style-type: none"> <li>• GaN HEMT</li> <li>• GaAs pHEMT</li> </ul> |

- 5G sub-6GHz (<6GHz) spectrum bands for ubiquitous network coverage
- 5G mmWave (~30GHz) likely for fixed wireless access as a start followed by extreme mobile broadband in the longer term

# 5G Sub-6GHz 頻譜



(1) New frequency bands for 5G

(2) MIMO: n41, n77, n78, and n79

(3) Additional 5G PA (Reform existing 4G Frequency bands )





## Wi-Fi 6 產品應用擴展 以及 Wi-Fi 7 的發展

- Wi-Fi will be upgraded from 802.11ac to 802.11ax (Wi-Fi 6), from flagship to mid-range phones
  - Faster throughput
  - Higher network efficiency
  - Better in dense environments
- 802.11be (Wi-Fi 7)
  - Extreme high throughput
  - Extend to 6GHz frequency band

智慧  
手機

企業  
應用

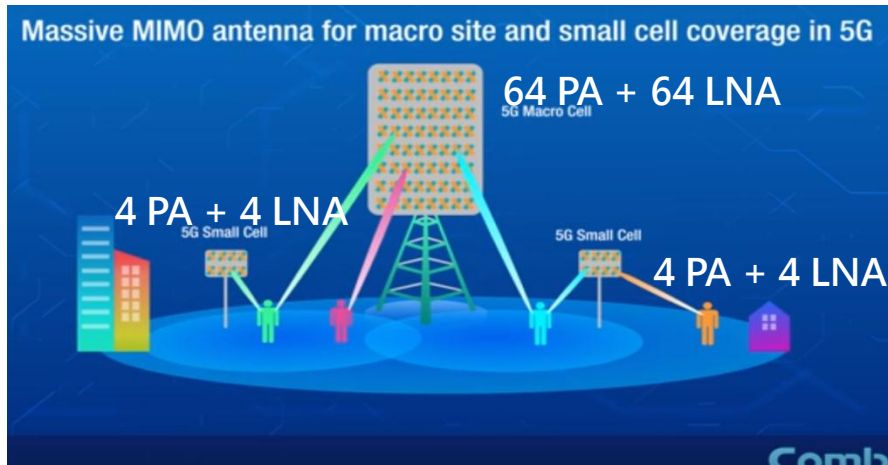
行動  
裝置

## ● RF Device Inside Macro & Small Cell Sector

- The high performance of compound semiconductors is the better choice for PA and LNA on 5G base-station.
- More than 100M transceivers in 2020.

## ● Satellite Communication Era is Coming

- More than 6,500 small satellites (<500kg) in orbit by 2027.
- Comms. application will be the key growth engine for satellite.

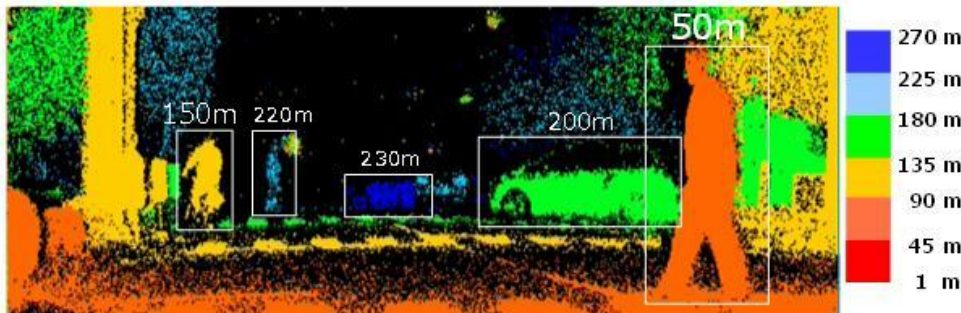


- **Structure-Light demand keep very strong**
- **ToF for 3D sensing applications will keep growth**
  - Production was started since 2H2019
  - Multiple customers use ToF for both front and world facing applications

## World Facing AR



## Autonomous



## Gesture Recognition



- 光電元件

- Data center interconnect, or metro/long-haul coherent transmission
- Proximity/Light sensor

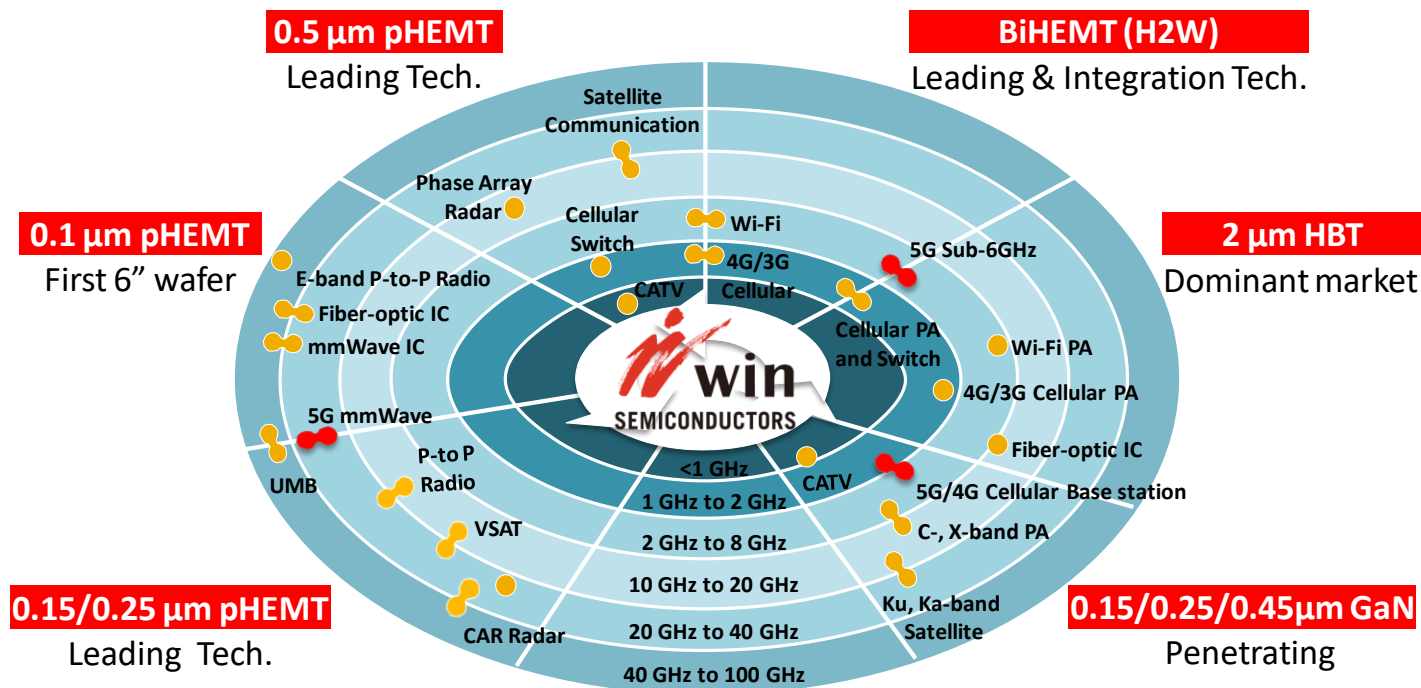


- **More and more customers engagement and will enter production stage soon**

# 技術藍圖

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The most comprehensive technology portfolio in industry enables customers to develop optimized products for a wide range of applications



- Dominant market share for high-performance HBT used in LTE PAs
- Leading BiHEMT technology for advanced integrated FEM
- First and only foundry worldwide to commercially develop 0.1μm pHEMT on 6" GaAs wafer

- Industry leading 0.15–0.25μm pHEMT technology
- Supports broad range of products such as PAs (from 50MHz–100GHz), switches, and fiberoptic IC
- Developing GaN for high power devices (4/5G base station)

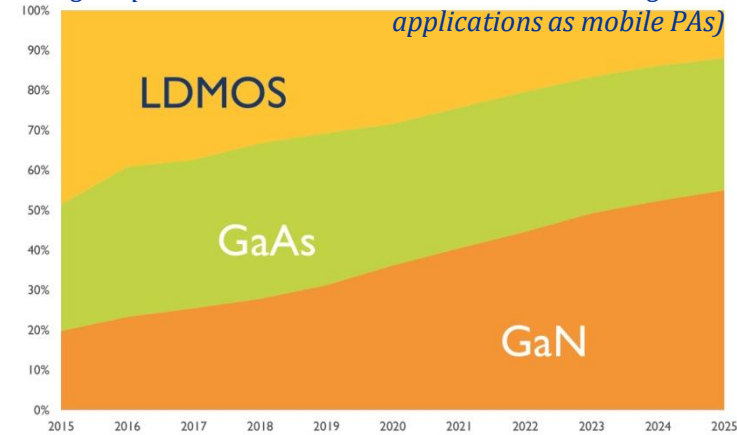
# 4/5G基礎建設 – 穩懋運用實例

## Ultra high frequency semiconductor technology provider!

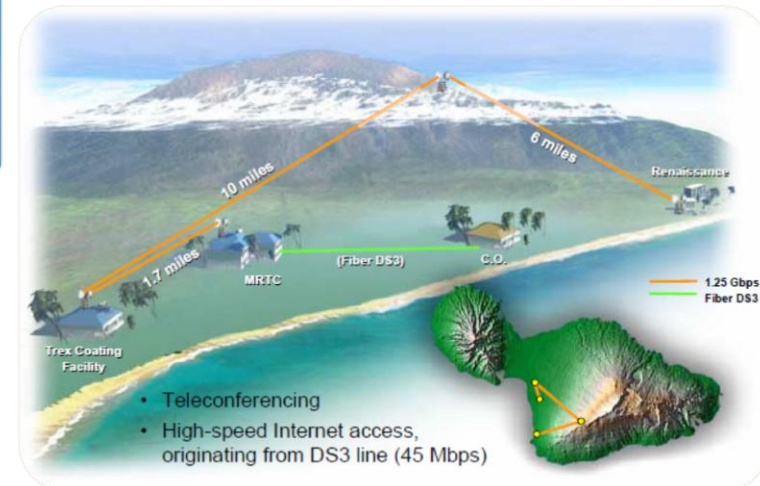
- Wireless infrastructure
- Satellite communications
- Fiberoptic communication
- ADAS

## RF power device market, in value – breakdown by technology

(Only considering RF power semiconductors above 3W, excluding such applications as mobile PAs)



Source: Yole Développement



Invest in capacity to capture demand growth and improve margins through product remix

**Scale & Remix**

**Technology Leadership**

Invest in technologies to maintain competitive edge and sustain leadership

Leverage on technology and manufacture expertise to lift efficiency and drive cost down

**Cost & Efficiency**

**Customer Diversification**

Grow and acquire new customers in existing and new markets to diversify customer base

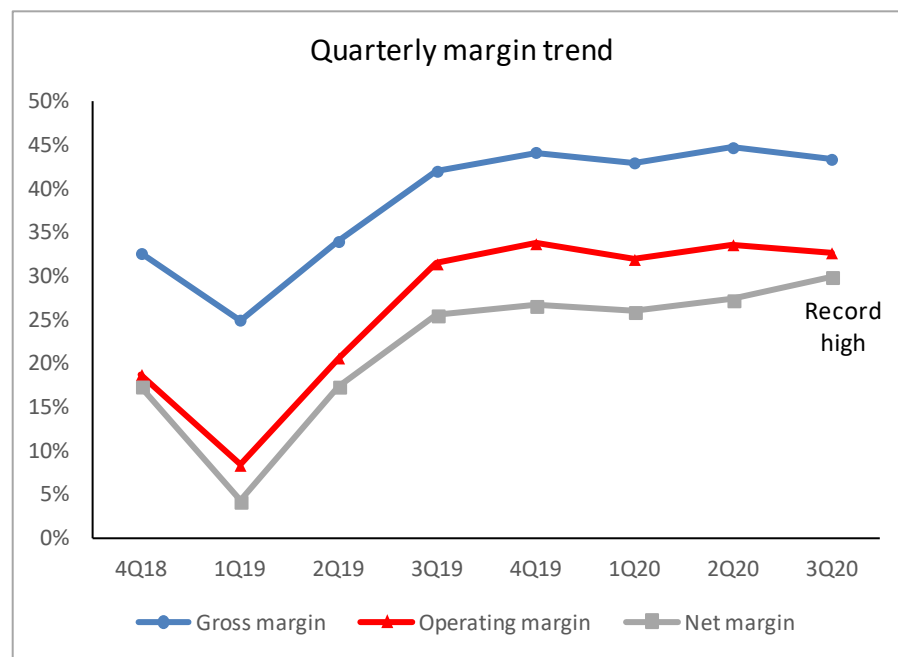
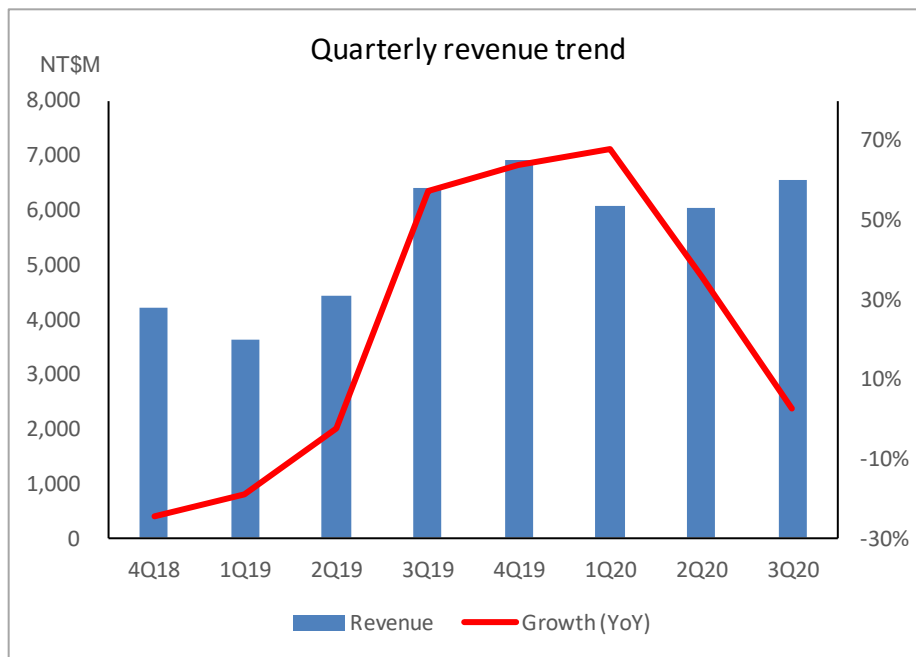


# 營運結果與展望

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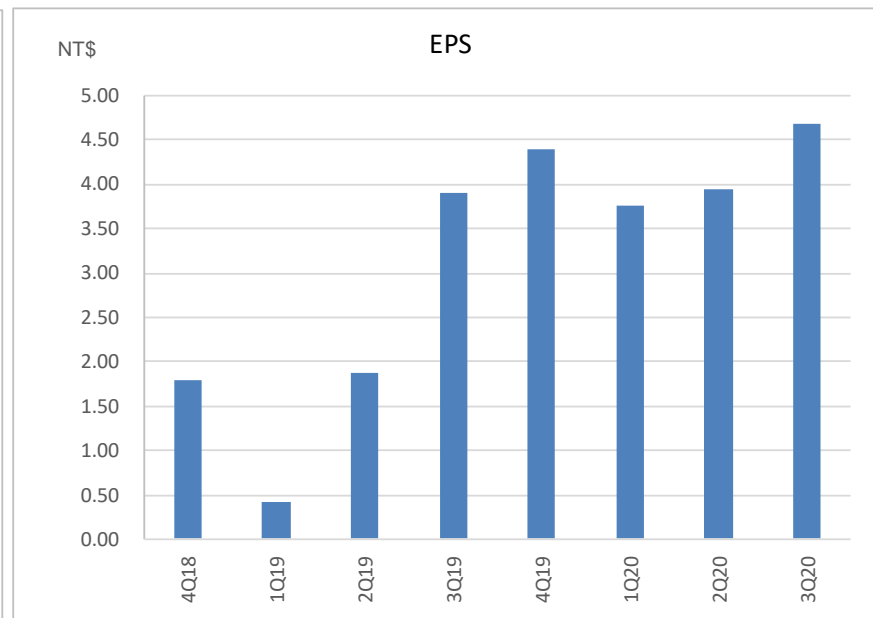
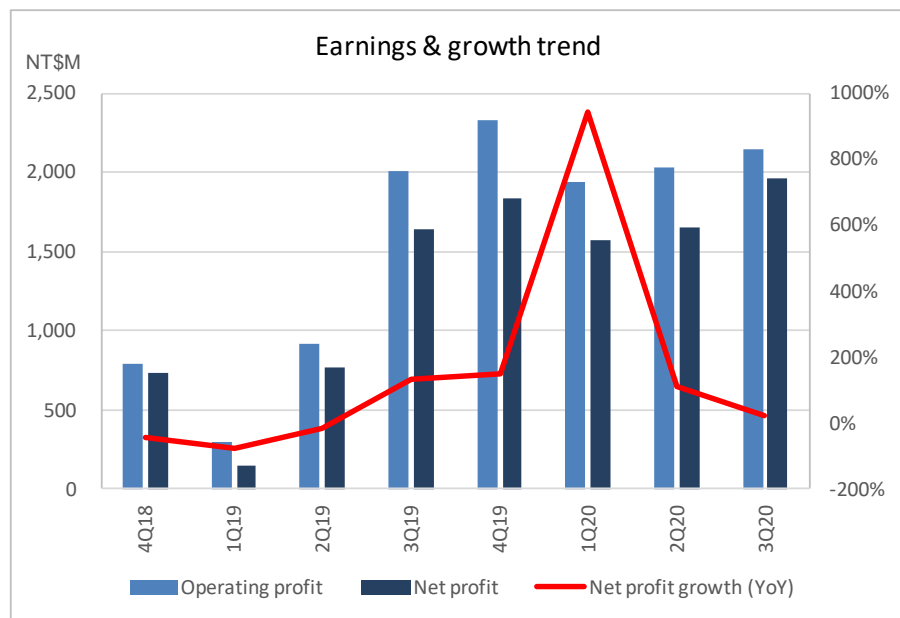
# 營收及毛利趨勢

- 第三季營收為新台幣65.66億元，較前一季增加9%，較去年同期增加3%。
- 第三季雖產能利用率隨著新產能逐月開出而下滑，但在產品組合優化下營業毛利率仍有43.4%，較前一季減少1.4個百分點；營業淨利率為32.7%，較前一季減少0.9個百分點。



Source: company.

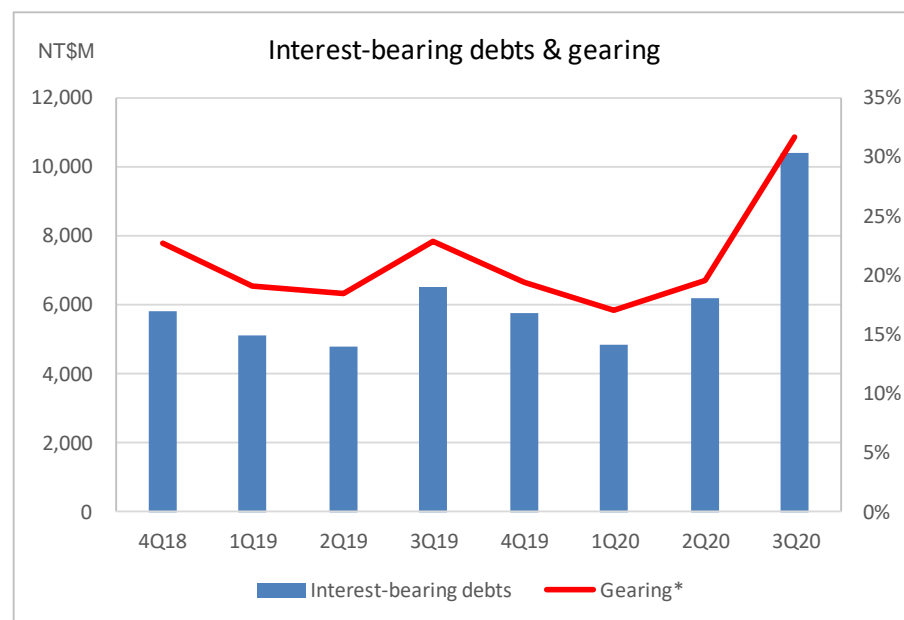
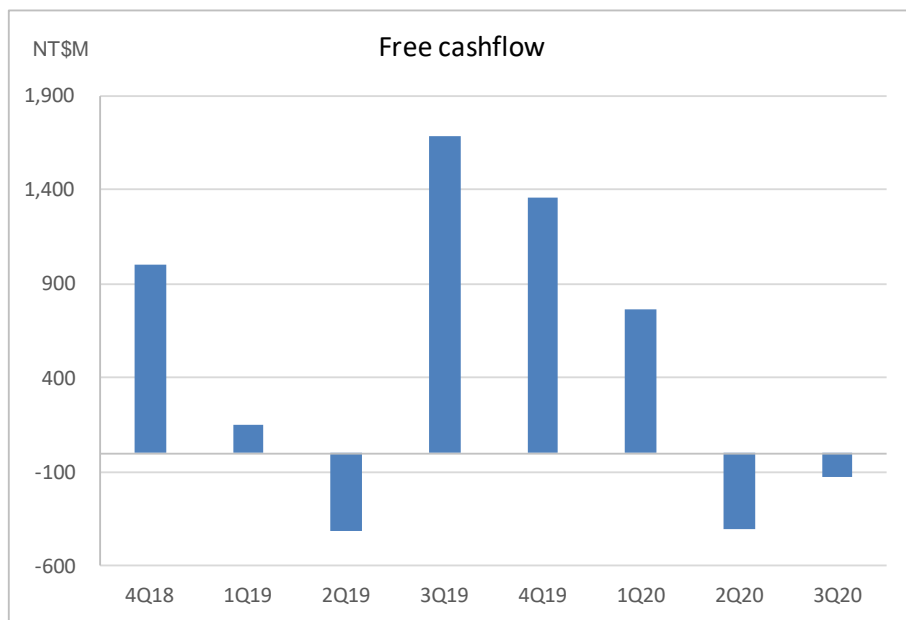
- 第三季淨利為NT\$19.67億元，為歷史單季新高，較前一季增加19%，較去年同期增加20%；第三季EPS為NT\$4.68元，同創單季歷史新高，前一季EPS為NT\$3.94元。



Source: company.

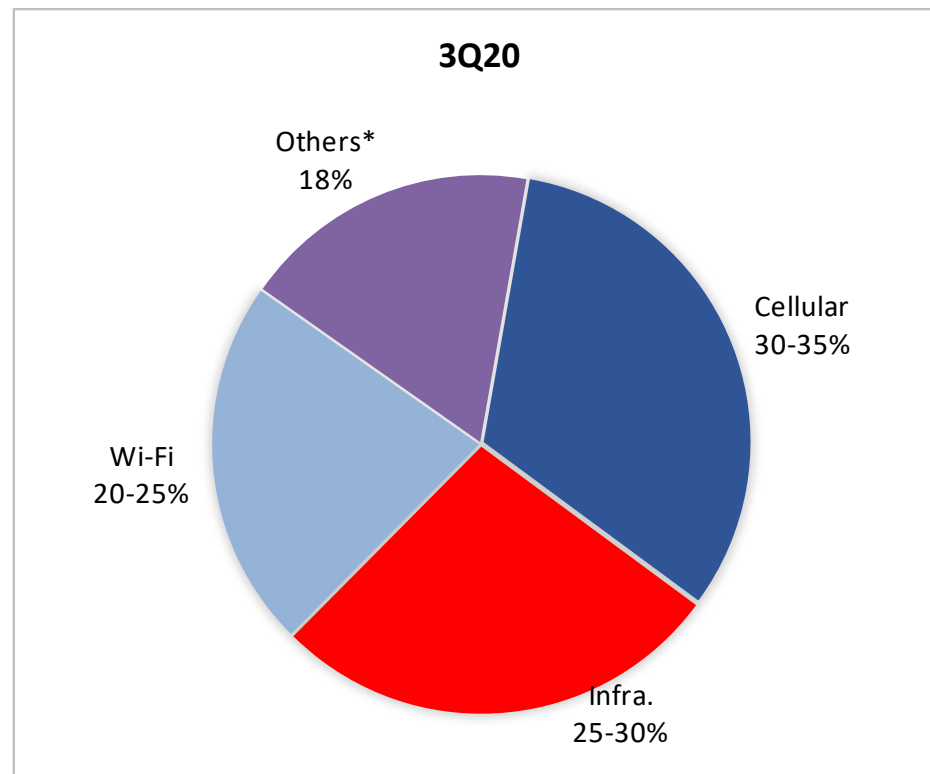
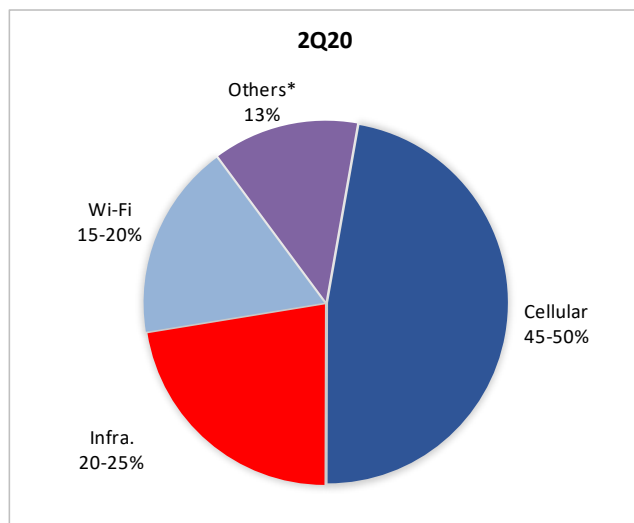
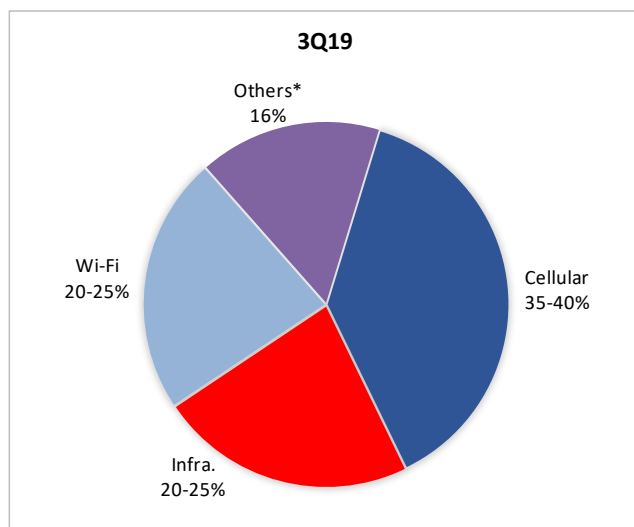
# 自由現金流量及負債趨勢

- 第三季資本支出持續增加，故自由現金流量呈現淨流出。
- 第三季計息負債及負債比率雖高於前一季，但財務結構仍十分穩健。



\* Gearing = interest-bearing debts / equity  
Source: company.

# 產品組合



\* Others: 未歸屬於以上主要產品別之營收，以及因應IFRS要求而併入集團之合併營收

Source: company.

- 預計第四季營收將較前一季成長 low-single digit 百分比。
- 第四季因產品組合變化，毛利率預計降至 約high-thirties的水準。

# 附件 – 財務狀況

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# 合併綜合損益表 - 第三季

| (新台幣 百萬元)    | 3Q'19 | 2Q'20 | 3Q'20<br>(自結數) | QoQ  | YoY  |
|--------------|-------|-------|----------------|------|------|
| 營業收入         | 6,404 | 6,048 | 6,566          | +9%  | +3%  |
| 營業毛利         | 2,693 | 2,707 | 2,851          | +5%  | +6%  |
| 營業毛利率(%)     | 42.1% | 44.8% | 43.4%          |      |      |
| 營業費用         | (681) | (674) | (705)          | +5%  | +4%  |
| 營業費用率(%)     | -11%  | -11%  | -11%           |      |      |
| 營業淨利         | 2,012 | 2,033 | 2,146          | +6%  | +7%  |
| 營業淨利率(%)     | 31.4% | 33.6% | 32.7%          |      |      |
| 營業外收支淨額      | (29)  | (3)   | 244            |      |      |
| 稅前淨利         | 1,983 | 2,030 | 2,391          | +18% | +21% |
| 所得稅費用        | (346) | (380) | (423)          |      |      |
| 本期淨利         | 1,637 | 1,651 | 1,967          | +19% | +20% |
| 淨利率(%)       | 25.6% | 27.3% | 30.0%          |      |      |
| 每股純益(元)      | 3.90  | 3.94  | 4.68           | +19% | +20% |
| 其他綜合損益(稅後淨額) | 1,031 | 606   | (590)          |      |      |
| 綜合損益總額       | 2,668 | 2,256 | 1,377          | -39% | -48% |
| 年化ROE(%)     | 24%   | 22%   | 24%            |      |      |
| 約當產能利用率 (%)  | 95%   | 90%   | 75%            |      |      |
| 折舊費用         | 809   | 868   | 935            |      |      |
| 資本支出         | 1,116 | 1,938 | 2,291          |      |      |



# 合併綜合損益表 - 前三季

| (新台幣 百萬元)      | 2019Q1-3      | 2020Q1-3<br>(自結數) | YoY          |
|----------------|---------------|-------------------|--------------|
| <b>營業收入</b>    | <b>14,474</b> | <b>18,685</b>     | <b>+29%</b>  |
| 營業毛利           | 5,109         | 8,169             | +60%         |
| 營業毛利率(%)       | 35.3%         | 43.7%             |              |
| 營業費用           | (1,879)       | (2,052)           | +9%          |
| 營業費用率(%)       | -13%          | -11%              |              |
| <b>營業淨利</b>    | <b>3,230</b>  | <b>6,118</b>      | <b>+89%</b>  |
| 營業淨利率(%)       | 22.3%         | 32.7%             |              |
| 營業外收支淨額        | (55)          | 268               |              |
| 稅前淨利           | 3,175         | 6,385             | +101%        |
| 所得稅費用          | (613)         | (1,192)           |              |
| <b>本期淨利</b>    | <b>2,561</b>  | <b>5,193</b>      | <b>+103%</b> |
| 淨利率(%)         | 17.7%         | 27.8%             |              |
| <b>每股純益(元)</b> | <b>6.18</b>   | <b>12.38</b>      | <b>+100%</b> |
| 其他綜合損益(稅後淨額)   | 2,505         | 13                |              |
| <b>綜合損益總額</b>  | <b>5,067</b>  | <b>5,206</b>      | <b>+3%</b>   |
|                |               |                   |              |
| 年化ROE(%)       | 13%           | 22%               |              |
| 約當產能利用率 (%)    | 75%           | 85%               |              |
| 折舊費用           | 2,477         | 2,645             |              |
| 資本支出           | 3,605         | 5,551             |              |

# 營業外收支

| (新台幣 百萬元)              | 3Q'19       | 3Q'20<br>(自結數) | 2019Q1-3    | 2020Q1-3<br>(自結數) |
|------------------------|-------------|----------------|-------------|-------------------|
| 外幣兌換損益                 | 19          | (31)           | 63          | (33)              |
| 處分不動產、廠房及設備損益          | (288)       | (3)            | (289)       | (4)               |
| 處分投資損益                 | (32)        | -              | 48          | -                 |
| 透過損益按公允價值衡量之金融資產及負債淨損益 | 146         | 48             | 68          | (19)              |
| 採用權益法認列之關聯企業及合資損益之份額   | (6)         | 77             | (196)       | 92                |
| 其他                     | 132         | 153            | 251         | 231               |
| <b>總計</b>              | <b>(29)</b> | <b>244</b>     | <b>(55)</b> | <b>268</b>        |

# 合併資產負債表

| (新台幣 百萬元) 重要科目       | 2019/9/30     |             | 2020/6/30     |             | 2020/9/30<br>(自結數) |             |
|----------------------|---------------|-------------|---------------|-------------|--------------------|-------------|
|                      | \$            | %           | \$            | %           | \$                 | %           |
| 現金及約當現金              | 4,993         | 12%         | 6,159         | 13%         | 6,709              | 13%         |
| 透過損益按公允價值衡量之金融資產-流動  | 720           | 2%          | 1,033         | 2%          | 1,098              | 2%          |
| 應收票據及帳款淨額            | 2,220         | 5%          | 2,318         | 5%          | 1,762              | 4%          |
| 存貨                   | 4,364         | 11%         | 5,347         | 11%         | 5,549              | 11%         |
| 長期投資                 | 6,191         | 15%         | 7,150         | 15%         | 7,359              | 15%         |
| 不動產、廠房及設備            | 20,432        | 50%         | 23,058        | 49%         | 24,514             | 49%         |
| <b>資產總計</b>          | <b>40,580</b> | <b>100%</b> | <b>47,169</b> | <b>100%</b> | <b>49,701</b>      | <b>100%</b> |
| 流動負債                 | 4,971         |             | 8,906         |             | 5,749              |             |
| 長期借款                 | 6,521         |             | 6,187         |             | 10,433             |             |
| <b>負債總額</b>          | <b>12,024</b> | <b>30%</b>  | <b>15,629</b> | <b>33%</b>  | <b>16,763</b>      | <b>34%</b>  |
| 普通股股本                | 4,241         |             | 4,241         |             | 4,241              |             |
| 歸屬於母公司業主之權益          | 28,427        |             | 30,596        |             | 32,000             |             |
| <b>權益總計</b>          | <b>28,557</b> | <b>70%</b>  | <b>31,540</b> | <b>67%</b>  | <b>32,938</b>      | <b>66%</b>  |
| 每股淨值(元) <sup>1</sup> | 67.04         |             | 72.15         |             | 75.46              |             |
| <b>重要財務指標</b>        |               |             |               |             |                    |             |
| 流動比率                 | 253%          |             | 172%          |             | 279%               |             |
| 負債比率                 | 30%           |             | 33%           |             | 34%                |             |

<sup>1</sup> 每股淨值=歸屬於母公司業主權益/普通股股數

# Q & A

For more information regarding WIN  
[www.winfoundry.com](http://www.winfoundry.com)

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