



*Compound Semiconductor Solutions  
from RF to Lightwave*

**穩懋半導體**

# WIN Semiconductors Company Presentation

Aug. 2021



# Safe Harbor Notice




- **This presentation contains certain forward-looking statements that are based on current expectations and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements.**
- **Except as required by law, we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.**

- **WIN's Business Overview and Strategy**
- **2Q Operating Result & 3Q Guidance**
- **Q&A**

# WIN'S BUSINESS OVERVIEW AND STRATEGY

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# WIN's Technologies and Applications

Product Segment	Technology	Wafer Size	Picture of 6" wafer
Cellular PA	HBT, BiHEMT	6 inch	
Wi-Fi PA	HBT, BiHEMT	6 inch	
Infrastructure PA	pHEMT, GaN	4, 6 inch	
3D Sensing	VCSEL	6 inch	
Optical	VCSEL, InP	4, 6 inch	

## 4G/5G Smart Mobile Devices



## Optical, 3D Sensing



## 4G/5G Basestation



## WiFi Router, IoT Gateway



## Fiber-optical Broadband Network



## Broadband Satellite

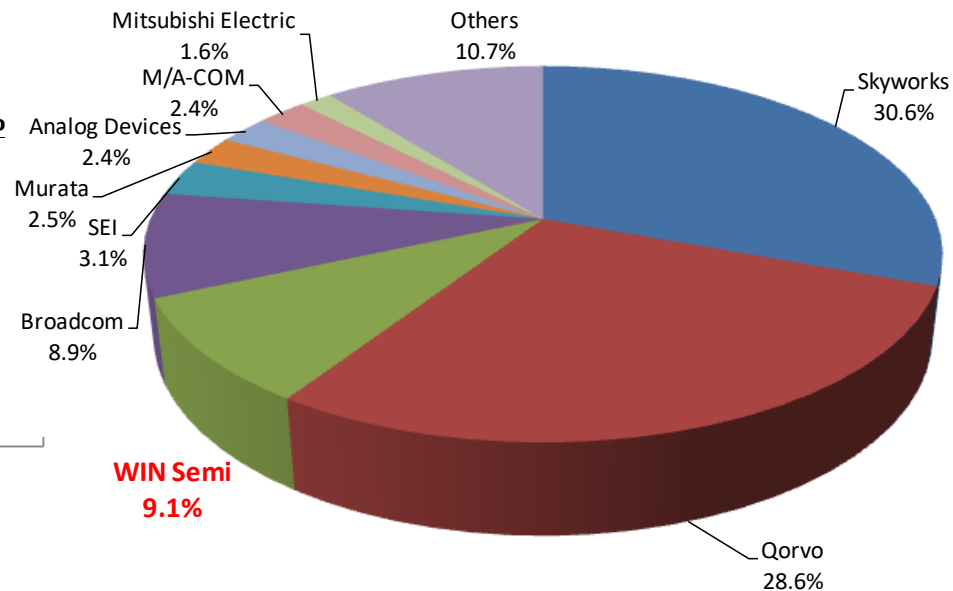
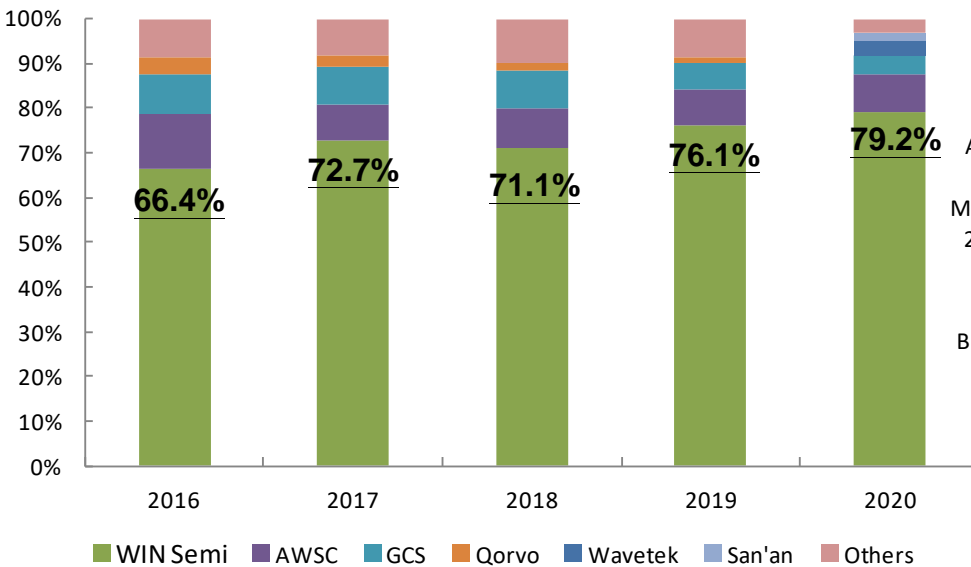


# Worldwide Market Share

**Invest in technologies to maintain competitive edge and sustain leadership!**

## GaAs Foundry Vendor Market Share (Recent 5-years)

## GaAs Device Vendor Market Share (Year 2020)



Sources: Strategy Analytics



# Our Locations



**Hwaya  
Technology Park**



**Guishan  
Industrial Park**



**As of today, WIN  
has three 6"GaAs  
fabs in Taiwan.**



**(Luzhu Fab)**

**Southern Taiwan Science  
Park located in Kaohsiung  
(Future production base)**

# The WIN-WIN Strategy

Invest in technologies to maintain competitive edge and sustain leadership

**Technology Leadership**

**Scale**

Invest in capacity to capture demand growth

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

**Cost & Efficiency**

**Customer & Application Diversification**

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



# Business Growth Drivers



**5G + Wi-Fi  
+ IoT**



**Infrastructure**



**Optical  
Devices**

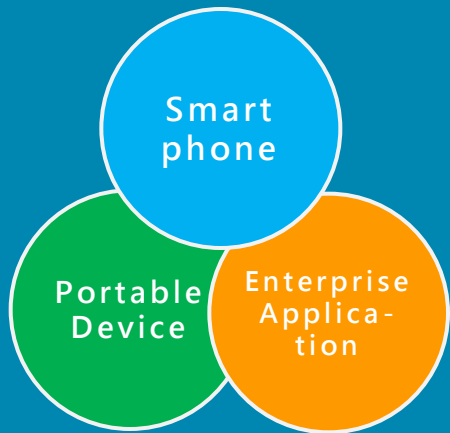
# Growth Drivers – 5G+Wi-Fi



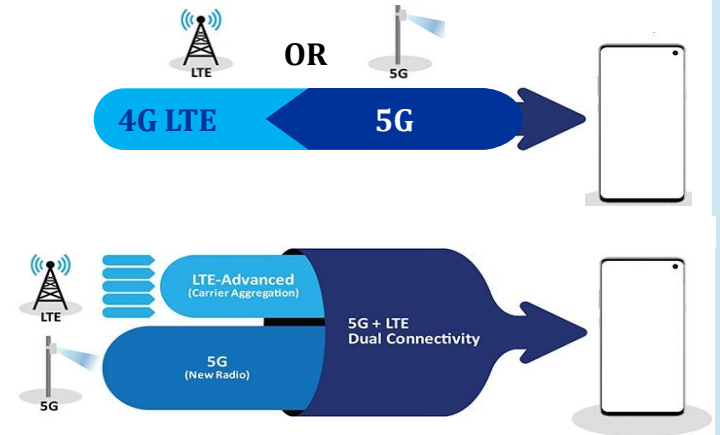
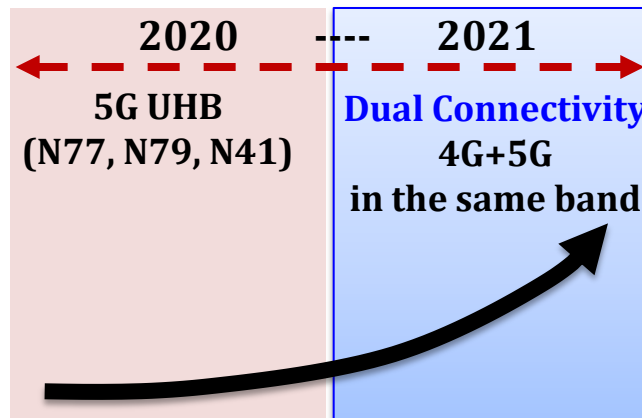
Y2019-20  
Implement Phase

Y2021-25  
Demand Rapid Growth

## 5G + Wi-Fi

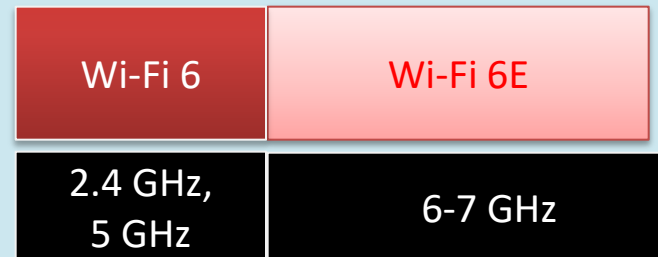


### ● Additional 5G PA for Dual Connectivity

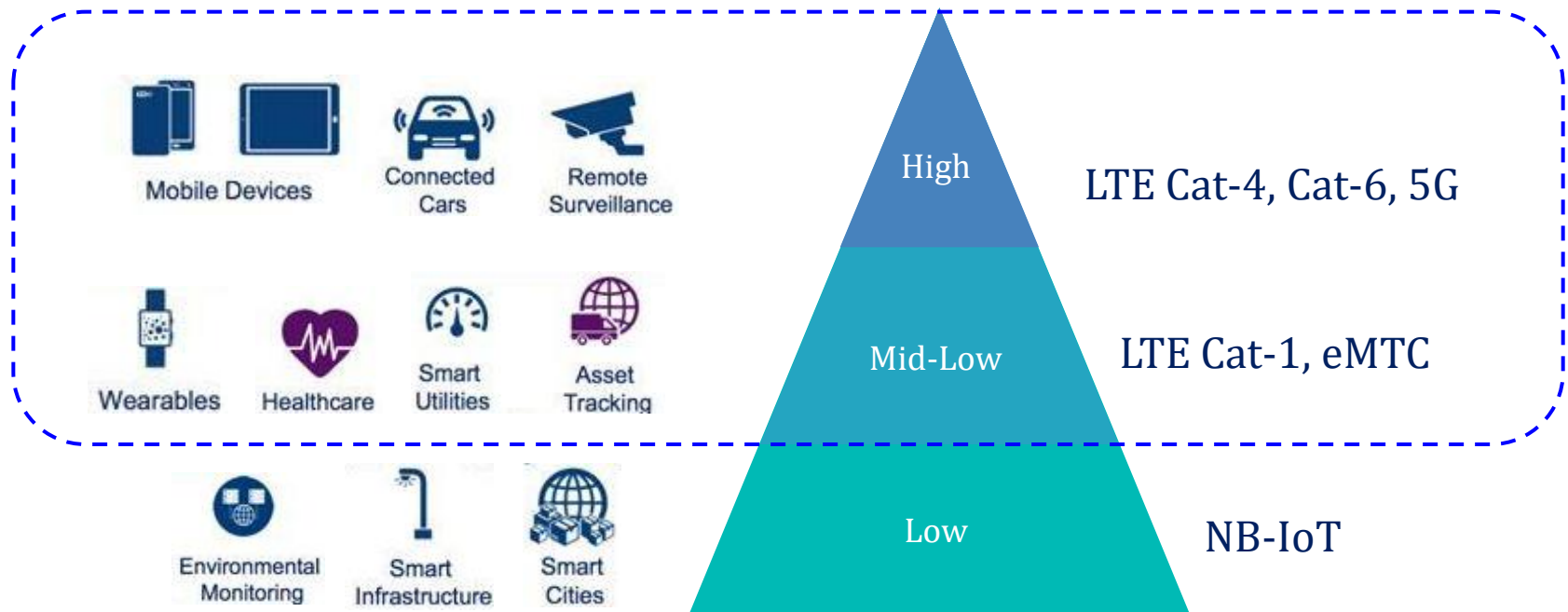


### ● Wi-Fi 6 will extend the frequency from 5GHz to 6~7GHz

- Wi-Fi 6 keeps growing and penetrating
- Wi-Fi 6E starts to ramp up



# Growth Drivers – Massive IoT



- **LTE Cat.1** is a branch of the 4G network. The network can be deployed with the help of 4G base stations without increasing investment. Cat.1's medium and low rate can perfectly cover 2G/3G network data services. **Network coverage, network speed and latency** are better than NB-IoT and 2G modules.

# Growth Drivers – Infrastructure



Y2019-20  
Implement Phase

Y2021-25  
Demand Rapid Growth

## Infrastructure



- **RF Device for base station**
  - The better RF performance (Linearity, PAE, etc.) for 5G Infra.

	Technology
Macro Cell	<ul style="list-style-type: none"><li>• PA : GaN HEMT</li><li>• DA : GaAs HBT</li><li>• LNA : GaAs pHEMT</li></ul>
Small Cell	<ul style="list-style-type: none"><li>• GaN HEMT for outdoor PA</li><li>• GaAs HBT for indoor PA</li><li>• pHEMT for LNA</li></ul>

- **Satellite Communication keeps growing from LEO requirement**
  - More small satellites in orbit by 2027.
  - Communication applications will be the key growth engine for satellite.

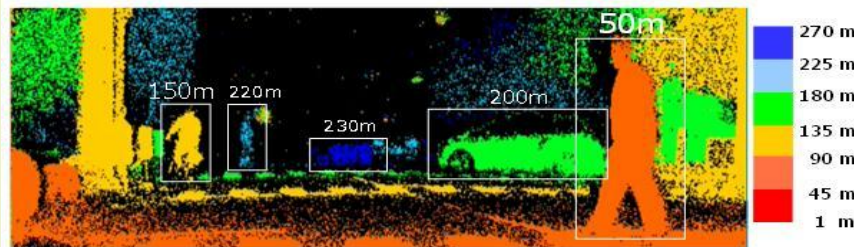


# Growth Drivers – Optical Devices

## Optical Devices



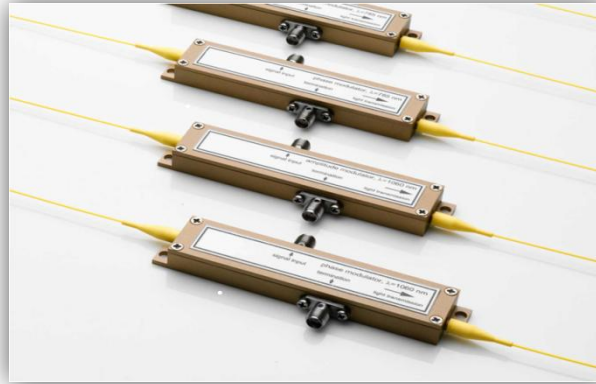
- **Structure-Light continuous** be used for facial recognition.
- **ToF for more 3D sensing applications will keep growing.**
  - LiDAR at rear side of smart phone
  - Door lock
  - LiDAR for autonomous car, in-cabin gesture recognition, driver condition monitoring, supermarket/bank payment system, airport/metro transportation entrance, etc.



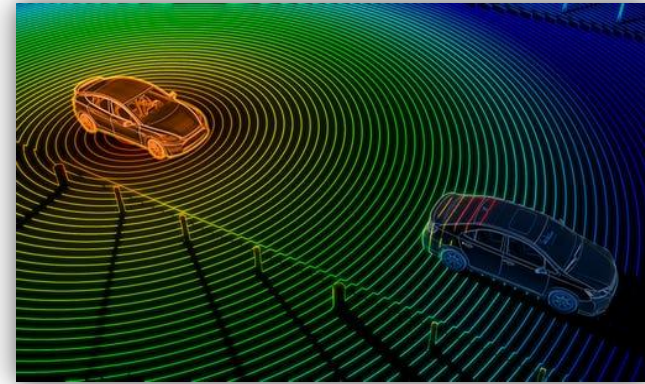
# Advanced Technology Development for Future Markets - InP



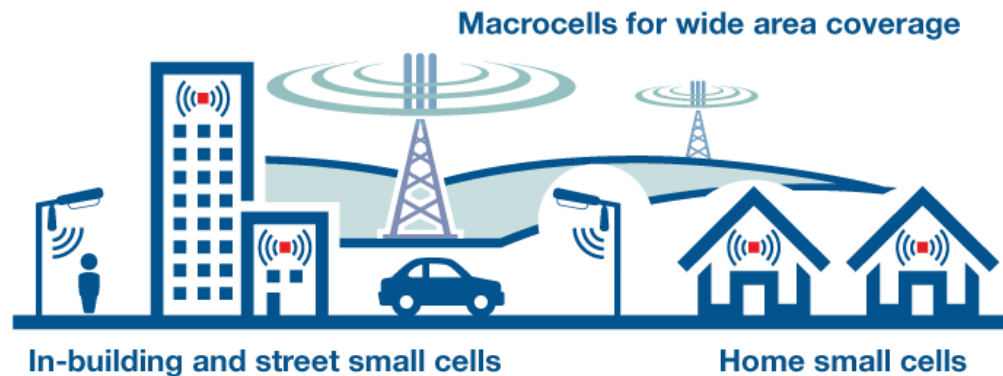
**Laser Diode/Photo Diode**



**Mach-Zehnder (MZ) Modulator**



**LiDAR**



## **RF Applications**



# Advanced Technology Development for Future Markets - GaN

## Satellite, V band PtP, mm-Wave Solutions



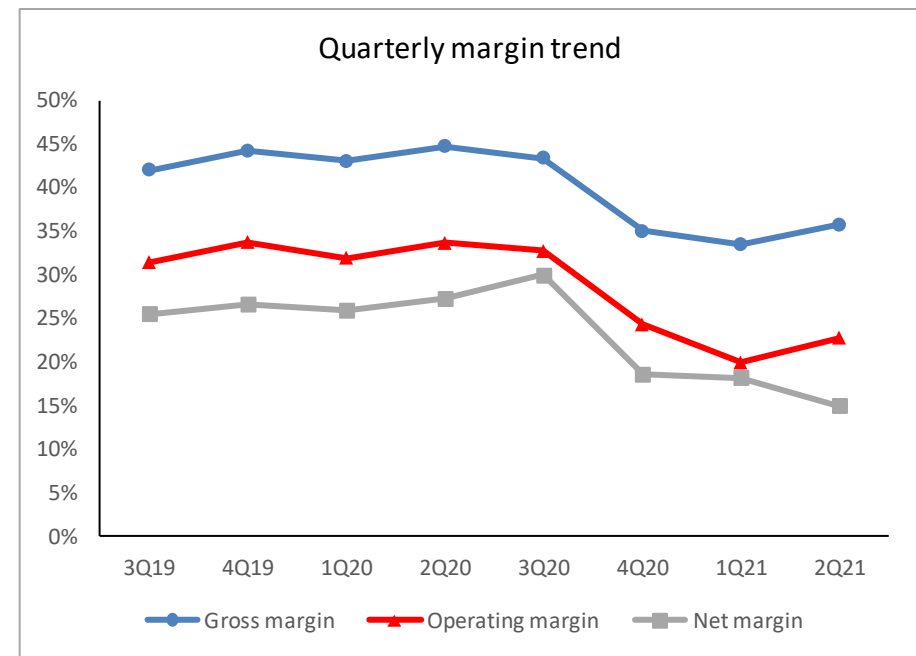
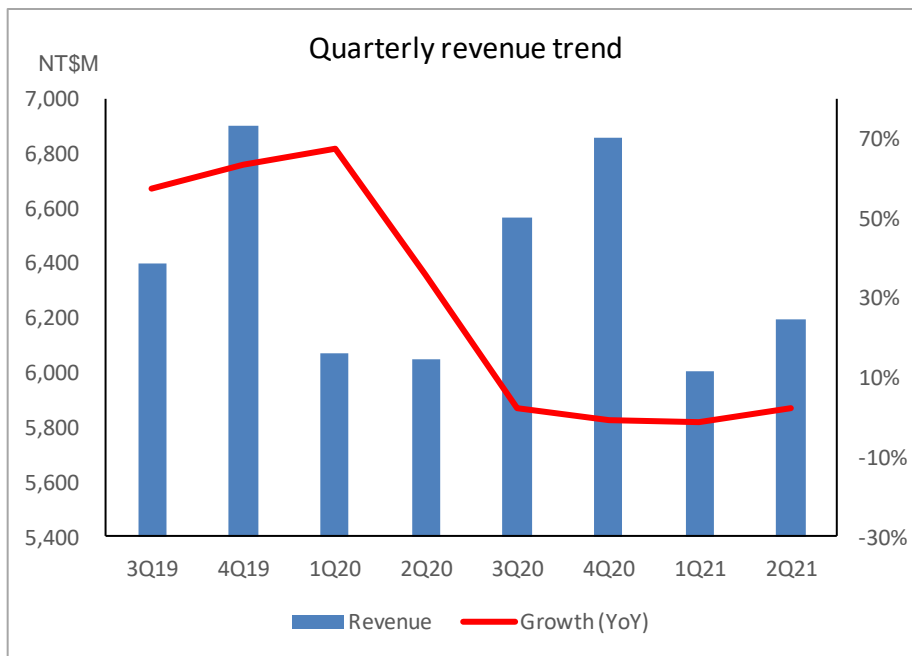


# 2Q OPERATING RESULT & 3Q GUIDANCE

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# Revenue & Margin Trend

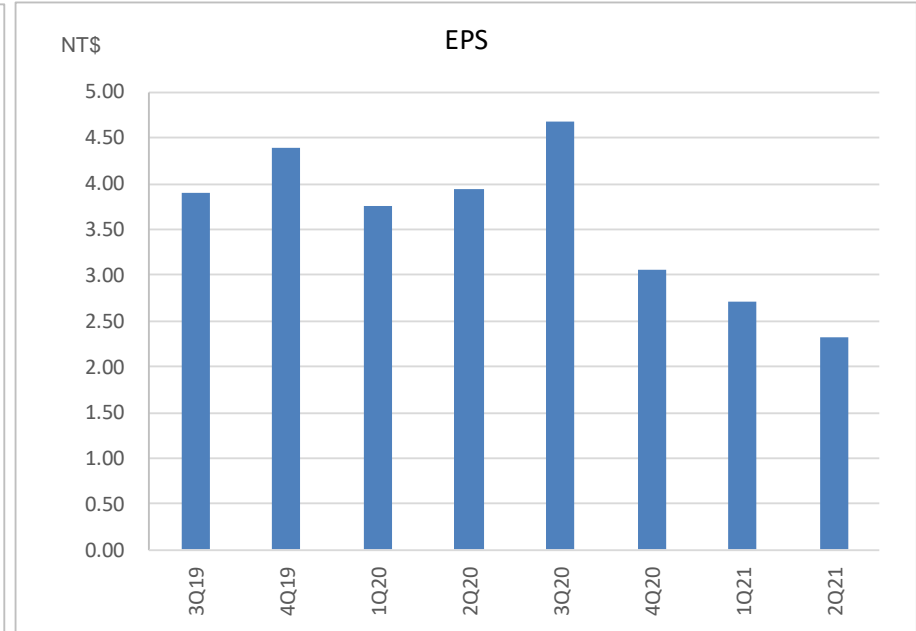
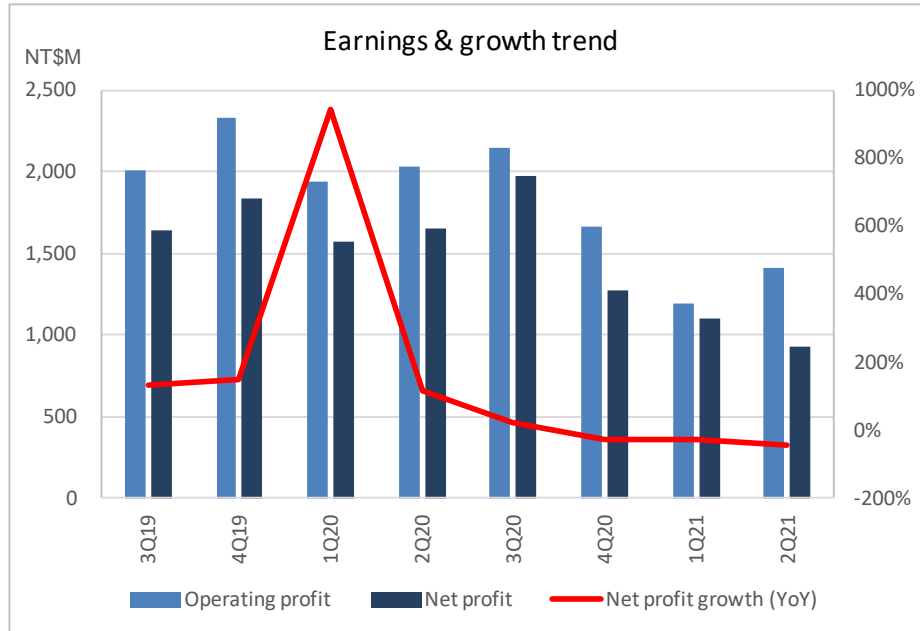
- 2Q21 revenue was NT\$6.2b, up 3% QoQ and up 2% YoY.
- In 2Q21, driven by changes in the product mix, gross margin increased by 2.2 pp sequentially to 35.7% and operating margin increased by 2.8 pp to 22.7%.



Source: company.

# Earnings Trend

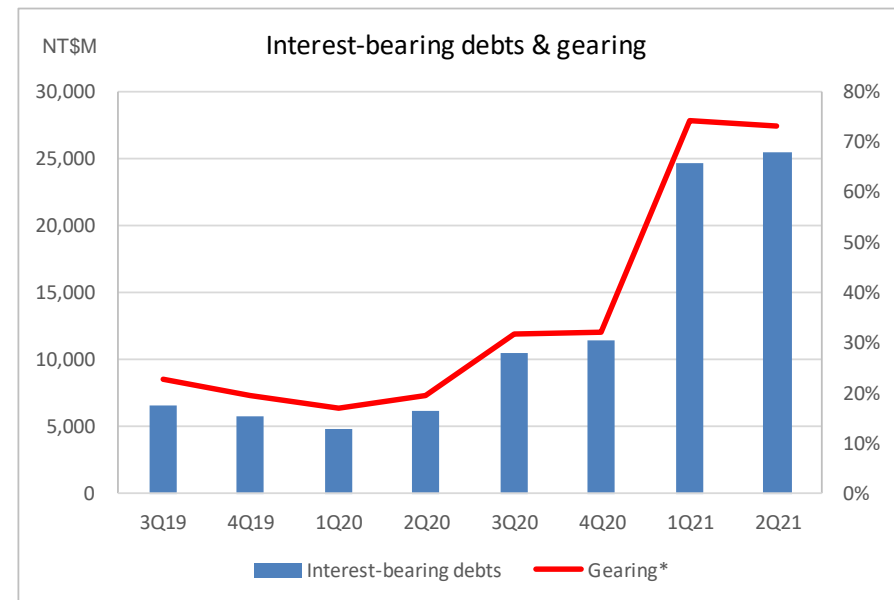
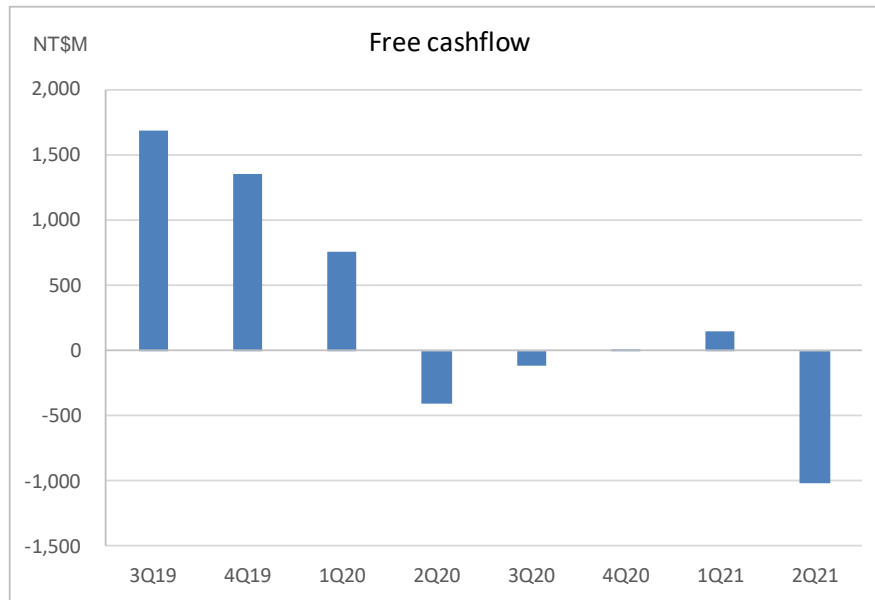
- 2Q21 net profit was NT\$930m, down 15% QoQ and down 44% YoY, mainly due to the appreciation of TWD against USD. EPS came in at NT\$2.32, compared to NT\$2.72 in 1Q21.



Source: company.

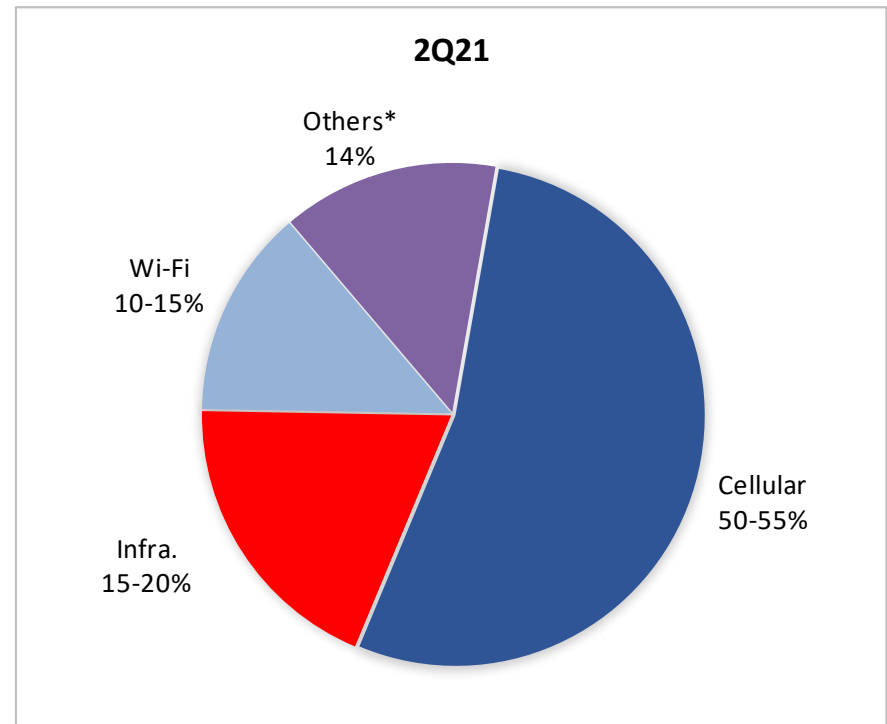
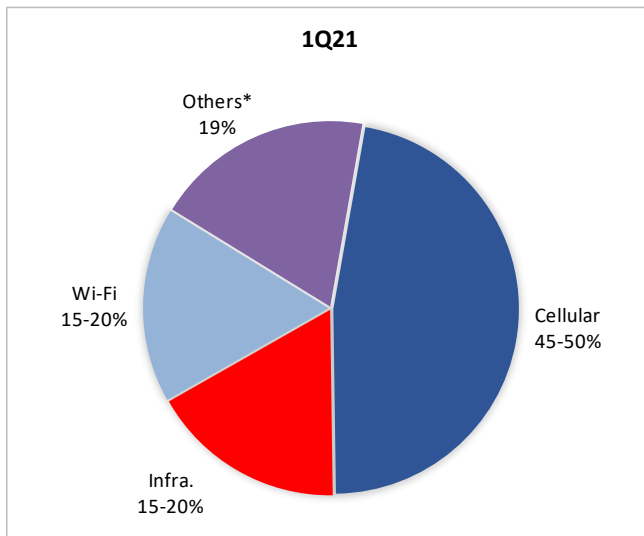
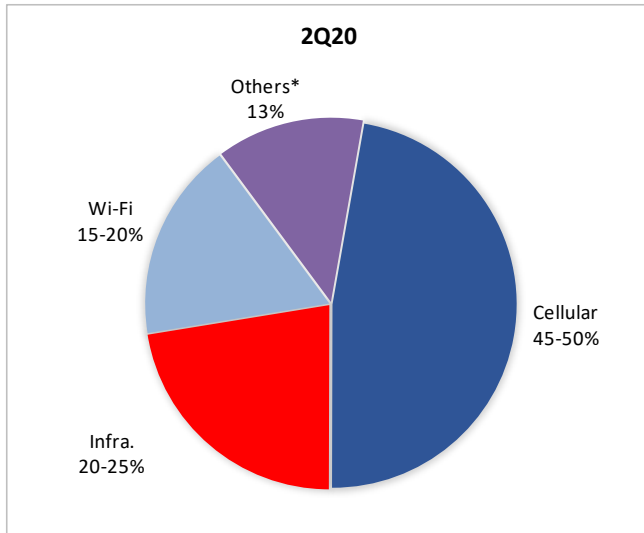
# FCF & Gearing Trend

- In 2Q21, as our capex increased, we had a net outflow of free cash flow.
- In 2Q21, both our interest-bearing debts and gearing ratio were maintained at the level of the previous quarter, and our financial structure remained healthy.



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

# Product Mix



\* Others: Revenue not attributable to main product segments and additional revenue being consolidated in accordance with IFRS.

Source: company.

# 3Q21 Guidance



- We expect 3Q21 revenue to grow by high-single digit QoQ.
- We expect 3Q21 gross margin to be around the level of mid-thirties.

# **APPENDIX - FINANCIAL SUMMARY**

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# Consolidated Statements of Comprehensive Income - Quarterly



Unit: NTD Million

	2Q'20	1Q'21	2Q'21	QoQ	YoY
<b>Net revenue</b>	<b>6,048</b>	<b>6,009</b>	<b>6,195</b>	+3%	+2%
Gross profit	2,707	2,012	2,212	+10%	-18%
<i>Gross margin (%)</i>	<i>44.8%</i>	<i>33.5%</i>	<i>35.7%</i>		
Operating expenses	(674)	(816)	(803)	-2%	+19%
<i>Operating expenses rate (%)</i>	<i>-11%</i>	<i>-14%</i>	<i>-13%</i>		
<b>Operating income</b>	<b>2,033</b>	<b>1,196</b>	<b>1,409</b>	<b>+18%</b>	<b>-31%</b>
<i>Operating margin (%)</i>	<i>33.6%</i>	<i>19.9%</i>	<i>22.7%</i>		
Non-operating incomes and expenses	(3)	191	(283)		
Income before income tax	2,030	1,386	1,126	-19%	-45%
Income tax expense	(380)	(291)	(197)		
<b>Net income</b>	<b>1,651</b>	<b>1,095</b>	<b>930</b>	<b>-15%</b>	<b>-44%</b>
<i>Net margin (%)</i>	<i>27.3%</i>	<i>18.2%</i>	<i>15.0%</i>		
<b>EPS (NT\$)</b>	<b>3.94</b>	<b>2.72</b>	<b>2.32</b>	<b>-15%</b>	<b>-41%</b>
Other comprehensive income, net	606	(14)	69		
<b>Comprehensive income</b>	<b>2,256</b>	<b>1,081</b>	<b>998</b>	<b>-8%</b>	<b>-56%</b>
ROE(%)	23%	14%	12%		
Approx. Utilization (%)	90%	80%	90%		
Depreciation	868	1,000	1,028		
CAPEX	1,938	1,834	2,702		

# Consolidated Statements of Comprehensive Income - YTD



Unit: NTD Million	2020H1	2021H1	YoY
<b>Net revenue</b>	<b>12,119</b>	<b>12,204</b>	+1%
Gross profit	5,318	4,224	-21%
<i>Gross margin (%)</i>	<i>43.9%</i>	<i>34.6%</i>	
Operating expenses	(1,347)	(1,619)	+20%
<i>Operating expenses rate (%)</i>	<i>-11%</i>	<i>-13%</i>	
<b>Operating income</b>	<b>3,971</b>	<b>2,605</b>	-34%
<i>Operating margin (%)</i>	<i>32.8%</i>	<i>21.3%</i>	
Non-operating incomes and expenses	23	(92)	
Income before income tax	3,995	2,513	-37%
Income tax expense	(769)	(488)	
<b>Net income</b>	<b>3,226</b>	<b>2,025</b>	-37%
<i>Net margin (%)</i>	<i>26.6%</i>	<i>16.6%</i>	
<b>EPS (NT\$)</b>	<b>7.70</b>	<b>5.04</b>	-35%
Other comprehensive income, net	603	55	
<b>Comprehensive income</b>	<b>3,829</b>	<b>2,080</b>	-46%
ROE(%)	22%	13%	
Approx. Utilization (%)	90%	85%	
Depreciation	1,709	2,027	
CAPEX	3,260	4,536	

# Non-operating Items

Unit: NTD Million	2Q'20	2Q'21	2020H1	2021H1
Foreign exchange gains (losses)	(65)	(348)	(1.8)	(157)
Gains (losses) on disposals of property, plant and equipment	0.3	0.7	(1)	(5)
Gains on financial assets (liabilities) at fair value through profit or loss, net	(11)	144	(67)	222
Share of gains (losses) of associates and joint ventures accounted for using equity method	21	(22)	15	(61)
Others	52	(57)	78	(91)
<b>Total</b>	<b>(3)</b>	<b>(283)</b>	<b>23</b>	<b>(92)</b>

# Consolidated Balance Sheets

(Unit: NTD Million)	Major Item	2020/6/30		2021/3/31		2021/6/30	
		\$	%	\$	%	\$	%
	Cash and cash equivalents	6,159	13%	22,334	32%	19,899	27%
	Current financial assets at fair value through profit or loss	1,033	2%	896	1%	258	0.4%
	Notes and accounts receivable, net	2,318	5%	1,999	3%	2,107	3%
	Inventories	5,347	11%	5,945	8%	6,065	8%
	Long-term investments	7,150	15%	8,525	12%	11,767	16%
	Net property, plant and equipment	23,058	49%	27,519	39%	29,111	40%
	<b>Total Assets</b>	<b>47,169</b>	<b>100%</b>	<b>70,149</b>	<b>100%</b>	<b>72,576</b>	<b>100%</b>
	Current liabilities	8,906		11,368		10,862	
	Bonds payable	-		13,160		13,202	
	Long-term borrowings	6,187		11,536		12,341	
	<b>Total Liabilities</b>	<b>15,629</b>	<b>33%</b>	<b>36,919</b>	<b>53%</b>	<b>37,634</b>	<b>52%</b>
	Common stock	4,241		4,240		4,240	
	Total equity attributable to owners of parent	30,596		31,643		32,727	
	<b>Total Equity</b>	<b>31,540</b>	<b>67%</b>	<b>33,230</b>	<b>47%</b>	<b>34,942</b>	<b>48%</b>
	Book value per share (NT\$) <sup>1</sup>	72.15		74.62		77.18	
	<b>Key Indices</b>						
	Current ratio ( <i>Current assets / Current liabilities</i> )	172%		279%		266%	
	Debt ratio ( <i>Total liabilities / Total assets</i> )	33%		53%		52%	

<sup>1</sup> Book value per share = total equity attributable to owners of parent / number of common shares

# Q & A

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

For all inquiries, suggestions, and comments  
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