



*Compound Semiconductor Solutions
from RF to Lightwave*

穩懋半導體

WIN Semiconductors Company Presentation

May - July 2020



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.**

- **Market Outlook**
- **Technologies**
- **The WIN Strategy**
- **Financial Review & Guidance**
- **Q&A**

MARKET OUTLOOK

Business Growth Drivers

5G + Wi-Fi 6



Infrastructure



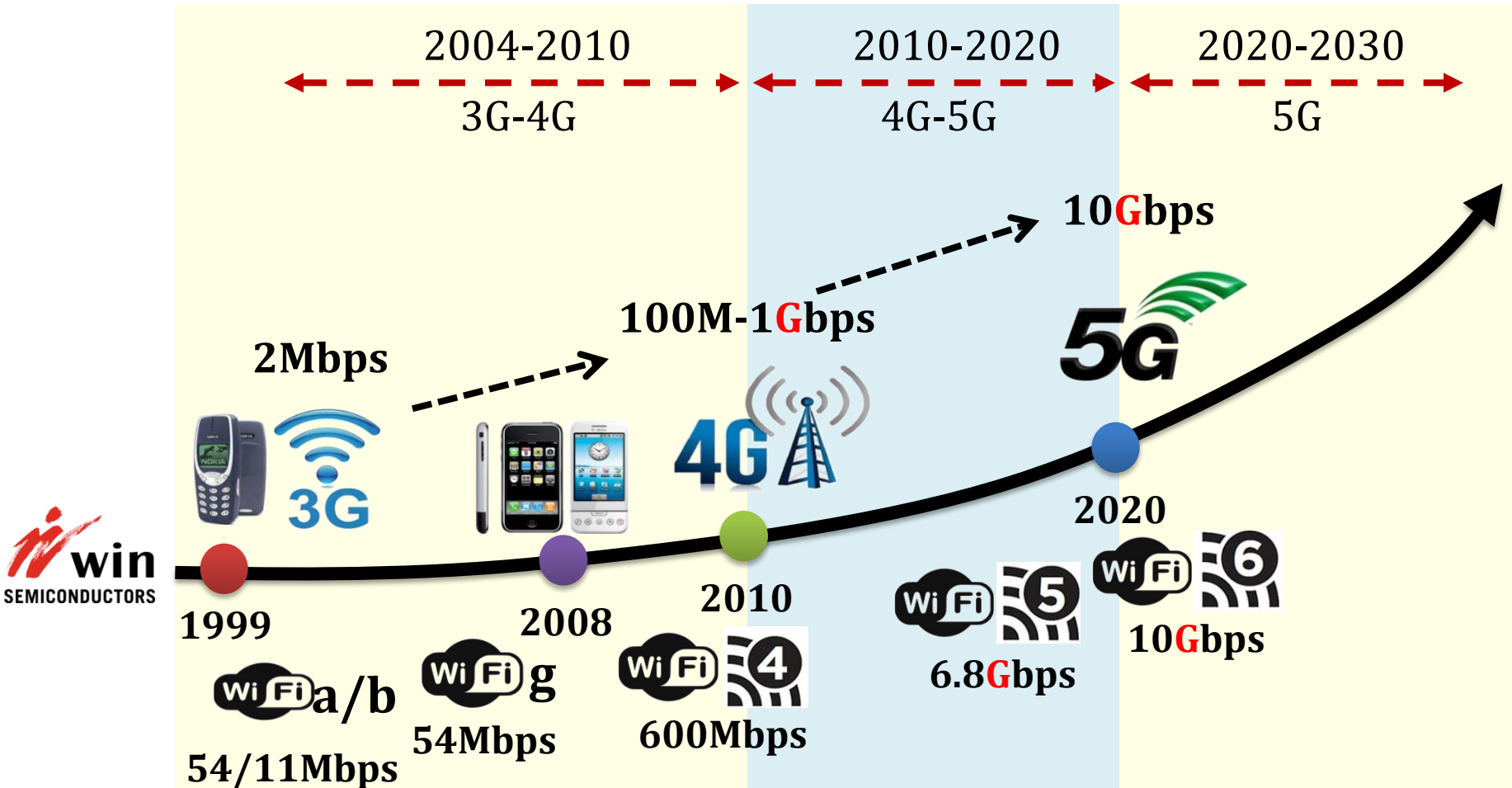
Optical Devices



Performance

Ultra-High
Speed

is required in **wireless communication**.
It is the advantage of compound semiconductors.





Opportunities for Compound Semiconductors



Y2019-20

Implement Phase

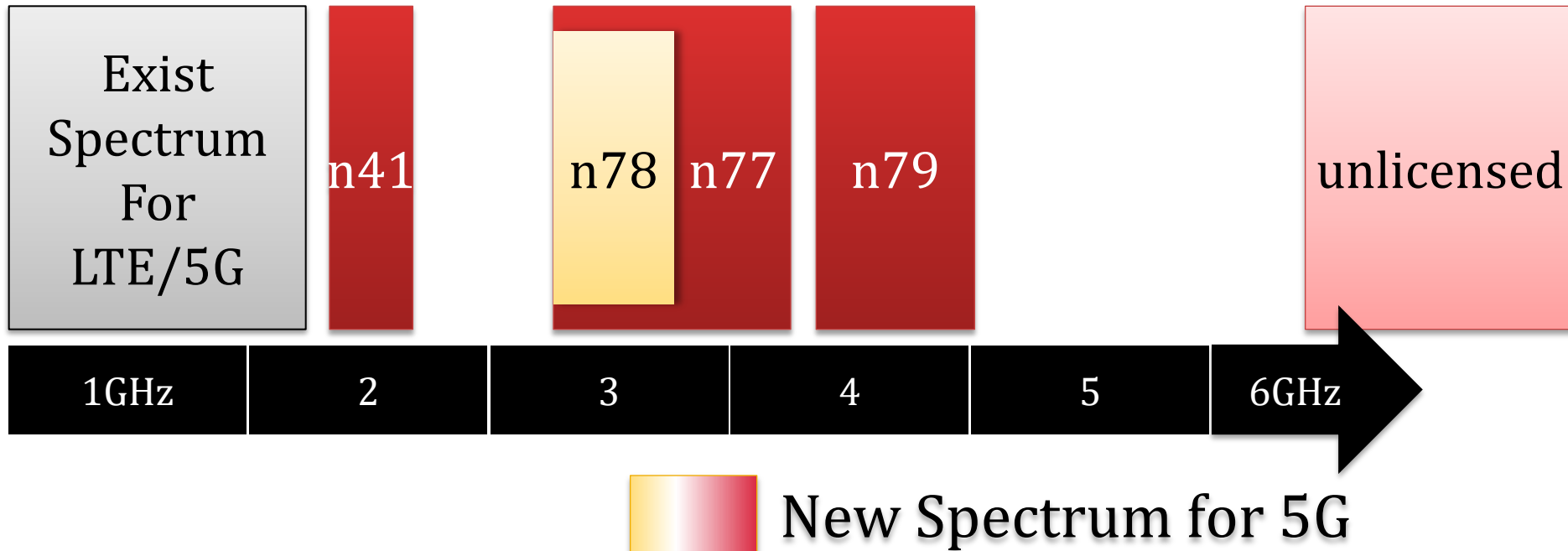
Y2021-25

Demand Rapid Growth

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

- 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 Freq. Spectrum



(1) New frequency bands for 5G

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

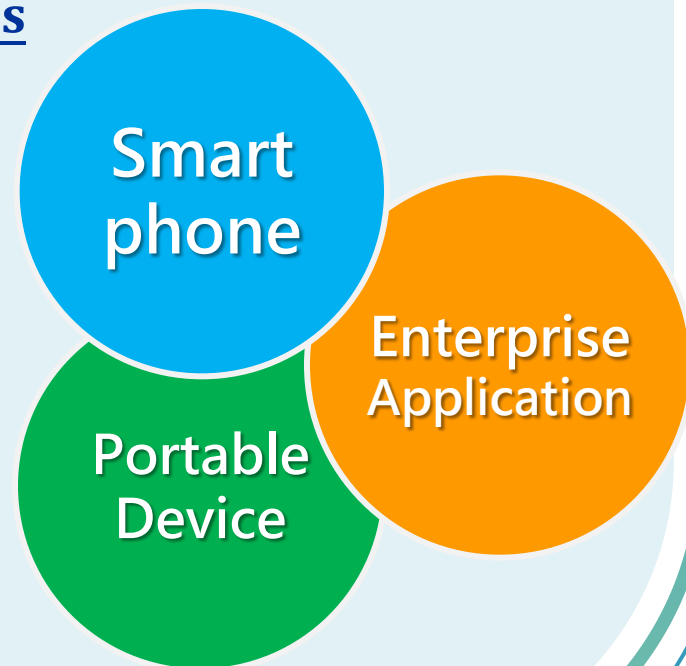
(3) Additional 5G PA (Refarm existing 4G Frequency band)



Opportunities

Wi-Fi 6 has been arriving and Wi-Fi 7 is developing

- 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

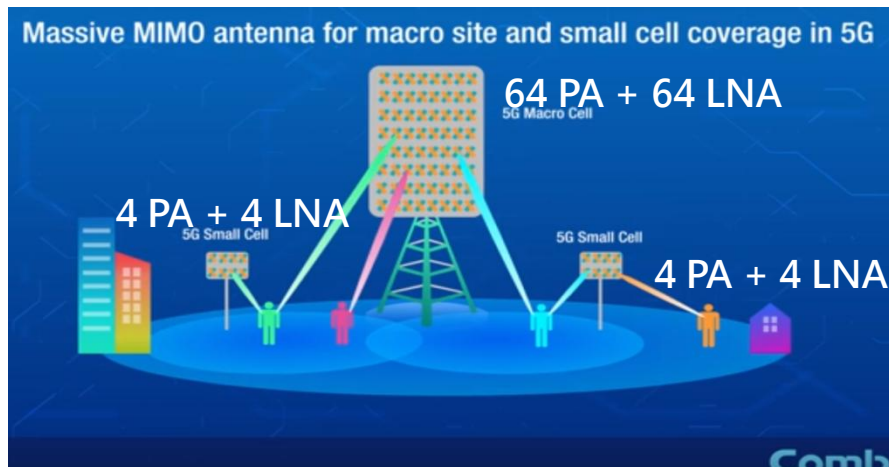


● RF Device Inside Macro & Small Cell Sector

- 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.



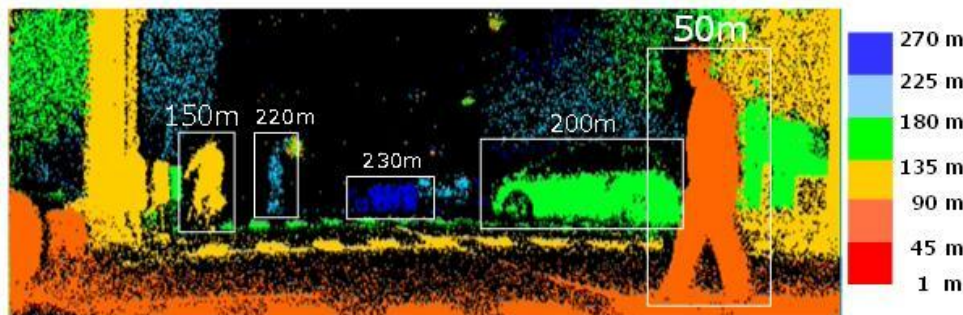
Optical for 3D Sensing

- **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



- **Optical Devices**

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

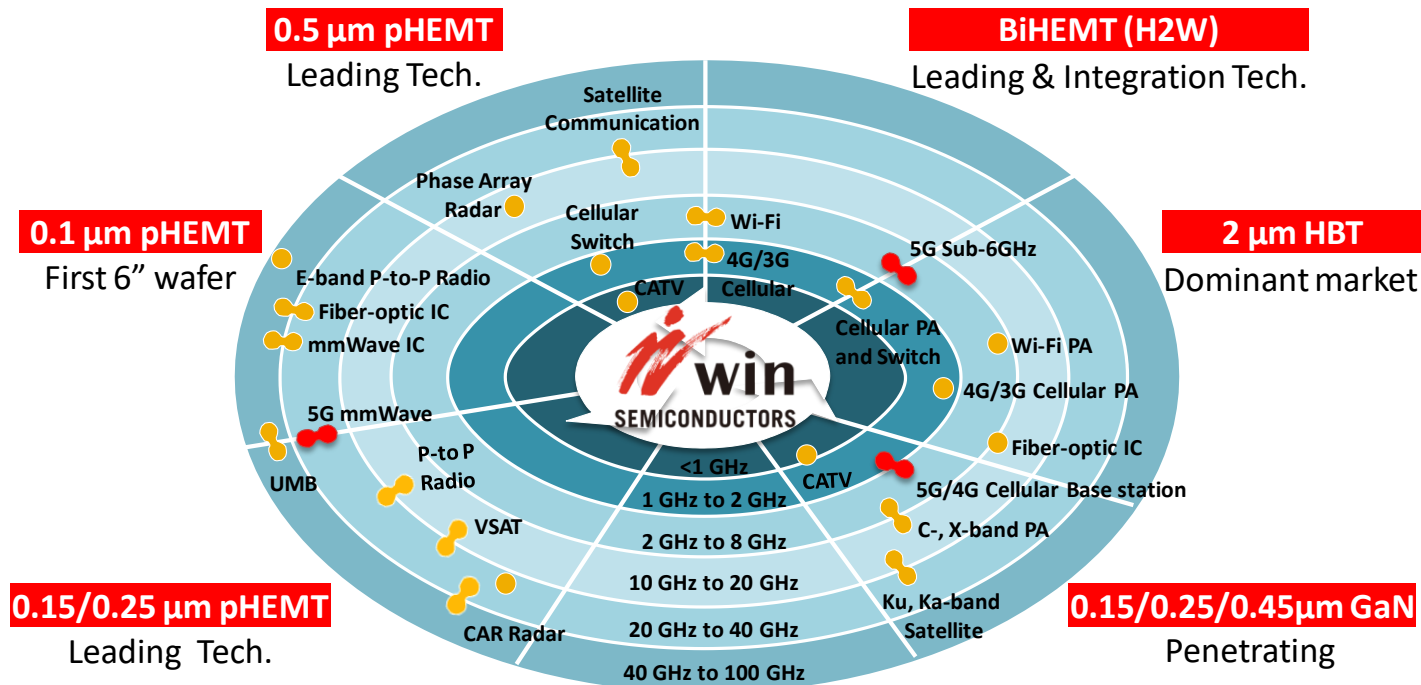


- **More and more customers engagement and will enter production stage soon**

TECHNOLOGIES

Broad Portfolio of Advanced Technologies

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 0.1 μm pHEMT on 6" GaAs wafer

- Industry leading 0.15–0.25 μm 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)

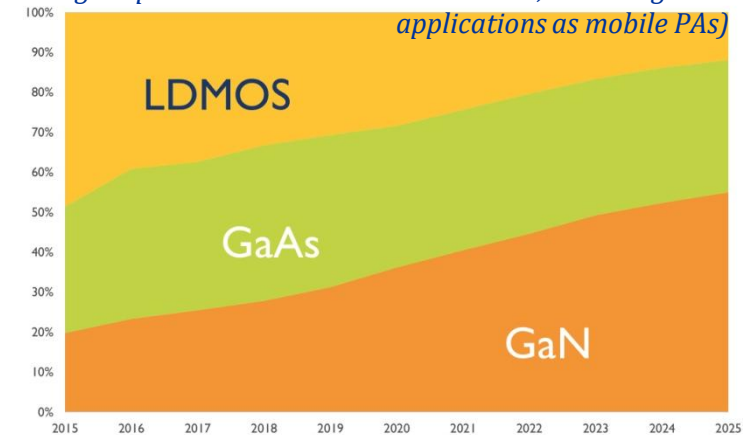
4/5G Infrastructure – WIN Inside!

Ultra high frequency semiconductor technology provider!

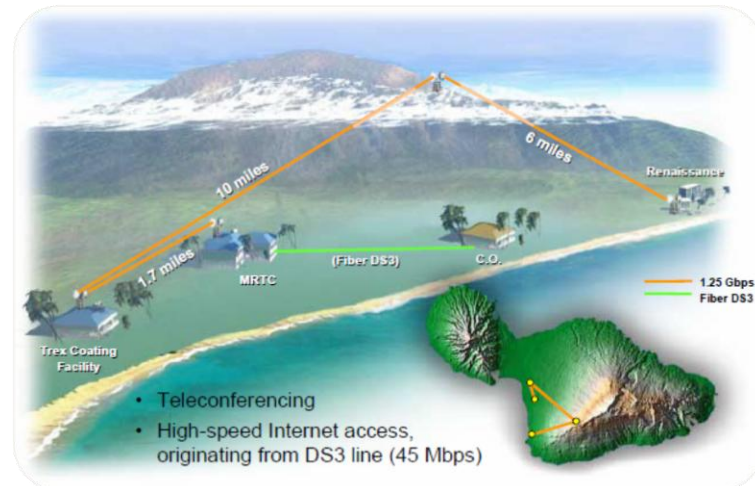
- Wireless infrastructure
- Satellite communications
- Fiberoptic communication
- ADAS

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



The WIN Strategy

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

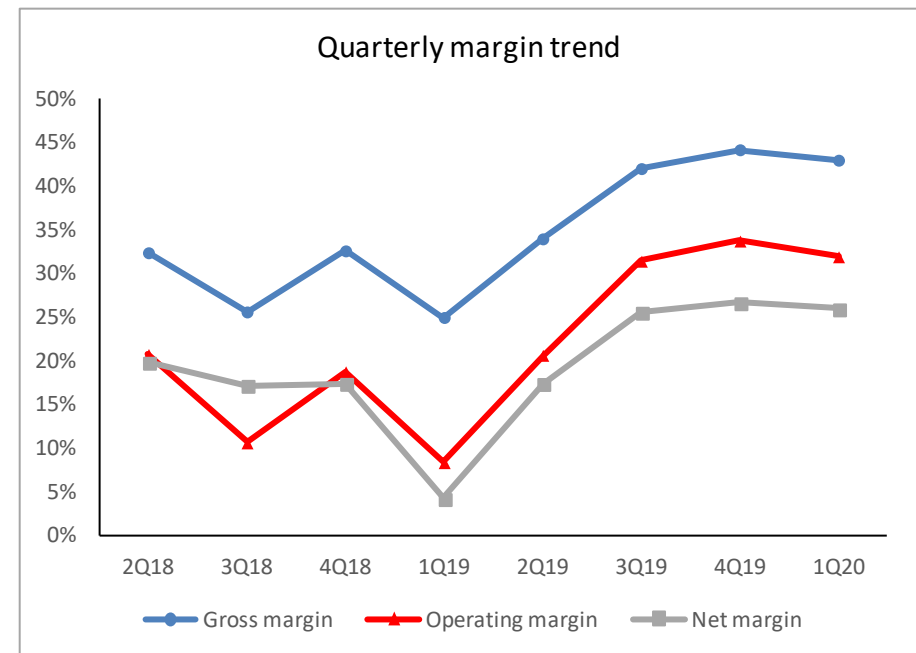
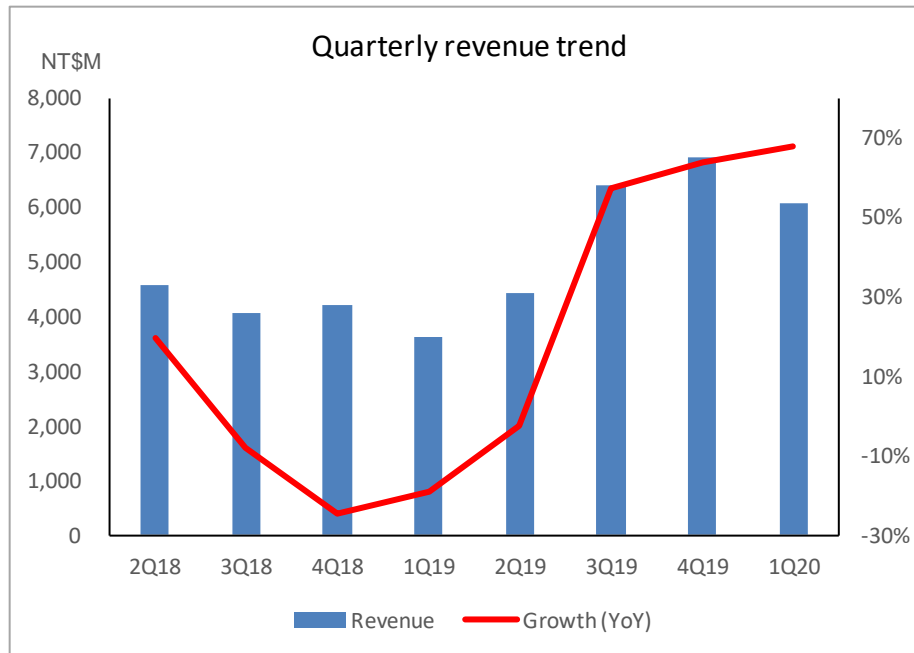
Customer Diversification

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

FINANCIAL REVIEW & GUIDANCE

Revenue & Margin Trend

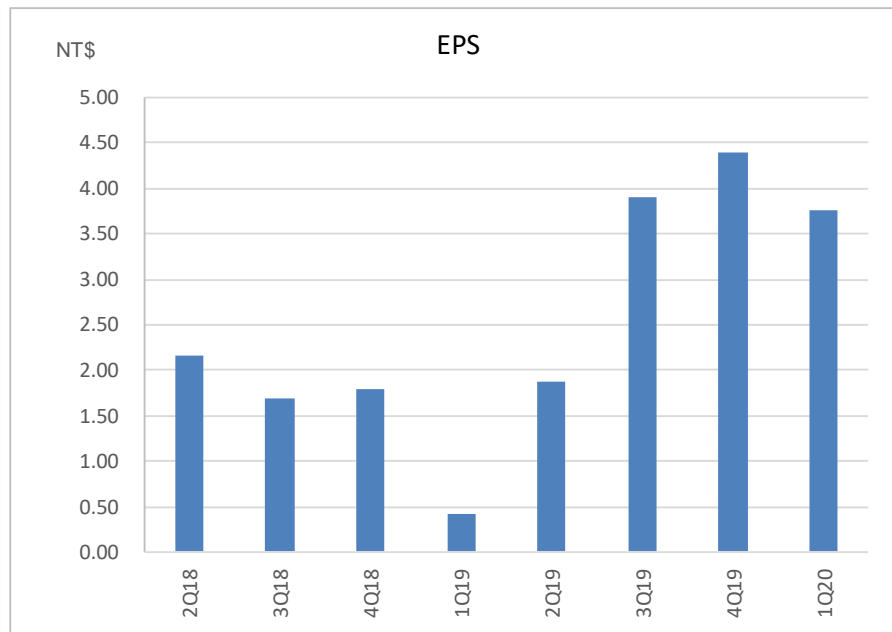
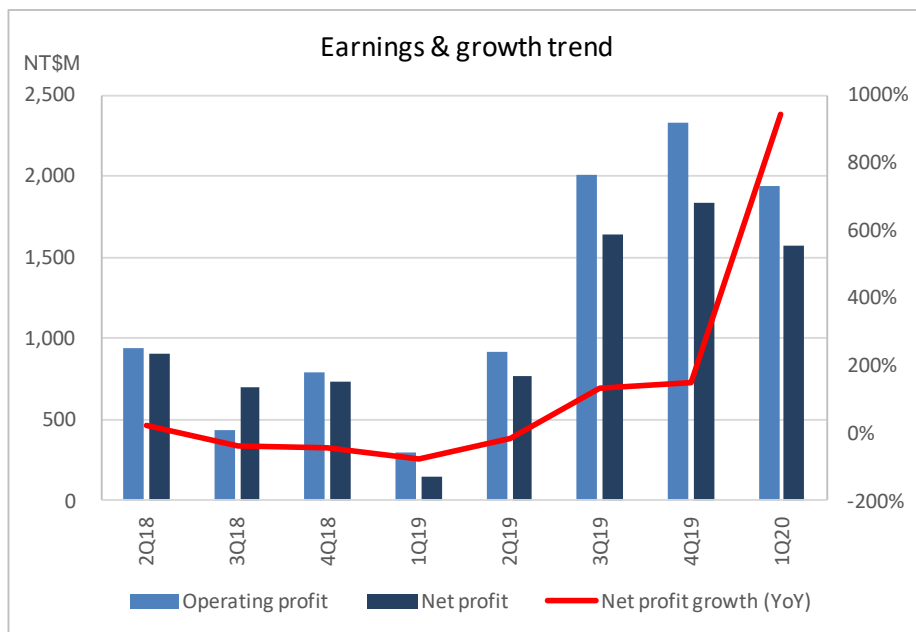
- 1Q20 revenue was NT\$6,071m, down 12% QoQ but up 68% YoY.
- In 1Q20, as there were only slight changes in the product mix and capacity utilization rate declined but was still at a relatively high level, gross margin decreased by 1.2pp sequentially to 43.0%, and operating margin decreased by 1.8pp sequentially to 31.9%.



Source: company.

Earnings Trend

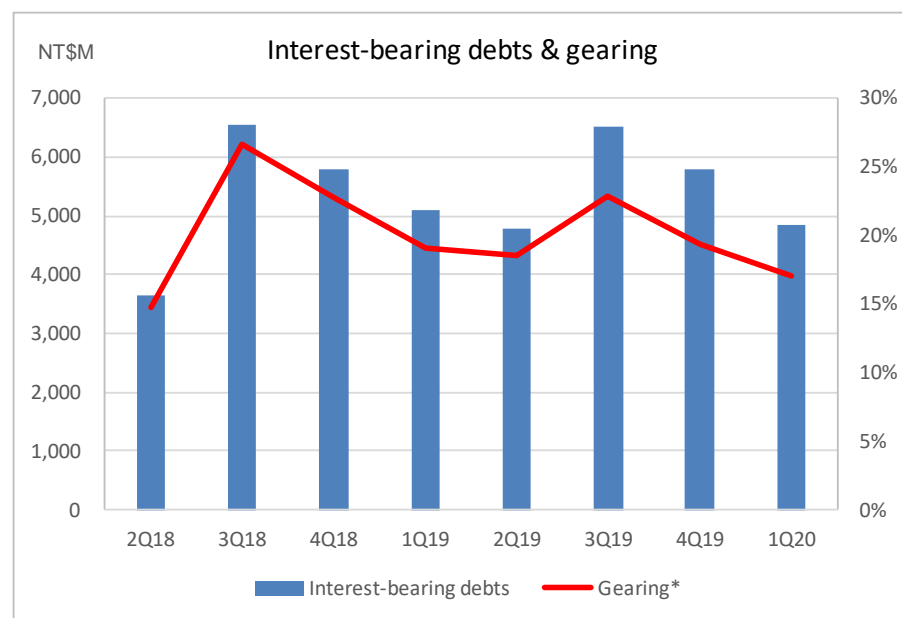
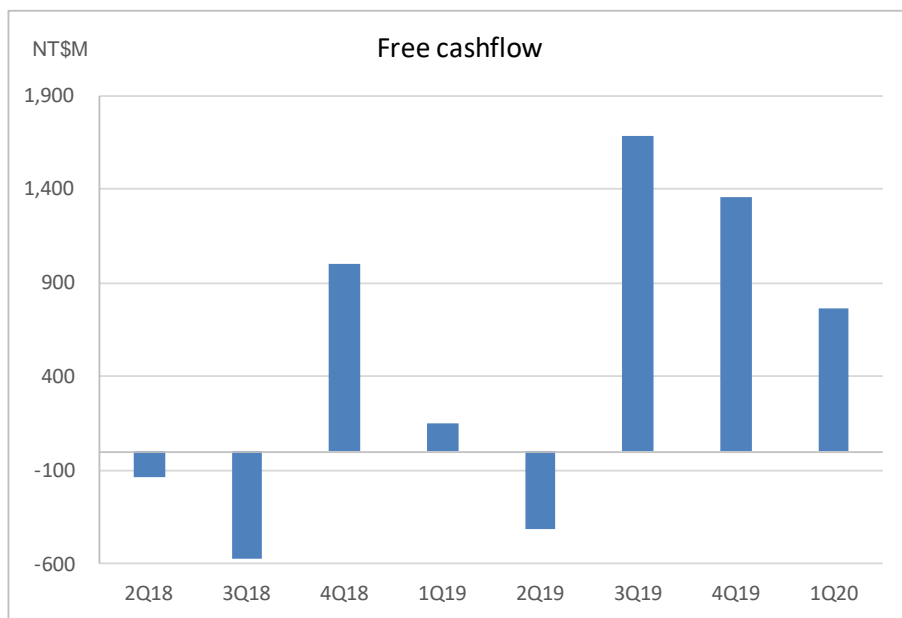
- In 1Q20, net profit was NT\$1,575m, down 14% QoQ but up 945% YoY. EPS came in at NT\$3.76, compares to NT\$4.4 in 4Q19.



Source: company.

FCF & Gearing Trend

- In 1Q20, although our capex is lower than the previous quarter, our free cash flow decreased sequentially due to lower operating profit.
- 1Q20 interest-bearing debts and gearing ratio both declined sequentially, indicating that our financial structure remained healthy.

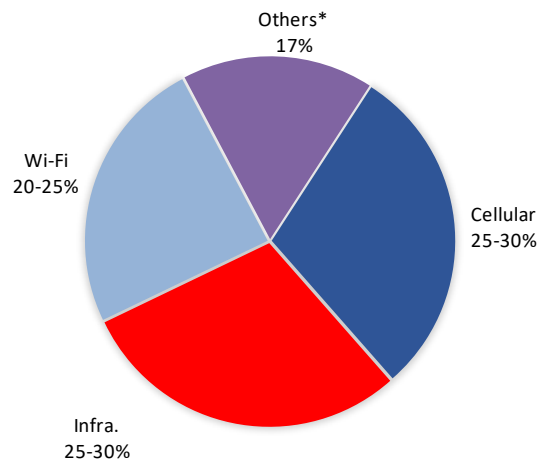


* Gearing = interest-bearing debts / equity

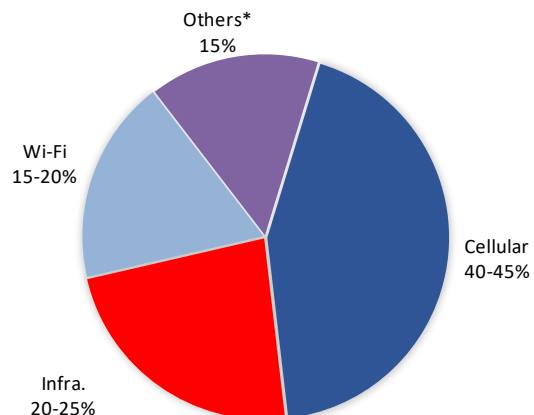
Source: company.

Product Mix

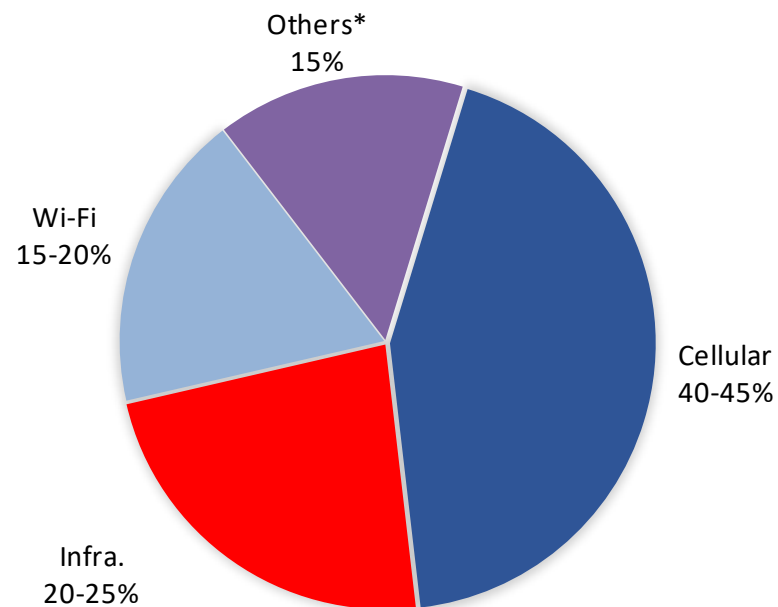
1Q19



4Q19



1Q20



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

Source: company.

2Q20 Guidance



- We expect 2Q20 revenue to decline low-single digit QoQ.
- We expect 2Q20 gross margin to be around the level of low-forties.

APPENDIX - FINANCIAL SUMMARY

Consolidated Statements of Comprehensive Income - Quarterly

Unit: NTD Million	1Q'19	4Q'19	1Q'20 (unaudited)	QoQ	YoY
Net revenue	3,619	6,904	6,071	-12%	+68%
Gross profit	903	3,052	2,611	-14%	+189%
<i>Gross margin (%)</i>	<i>25.0%</i>	<i>44.2%</i>	<i>43.0%</i>		
Operating expenses	(603)	(723)	(673)	-7%	+12%
<i>Operating expenses rate (%)</i>	<i>-17%</i>	<i>-10%</i>	<i>-11%</i>		
Operating income	300	2,329	1,938	-17%	+546%
<i>Operating margin (%)</i>	<i>8.3%</i>	<i>33.7%</i>	<i>31.9%</i>		
Non-operating incomes and expenses	(108)	(110)	26		
Income before income tax	192	2,219	1,965	-11%	+921%
Income tax expense	(42)	(379)	(389)		
Net income	151	1,840	1,575	-14%	+945%
<i>Net margin (%)</i>	<i>4.2%</i>	<i>26.6%</i>	<i>25.9%</i>		
EPS (NT\$)	0.41	4.40	3.76	-15%	+817%
Other comprehensive income, net	1,059	(535)	(3)		
Comprehensive income	1,210	1,304	1,572	+21%	+30%
ROE(%)	2%	25%	22%		
Approx. Utilization (%)	50%	100%	90%		
Depreciation	827	871	841		
CAPEX	820	1,701	1,322		

Non-operating Items

Unit: NTD Million

	1Q'19	1Q'20 (unaudited)
Foreign exchange gains (losses)	2	64
Gains (losses) on disposals of property, plant and equipment	(1)	(1)
Gains (losses) on disposals of investments	(26)	-
Gains on financial assets (liabilities) at fair value through profit or loss, net	41	(57)
Share of loss of associates and joint ventures accounted for using equity method	(179)	(6)
Others	55	26
Total	(108)	26

Consolidated Balance Sheets

(Unit: NTD Million)	Major Item	2019/3/31		2019/12/31		2020/3/31 (unaudited)	
		\$	%	\$	%	\$	%
	Cash and cash equivalents	4,765	13%	5,926	14%	4,812	11%
	Current financial assets at fair value through profit or loss	137	0.4%	507	1.2%	587	1.4%
	Notes and accounts receivable, net	1,385	4%	2,407	6%	2,297	5%
	Inventories	3,748	10%	4,389	10%	4,977	12%
	Long-term investments	4,520	13%	5,655	13%	6,342	15%
	Net property, plant and equipment	20,002	55%	21,405	51%	22,112	51%
	Total Assets	36,137	100%	42,126	100%	42,996	100%
	Current liabilities	3,801		5,976		9,178	
	Long-term borrowings	5,105		5,788		4,833	
	Total Liabilities	9,362	26%	12,287	29%	14,533	34%
	Common stock	4,238		4,241		4,241	
	Total equity attributable to owners of parent	26,616		29,657		28,299	
	Total Equity	26,775	74%	29,840	71%	28,463	66%
	Book value per share (NT\$) ¹	62.80		69.94		66.73	
	Key Indices						
	Current ratio (<i>Current assets / Current liabilities</i>)	273%		228%		142%	
	Debt ratio (<i>Total liabilities / Total assets</i>)	26%		29%		34%	

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

Q & A

For more information regarding WIN
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