

環宇
芯系天下

**Q1 2020
Quarterly
Online Investor
Conference
(線上法說會)**

May 08, 2020



環宇通訊半導體
Global Communication Semiconductors, LLC



“Enabling Today’s Global
Communications
and Beyond”

Disclaimer Statement



This presentation includes forward-looking statements. All statements, other than statements of historical facts, that address activities, events or developments that GCS Holdings, Inc. expects or anticipates will or may occur in the future (including but not limited to projections, targets, estimates and business plans) are forward-looking statements.

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GCS does not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

Agenda



Opening:

Brian Ann, CEO & President

Financial Section:

Grace Li, Senior Director & Special Assistant to
CEO

Market Overview:

Simon Yu, Senior VP and General Manager,
Worldwide Sales & Marketing and Component
Business

Q&A: All



FINANCIAL SECTION

Statements of Comprehensive Income - QoQ



(in NT\$ thousands except EPS)

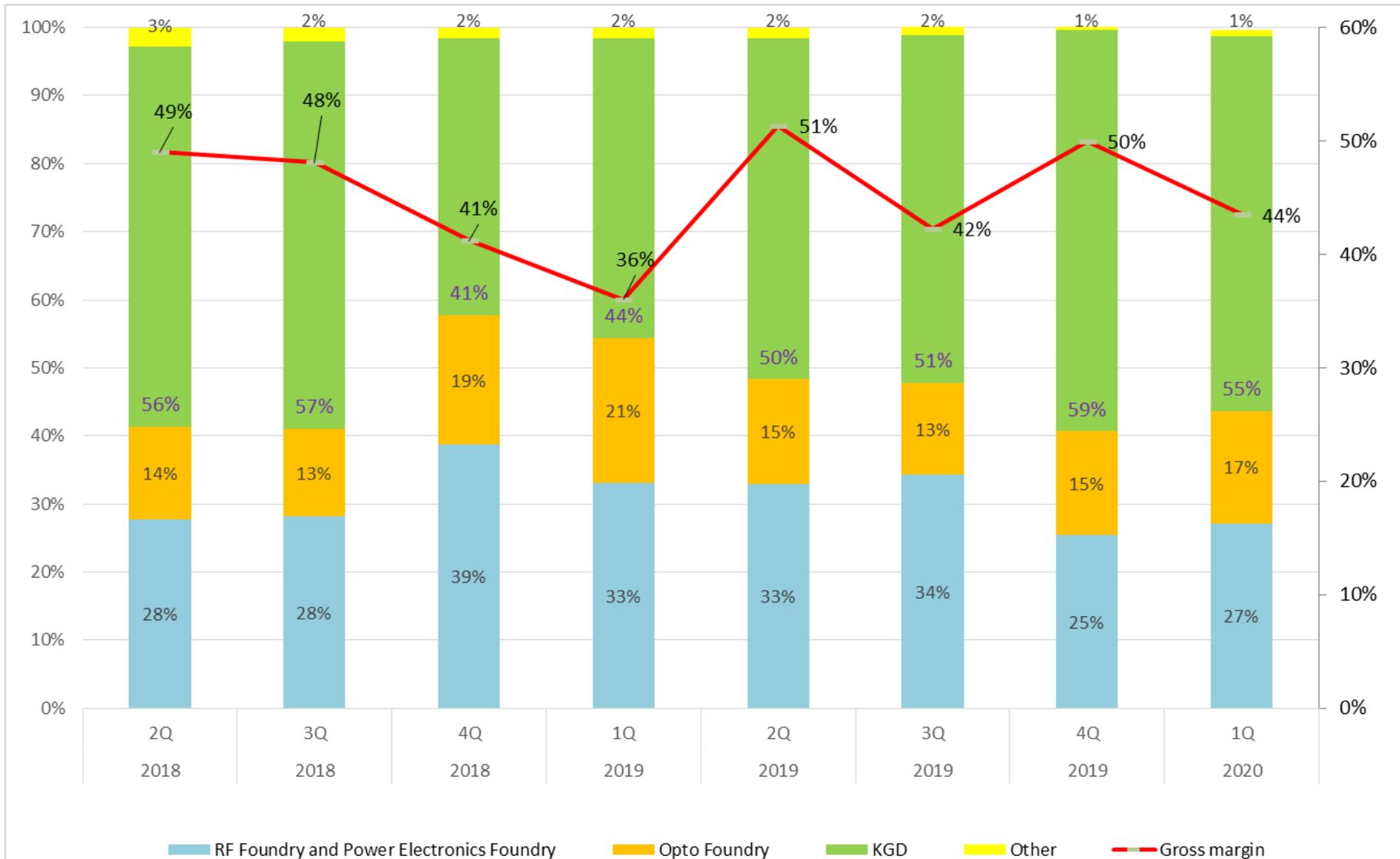
	1Q20	4Q19	1Q19	1Q20 Over 4Q19	1Q20 Over 1Q19
Net Operating Revenue	367,352	476,513	377,909	-22.9%	-2.8%
Gross Profit	159,898	237,496	136,060	-32.7%	17.5%
Gross Margin	43.5%	49.8%	36.0%		
Operating Expenses	(109,694)	(130,559)	(122,480)	-16.0%	-10.4%
Operating Expenses to Revenue %	29.9%	27.4%	32.4%		
Operating Income	50,204	106,937	13,580	-53.1%	269.7%
Operating Margin	13.7%	22.4%	3.6%		
Non-operating Items	(35,440)	4,318	3,713	-920.8%	-1054.5%
Income before Income Tax	14,764	111,255	17,293	-86.7%	-14.6%
Income Tax	(12,209)	(7,459)	(4,300)	63.7%	183.9%
Net Income	2,555	103,796	12,993	-97.5%	-80.3%
Net Income Attributable to owners of the Parent	2,477	104,107	14,742		
Net Profit Margin	0.7%	21.8%	3.9%		
Basic EPS (NTD)	0.03	1.17	0.17		
Diluted EPS (NTD)	0.03	1.16	0.17		
R&D Expense % to Revenue	12.3%	9.2%	11.8%		
ROA (%)	0.3%	7.4%	1.6%		
ROE (%)	0.3%	8.2%	1.6%		

Note 1: 88,738 thousand shares and 89,952 thousand shares were used in basic EPS and diluted EPS calculation for 1Q20, respectively.

Note 2. Revenue supplemental information

	1Q20	4Q19	1Q19	1Q20 Over 4Q19	1Q20 Over 1Q19
Revenue in US\$ thousand	12,200	15,607	12,258	-21.83%	-0.5%
Exchange Rate	30.11	30.91	30.83		

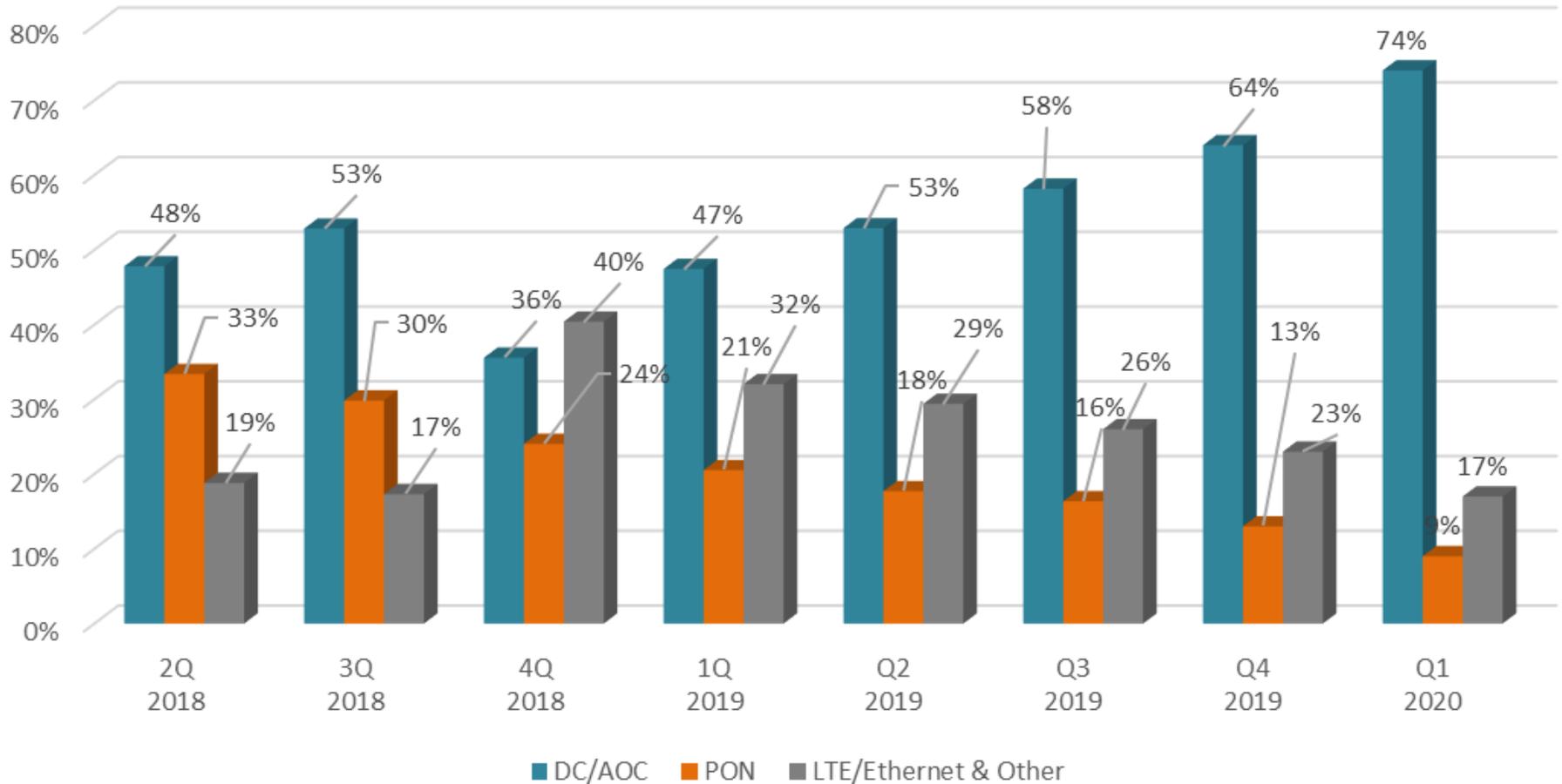
Revenue Mix % vs Gross Margin - QoQ



KGD Revenue Mix - QoQ



KGD Revenue Analysis-By Application



Non-operating Income and Expenses- QoQ



(in NT\$ thousands)

	1Q20	4Q19	1Q19	1Q20 Over 4Q19	1Q20 Over 1Q19
Other Income	6,248	7,011	5,204	-10.9%	20.1%
Other Gains and Losses					
Net currency exchange gain or (loss)	461	(1,576)	(109)	-129.3%	-522.9%
Gain (loss) on disposal of property, plant and equipment	213	53	-	301.9%	-
Others	(87)	2	-	-4450.0%	-
Finance Cost					
Interest expense	(994)	(1,172)	(1,382)	-15.2%	-28.1%
Share of profit (loss) of equity-accounted investees	(41,281)	-	-	-	-
Total Non-operating Income and Expenses	(35,440)	4,318	3,713	-920.8%	-1054.5%

Balance Sheet Highlight & Key Indices



Selected Items from Balance Sheet

(in NT\$ thousands)

	1Q20		4Q19		1Q19	
	Amount	%	Amount	%	Amount	%
Cash and Cash Equivalent	1,448,840	37%	1,838,994	47%	1,709,872	45%
Accounts Receivable and Notes Receivable	201,303	5%	317,126	8%	272,740	7%
Inventory	369,392	10%	352,983	9%	340,801	9%
Other current assets	183,166	5%	30,951	1%	93,458	2%
Non-current financial assets at fair value through other comprehensive income	-	0%	159,531	4%	164,000	4%
Investments accounted for under the Equity Method	519,865	13%	-	0%	-	0%
Net Property, Plant and Equipment	757,595	19%	775,808	20%	744,473	19%
Intangible Assets	197,022	5%	197,032	5%	187,268	6%
Deferred Tax Assets	121,431	3%	129,281	3%	169,676	4%
Total Assets	3,886,093	100%	3,902,999	100%	3,834,670	100%
Short Term Loan	20,000	1%	20,000	1%	20,000	1%
Accounts Payable and Other Payables	194,888	5%	173,652	4%	163,812	5%
Long Term Bank Borrowings - Current Portion	23,446	1%	23,050	1%	21,089	1%
Long Term Bank Loans	36,538	1%	42,195	1%	52,255	2%
Deferred Tax Liabilities	72,612	2%	76,123	2%	84,182	2%
Total Liabilities	373,535	10%	375,891	10%	401,404	10%
Total Stockholders' Equity	3,512,558	90%	3,527,108	90%	3,433,266	90%

Key Indices

Current Ratio	879%	1083%	1033%
Debt Ratio	10%	10%	10%
AR Turnover Days	66	55	59
Inventory Turnover Days	184	150	152

Cash Flows



(in NT\$ thousands)

	1Q20	4Q19	1Q19
Beginning Balance	1,838,994	1,941,017	1,512,863
Cash from Operating Activities	182,004	77,636	(7,724)
Acquisition of financial assets at fair value through other comprehensive income	-	-	(164,000)
Acquisition of investments accounted for under the equity method	(400,000)	-	-
Acquisition of property, plant and equipment	(23,443)	(66,893)	(22,209)
Decrease (Increase) in other current assets	(151,354)	61,822	(586)
Acquisition of intangible assets	-	(3,383)	(2,184)
Principal elements of lease payments	(2,226)	(2,775)	(4,591)
Proceeds from the sale of property, plant and equipment	256	50	-
Repayments of long-term loans	(5,707)	(5,711)	(5,154)
Employee option exercise	-	2,279	558
Cash Dividend Paid	-	(106,561)	-
Cash capital increase- issuance of Global Depositary Shares	-	-	390,555
Disposal of a subsidiary- decrease in cash and cash equivalents	(11,707)	-	-
The effect of exchange rate changes	20,985	(58,982)	12,296
Others	1,038	495	48
Ending Balance	1,448,840	1,838,994	1,709,872
Increase (Decrease) in Cash	(390,154)	(102,023)	197,009
Free Cash Flow (Note)	158,561	10,743	(29,933)

Note: Free Cash Flow = Cash from Operating Activities - Capital Expenditures

MARKET OVERVIEW

2019 Optical Fiber Communication



- ❖ Ethernet Optical Transceiver – lackluster 2019
 - Decline 16% (\$2.9B vs \$3.45B 2018)
- ❖ Wireless Fronthaul Optical Transceivers (30M+ units, close to 25M in China)
 - 5G 25G Wireless Fronthaul boost the growth in 2H 2019
- ❖ More players get into optical transceiver market via M&A
 - II-VI/Finisar, CIG, CISCO...etc
- ❖ Shorten supplier chain, changing customer-supplier relationship
 - direct sourcing of optical transceiver (China mobile...)
 - Alibaba, Facebook, CISCO made its own 400G optical transceiver
- ❖ US-China trade war, US ban on Huawei
 - Drove Huawei and ZTE seek alternatives including local supplies
 - Other suppliers (Accelink, HG, Source Photonics...) will follow
 - The ultimate impact – US suppliers are not able to compete with Chinese suppliers (M/A-COM got out of DC optical transceiver..)
- ❖ Broad commercial 5G deployments began in Q3 and Q4 2019, led by China Mobile, China Telecom, China Unicom, Korea Telecom, SK Telecom, LG Uplus, Verizon, AT&T, and T-Mobile

The whole world was gripped by the COVID-19 pandemic.

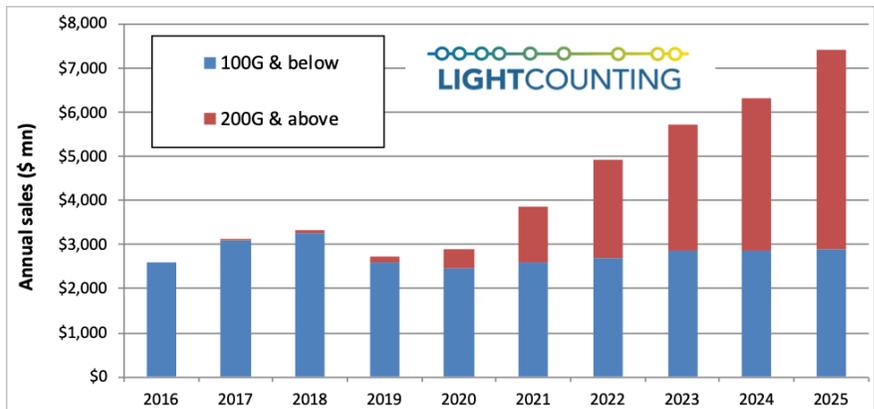
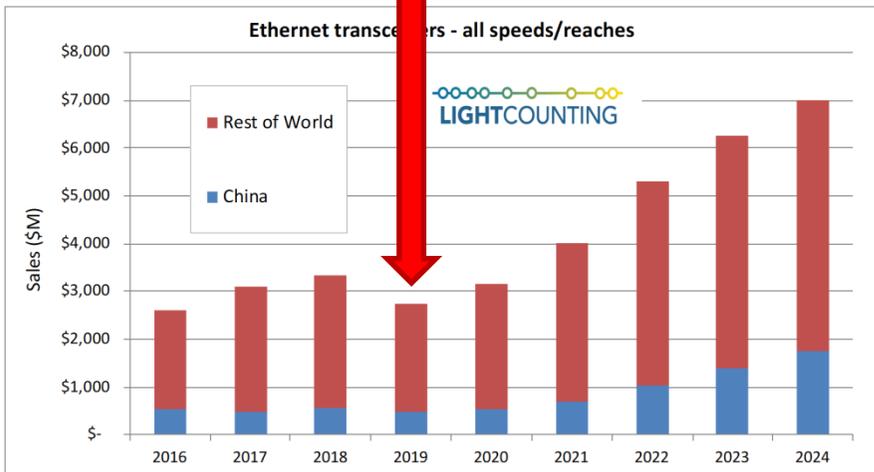
- Telecommunications and data centers; designated essential businesses that are allowed to remain open
- China is getting back to business, more or less
- Bandwidth demand is getting a boost from social distancing measures
- Infrastructure CAPEX is showing signs of strength
- Equipment and component company sales will be impacted but not catastrophically

HOWEVER, the longer term impacts of COVID-19 will benefit the digital economy and by extension optical communication

Sales of Ethernet Optical Transceivers

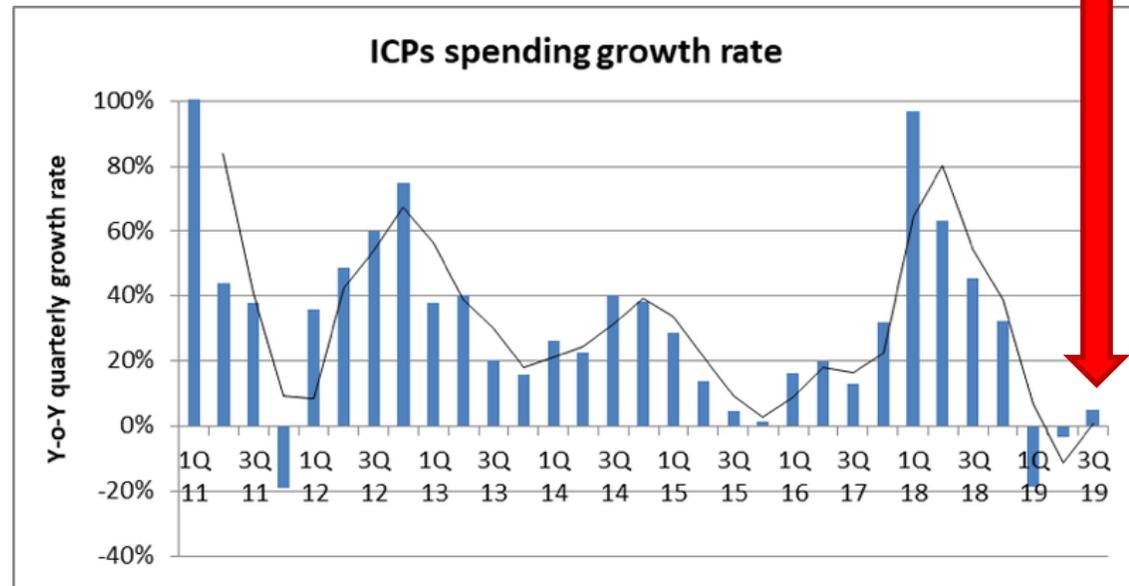


1. Slow down in infrastructure spending in China and elsewhere
2. US-China trade war



Before COVID-19

GOOD NEWS!

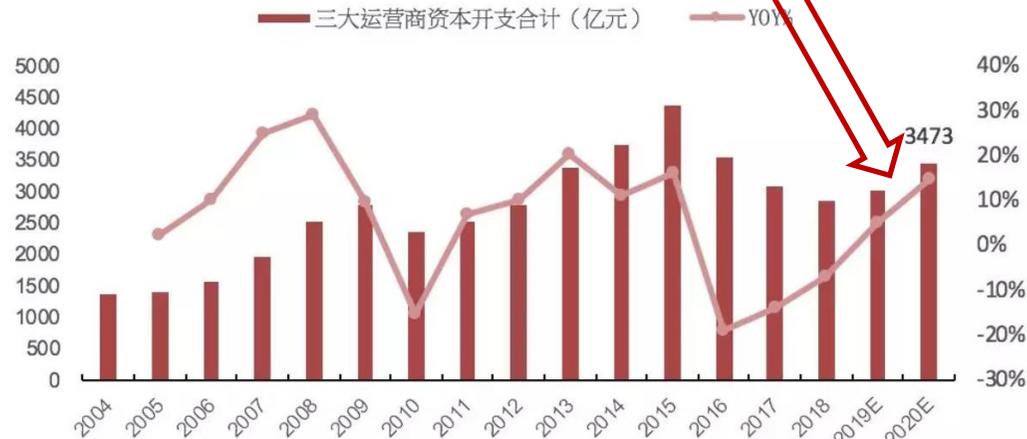


2019 RF Market

- 5G is here! after a few years of hype and irrational exuberance
- 19 millions 5G smartphones sold (H/7m, S/6.7m, V/2m, X/1.2m, LG/0.9m)
- 130K+ 5G base stations built in China (7 years to build 6 millions 5G base stations)
- 5G users by 2025
China – 460m, Europe – 205m, USA – 187m
- 3 China major service providers – CAPEX turned around

Smartphone:
2020 – 1.45 billion
5G smartphone:
2020 – 232 million
2021 – 487 million

图 3: 三大运营商资本开支增速从 2019 年开始由负转正, 2020 年有望超 15%

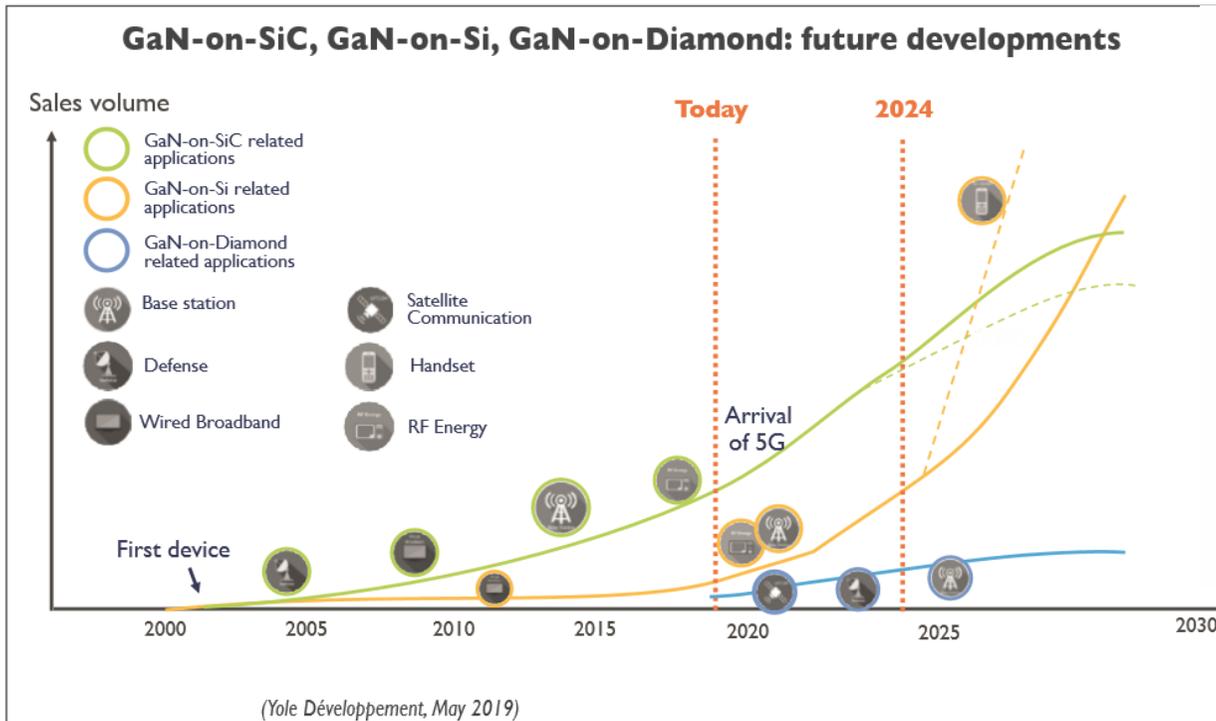


资料来源: 三大运营商公告、招商证券预测

2019 RF Market (continued)



- GaN RF semiconductor device market
2018 - US\$ 460.93 million, 2024 – US\$1597.36 million (2019-2024, CAGR – 23.2%)
- **GaN/Si to replace LDMOS, and can potential for smartphones as well**
- 5G network drives volume adoptions of GaN (both sub-6G and mmWave)
- GaN/SiC and GaN/Diamond for high-end applications only



GaN/Si 5G基地台

应用优势

- ✓ 原始功率密度是LDMOS的4倍
- ✓ 具有更高功率密度特性，能实现更小元件封装
- ✓ 满足Massive MIMO和AAU技术下射频前端高度整合需求

- **2020 – Year of GaN?**
- Smartphones declines estimated 21% in 2020, recovers well in 2021
- Absence of MWC Barcelona, but a good range of affordable models (<\$500) targeted at the Chinese and international markets
- Push to deliver sub-\$200 5G smartphones by the end of 2020
- China government is looking to infrastructure projects to offset the economic impact of COVID-19, with 5G one of the key infrastructures –
 - China Mobile: 300,000 5G base stations in use by the end of 2020
 - China Telecom and China Unicom: deploying 250,000 base stations September 2020
- 5G investment plans also remain strong in the US: Verizon increasing its CAPEX for 2020

2019 & Q1 2020 Power Electronics Market

- GaN/Si got into consumer market (Nov 2019 Oppo GaN charger)
- EV/HEV will drive power electronics innovations
 - Worldwide power electronics market: US\$23.4 billion CAGR 19% 2018-2026 (AR&C)
 - 4 millions EV needs 100,000 6" SiC wafers
- Solid-state cooking is emerging...
- The Key for compound semiconductors (GaN and SiC):
 - Reliability
 - Cost
 - Large scale Supply Chain



Figure 3 • Cooking appliances powered by LDMOS transistors may be the "next big thing" for LDMOS.
Source: NXP Semiconductors.

LDMOS can be replaced by GaN

Q1 2020:

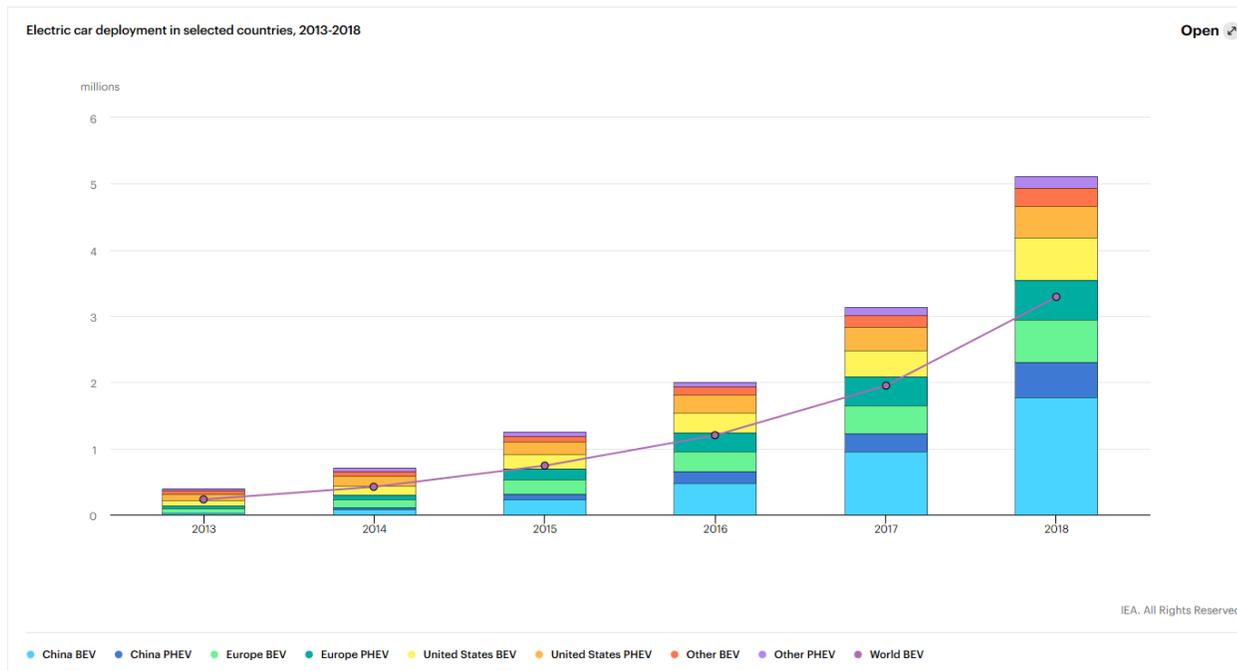
- * Samsung, Xiaomi, Realme, integrated power GaN devices in their accessory or inbox fast chargers
- * Power SiC market is mainly driven by EV/HEV applications, EV charging infrastructure and industrial power supply applications.

EV Sales



Electric car:

- Has been growing rapidly over the past 10 years
- Global stock of electric passenger cars to 5 million in 2018 (YOY 63%)
- 2.3 million (45%) in China (39% 2017)
- Europe – 24%, US – 22%
- 2030 – Sales 43 million, Stock 250 million (EV30@30 campaign by 2030) (IEA)
- Assuming SiC is 50% share by 2030, 540,000 6” SiC wafers are needed in 2030

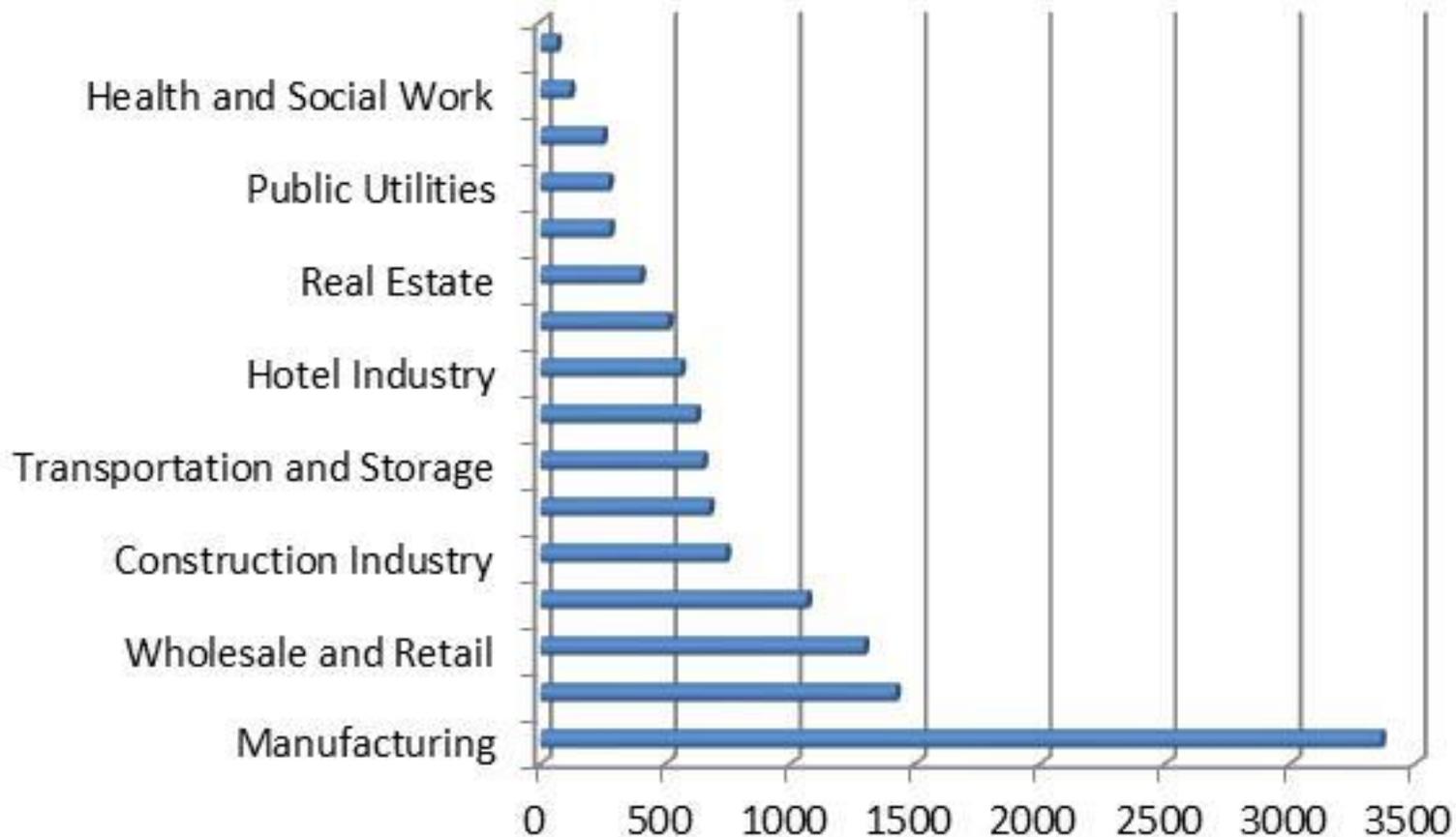


LA AUTO SHOW

5G Market



5G Market: USD 12,300 billion (by 2035)



Data Source: IHS

5G Market



- **5G Has made a positive contribution to the COVID-19 response effort**
 - embraced online tools for collaboration, communication, education, and entertainment.
CloudMind's 5G Cloud Robots
Neolix's unmanned vehicles
5G-enabled cloud collaboration tools for CT scan and x-ray screening via HD video
- **Can 5G Help the Economic Recovery?**
 - Chinese government accelerates its 5G deployment plans as part of the country's focus on generating economic growth through infrastructure projects (新基建)
 - Hungary's government: 5G deployments following the completion of spectrum auctions which were brought forward to March 2020
 - Korea: increased their H1 2020 investment plans from KRW2.7 trillion (US\$2.3 billion) to KRW4 trillion (\$3.3 billion) with a 2020 focus on developments in smart factories, smart cities, digital healthcare, autonomous vehicles and 5G V2X, and drones.

Q & A



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**For further inquiry
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