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China's smartphone shipment – 5G is becoming the major driver



Figure 1: China's smartphone shipment (mn units), monthly

Source: CAICT, AMTD Research

**AMTD views:** According to CAICT, in May and first five months of 2020, China's smartphone shipment were 33.76mn and 124mn units, down 11.8% YoY and 18.0% YoY, respectively. Meanwhile, 15.64mn units and 46.08mn units of 5G smartphone were shipped in May and first five months of 2020, accounting for 46.3% and 37.0% of total shipment, respectively. 5G has become the major driver for the smartphone recovery. Thanks to introduction of higher performance-price ratio 5G chips by chip manufacturers, for example, Dimesity 820, Kirin 820, Snapdragon 765G/768G, more affordable 5G smartphones have been launched in low-mid segment, such as Redmi 10X 5G priced from RMB1,599 and Honor X10 5G priced from RMB1,899, which could stimulate demand in the near term. Nevertheless, the decline of 5G tariff and new phenomenal 5G applications are the foremost secular drivers for the next round of smartphone growth, in our view.

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5G

#### Huawei (including Honor)

Although Huawei's smartphone sales declined in oversea market due to the restriction from GMS, the vendor topped the China smartphone market with its share growing to a record high of 42.6% by the end of first quarter, according to IDC. Thanks to its promotion to cut prices for Huawei Mate 30 and P30 series, Honor V30 and 9X series, along with a diversified online-offline channels integration, Huawei's sales were pushed up. Besides, the company is enriching its offerings in 5G market. According to Aurora Mobile, Huawei Mate 30 Pro 5G, Mate 30 5G and Nova 6 5G, targeting middle-/high-end market, ranked 1<sup>st,</sup> 2<sup>nd</sup> and 4<sup>th</sup> among the best-selling smartphone in first quarter, respectively, while Huawei also debuted Honor 10X 5G in May, priced starting at RMB1,899, to fuel sales growth in low-end segment.

# Vivo

Vivo obtained its spot in the second place in China smartphone market in 1Q20, despite a 24.5% YoY shipment decline, according to IDC. The company has progressively launched a series of 5G smartphone products, including iQOO3, Z6, NEX 3S, S6, Neo3 and others, priced at RMB2,000-RMB6,000, to extend consumers coverage in diversified segments. In addition, its online channels-oriented models such as iQOO and the Z and U series helped offset the lost sales from store closures.

#### Орро

Oppo is pushing aggressively on 5G smartphone market. Its newly launched Reno 3 Young 5G in Feb, priced at RMB2,999, helped expand its market share in the low-/mid-end segment, while its Find X2 5G series, priced starting at RMB5,499, the most expensive ever released by the company, signaled its growing ambition in China's high-end smartphone segment currently dominated by Huawei. On the other hand, Oppo has hired several top executives and engineers from MediaTek, Unisoc to accelerate its self-developed chip research.

# Xiaomi

Comparing to its rivals, Xiaomi underperformed in China smartphone shipment in the first quarter, mainly due to a supply shortage for its Redmi series in Jan and early Feb, however, oversea market sales kept momentum, benefiting from its strength of online sale channels over the headwinds. Besides, Xiaomi launched more affordable 5G products portfolio such as Redmi K30 5G, Mi 10 Lite 5G, Redmi 10X 5G, priced at as low as RMB1,599, which further boosted domestic sales and sharpened Xiaomi's position in low-/mid-end segment, in our view. Shipments of Mi 10/Mi 10 Pro exceeded 1mn units two months after their launch by mid-Feb, establishing a solid foothold in the premium segment as well.

# Apple

Apple saw a downward pressure on China smartphone shipment given its factories restarted production slower than the competition during the COVID-19 period. However, its newly launched iPhone SE in April, targeting the low/mid-end segment, is selling better than expected. Moreover, Apple has cut the prices of iPhone 11 series and iPhone SE by up to 13% and 6% on the official Apple store on Tmall, respectively, ahead of "6.18" online shopping festival, hoping to increase sales in China. Looking forward, iPhone 12 series (iPhone 12, iPhone 12 Max, iPhone 12 Pro and iPhone 12 Pro Max) will be launched in 4Q20 with support of 5G.

# News update

11 Jun 2020

Cloud/SaaS

Adobe

#### Solid 2Q results amid the COVID-19

Adobe reported solid 2Q results amid COVID-19 pandemic. Total revenue grew by 14.0% YoY/1.2% QoQ to US\$3.13bn. In terms of segment: 1) Digital Media remained the main contributor and its revenue reached US\$2.23bn, up 18.1% YoY/2.9% QoQ; 2) Digital Experience reported revenue of US\$826mn, up 5.4% YoY but down 3.7% QoQ. The expected weak QoQ performance was mentioned in their last earnings call as enterprises delayed their spending due to the COVID-19 situation. Operating margin continued to expand, reaching 44.3% this quarter compared to 41.6% last quarter, thanks to cost savings from travel and shifting to virtual conference. Non-GAAP net income and EPS came in at US\$1.19bn and US\$2.45 this quarter, respectively. For next quarter, total revenue was guided to US\$3.15bn and Digital Media and Digital Experience revenues were expected to grow by 16% and flat YoY, respectively, reflecting the impact from COVID-19. (Source: Adobe)

**AMTD views:** Despite the COVID-19, Digital Media business still achieved a steady growth. Net new Digital Media ARR was US\$443mn and total Digital Media ARR exiting Q2 grew to US\$9.17bn. In Q2, the company saw historic highs in Adobe.com traffic across both Creative Cloud and Document Cloud as customers moved online, including students and business users. However, in Digital Experience business, the company eliminated the low margin Advertising Cloud offerings to reduce the impact of the macroeconomic headwinds. In addition, Adobe is very cash flow generative, and repurchased approximately 2.6m shares at a cost of \$850mn in Q2.







10 June 2020	<b>Microsoft Power Platform is now commercially available in China</b> Microsoft officially announced that its Power Platform is commercially available in China. This is another commercial application after Microsoft Azure, Office 365, Dynamics 365 China Cloud. The Microsoft Power Platform provides support by seamlessly integrating Azure, Office 365, Dynamics 365, and third-party independent applications. This gives everyone the ability to create solutions that accelerate business development. (Source: <u>Microsoft</u> )
Cloud	
Microsoft	
10 June 2020	Apple will use self-developed ARM chips Apple may announce its ARM-based Mac switch as soon as WWDC 2020, The new processo will be based on the same technology as the designed iPhone and iPad chips, but the new Mac will still run the MacOS operating system instead of the iOS software. (Source: <u>EEworld</u>
Smart terminal	
Apple	
9 June 2020 Yageo acquisition of Kemet in US\$1.64 bn received approval from Tai	
Semiconductor	Yageo received approval from Taiwan's Fair Trade Commission (FTC) and the acquisition of American rival Kemet Corp. is expected to complete in the third quarter of this year, with a total value of US\$1.64bn. Thus, Yageo is expected to become the third-largest multi-layer ceramic capacitors (MLCC) supplier in the world. It is also Taiwan's largest passive electronics component maker. (Source: <u>EEworld</u> )
Yageo/Kemet	
9 June 2020	Tencent Cloud launched "cloud applications"
Cloud	Tencent Cloud announced the launch of "cloud applications" within the overall framework or Cloud Development (CloudBase). This product can help developers quickly migrate their business to the Serverless mode without modifying the original technical framework and business code. While enjoying the convenience of Serverless, they can also use the cloud to develop the overall technical framework to improve the whole development efficiency. This is also the first domestic development tool product which adopts Elastic Container Instance technology with Serverless concept. (Source: <u>Newspaperhk</u> )
Tencent	
8 June 2020 Youzan has completed the investment in Aiguang Platform	
SaaS	Youzan has announced its completion of investment in Aiguang Platform. The Closing took place on 8 June 2020. Following the Closing, the company holds 10% share in Guang
Youzan	Holdings (which has effective control over and enjoys the entire economic interests and benefits generated by the Domestic Group operating Aiguang Platform through VIE Structure), representing 2.94% of the voting power at any general meetings of Guang Holdings. (Source: <u>Youzan</u> )
8 June 2020	TSMC to accelerate investment in 2nm R&D and on schedule for 3nm A16 chip
Semiconductor	TSMC is accelerating the pace of 2nm R&D and recently purchased two additional Extreme Ultraviolet (EUV) machines to invest in 2nm R&D. Besides, TSMC is on schedule to star producing 3nm Apple 'A16' iPhone and iPad chips, which is expected in the second half o 2022. The company is currently working on improved 5nm processes. (Source: <u>Cntech</u> )

7 June 2020 Device	<b>Apple, Qualcomm and others have placed additional 7nm orders at TSMC</b> Apple, Qualcomm, MediaTek, Supermicro and other manufacturers have placed additional 7nm orders with TSMC in the fourth quarter. TSMC has full production capacity of 7 nm and TSMC's 5nm capacity of approximately 120,000 to 130,000 wafers. Besides, TSMC added approximately 70,000 to 80,000 wafers of A13/A12 application processor capacity in the fourth quarter, pulling up to 170,000 to 180,000 tablets in size for Apple. (Source: <u>Optocrypto</u> )	
Apple		
5 June 2020 Largan to grant wide-angle lens patent to Apple for iPhone 12		
Lens	Apple has decided to obtain the patent of wide-angle lens design from Largan. While iPhone 12 is set to hit the market after September 2020, Apple decided to fight for the patent from Largan as it seeks to guarantee smooth manufacturing. (Source: <u>Taiwan Economic Daily</u> <u>News</u> )	
Apple/Largan		
5 June 2020	OLED screens of iPhones may adopt LTPO backplanes in 2021	
Smartphone	Apple has yet to introduce its 5G iPhones for 2020, but its supply chain is already developing OLED screens using LTPO (low temperature polycrystalline oxide) backplane technology for next year's premium iPhone models. (Source: <u>Digitimes</u> )	
Apple		
3 June 2020 Device	<b>iPad Pro with A14X Chip, 5G, and mini-LED display expected in 1H21</b> Apple plans to launch new iPad Pro models with an A14X chip, 5G connectivity, and a Mini- LED display in the first or second quarter of 2021. The new iPad Pro models will be equipped with Qualcomm's Snapdragon X55 modem, which supports both mmWave and sub-6GHz. Besides, Apple is reportedly developing its own 5G baseband technology for future devices, and the company acquired Intel's smartphone modem business last year. (Source: <u>Ofweek</u> )	
Apple		
3 June 2020	Global smartphone shipments expected to plummet 11.9% YoY in 2020	
Smartphone	The worldwide smartphone market is forecast to decline 11.9% YoY in 2020 with shipments totaling 1.2 billion units, according to IDC. The forecast follows the largest YoY decline in history in 1Q20. Smartphone shipments are now expected to decline 18.2% in the first half of the year as the macroeconomic impact of the COVID-19 pandemic continues to affect consumer spending. Global smartphone shipments are not expected to return to growth until 1Q21. (Source: IDC)	
3 June 2020	O-Film raised RMB6.76bn to ramp up production capacity	
Lens	O-FIIm Group is raising up to RMB6.76bn (US\$950.16mn) to scale up production line capacity. Proceeds will fund the construction of optical lens which includes investment of	
O film	RMB2.34 bn and has capacity of 0.98 bn units per year; 3D optical depth sensor, which includes investment of RMB1.5bn and has capacity of 58 mn per year; and micro camera module projects which includes investment of RMB1.59bn and has capacity of 80 mn units (Source: <u>STCN</u> )	

2 June 2020	<b>Global semiconductor equipment billings up 13 % YoY to US\$15.57 bn in 1Q20</b> Worldwide semiconductor manufacturing equipment billings increased 13% YoY to US\$15.57bn in 1Q20, but contracted 13% QoQ, according to Worldwide Semiconductor Equipment Market Statistics (WWSEMS) Report published by SEMI. China marked the biggest improvement in billings for semiconductor equipment in the first quarter, up 48% YoY to US\$3.50bn, ranking second highest in the world. (Source: <u>WWSEMS</u> )	
Semiconductor		
ASML		
2 June 2020	<b>JD.com and Qualcomm upgraded partnership on 5G</b> JD.com and Qualcomm announced that they have upgraded their strategic partnership and will work together on projects such as 5G device penetration and groundbreaking technology applications. The partnership covers a wide range of categories including smartphones, connected terminals, XR, mobile PCs and wearable devices. (Source: <u>Cntech</u> )	
5G		
JD/Qualcomm		
2 June 2020	Samsung released new Exynos 850 SoC, first supporting Galaxy A21S	
Semiconductor	Samsung released a new Exynos 850 SoC. The 8nm chip consists of eight ARM Cortex-A55 cores clocked at 2.0GHz, comes with a Mali G-52GPU, and supports a single 21MP or dual	
Samsung	16+5MP camera configurations. It will be featured in an upcoming Galaxy A21S. (Source: <u>Androidauthority</u> )	
2 June 2020	TSMC to invest NT\$303.2bn to build IC packaging and test factory	
Semiconductor	TSMC planned to establish a new high-end IC packaging and test factory in Miaoli County, Taiwan. Construction on the complex will be completed in May 2021, with its first phase set to start production shortly afterwards. Total investment will reach NT\$303.2bn (US\$10bn). (Source: FocusTaiwan)	
TSMC		
1 June 2020	Samsung announced new NAND flash facility in South Korea	
Semiconductor	Samsung Electronics announced plans to expand its NAND flash production capacity in Pyeongtaek, Korea, reinforcing the company's ability to meet demands from emerging	
Semiconductor Samsung	Samsung Electronics announced plans to expand its NAND flash production capacity in	
	Samsung Electronics announced plans to expand its NAND flash production capacity in Pyeongtaek, Korea, reinforcing the company's ability to meet demands from emerging technologies. Construction, which began this May, will pave the way for mass production of Samsung's cutting-edge V-NAND memory in the second half of 2021. Total investment is expected to reach 8,000bn Won (RMB46.48bn). (Source: <u>Samsung</u> ) <b>Amazon's Jeff Bezos invests in UK digital freight forwarder Beacon</b>	
Samsung	Samsung Electronics announced plans to expand its NAND flash production capacity in Pyeongtaek, Korea, reinforcing the company's ability to meet demands from emerging technologies. Construction, which began this May, will pave the way for mass production of Samsung's cutting-edge V-NAND memory in the second half of 2021. Total investment is expected to reach 8,000bn Won (RMB46.48bn). (Source: <u>Samsung</u> )	

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As of the date the report is published, Brian Li holds financial interest in the securities of Amazon mentioned in the report.

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