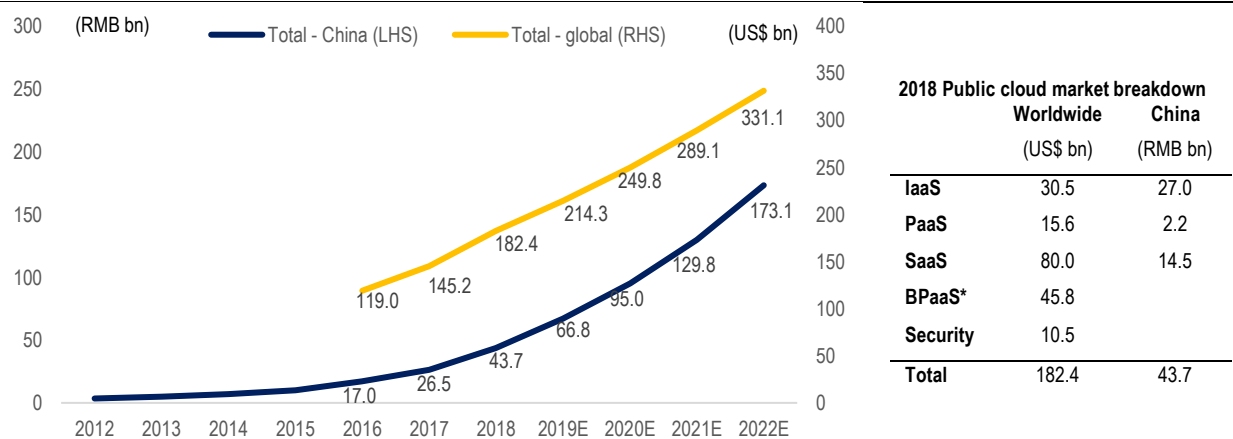




Public Cloud Market

Figure 1: Global and China public cloud service market size forecast and 2018 breakdown by service type



Source: Gartner (April 2019), CAICT (July 2019), AMTD Research; Note*: BPaaS: Business Process as a Service

AMTD comments: According to Gartner (April 2019), the worldwide public cloud services market size was US\$182.4bn in 2018 and projected to grow by 17.5% YoY to US\$214.3bn in 2019. In terms of service type, SaaS market accounted for the largest proportion while smaller IaaS market was quite concentrated. In 2018, three big giants, Amazon (AWS), Microsoft (Azure), and Alibaba accounted for 47.8%, 15.5%, and 7.7% of the global IaaS market share, respectively. For China market, according to China Cloud Market White Paper 2019, announced by CAICT on 2 July, Alibaba Cloud was undoubtedly the leader of IaaS market with 36.0% of total IaaS market share, followed by China Telecom (11.6%), and Tencent (10.9%) in 2018. Different stages of development have determined that the current China public cloud market is still dominated by IaaS. However, as various industries have been undergoing digital revolutions, we have noticed that traditional ERP vendors have begun their SaaS transformation, while e-commerce has brought new CRM SaaS vendors. We believe SaaS will become the major driver of China public cloud going forward. CAICT projected China public cloud market would grow to RMB173.1bn by 2020 with a five-year CAGR of 41.1%.

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News updates

22 Jul 2019

Smartphone

Apple

Intel

Apple to buy Intel's abandoned smartphone modem business

According to WSJ, Apple could be within a week of agreeing to a deal to buy Intel's abandoned smartphone modem business. The deal is valued at US\$1bn or more, covering a portfolio of patents and staff. It would give Apple access to engineering work and talent behind Intel's yearslong push to develop modem chips for 5G. For Intel, although it would exit smartphone business, it plans to continue to work on 5G on other connected devices. (Source: [WSJ](#))

AMTD comments: In April, Intel had abandoned the modem business because of the Apple settlement with Qualcomm. After that Intel reportedly began searching for a buyer for its modem business. Apple has long been Intel's only major customer for modems while most from Android camp rely on either Qualcomm or in-house solutions. It is not surprising that Apple turns out to be a buyer of Intel modem business.

18 Jul 2019

Cloud

Microsoft

Microsoft 4Q19 results beat

Microsoft reported stronger than expected 4Q19 results. Revenue grew by 12% YoY to US\$33.7bn with Intelligent Cloud to US\$11.4bn (+19% YoY), Productivity and Business Processes to US\$11.0bn (+14% YoY), and More Personal Computing to US\$11.3bn (+4% YoY). Given the improving efficiency (operating margin +230bps YoY) and shift to Commercial Cloud with high margin (GM +600bps YoY), adjusted EPS came to US\$1.37, up 21% YoY. (Source: [Microsoft](#))

AMTD comments: More specifically, in 4Q19, Commercial Cloud post strong growth of 39% YoY, with O365 Commercial of 31% YoY, Dynamics 365 of 45% YoY, and Azure of 64% YoY, which decelerated from 73% last quarter. As a leading indicator for growth, commercial booking reported decent growth of 22% YoY driven by an increase in number of long-term Azure contracts. On the other hand, Gaming revenue declined 10% YoY in 4Q19. Compared to 8% opex growth of FY19, the management target of 11-12% opex growth for FY20 may bring some pressure on the margin, in our view.

17 Jul 2019

Semiconductor/IoT

Xiaomi

Xiaomi continues chip strategy with investment in IC designer companies

On July 17, Xiaomi invested in China chip designer Bestechnic through Yangtze River Xiaomi Industry Fund (Xiaomi holding 17.23%). Bestechnic is a fabless IC (integrated circuit) startup and focuses on the development of highly integrated, low power, high performance SOC platform for wireless (Bluetooth and WiFi) audio, voice and hearable market. Several days ago, Xiaomi has taken a stake of 6.25% in another chip designer VeriSilicon. Founded in 2001, VeriSilicon provides semiconductor design services for the IoT, wearables, and automotive electronics. (Source: [Reuters](#), [IDC](#))

AMTD comments: Continuous strategic investment in chip designer companies proves Xiaomi's ambition in smart speaker and IoT, which are now becoming important entrances to internet and accesses to the big data. According to IDC, smart speaker shipments in China surged 787% YoY to 11.2mn units in 1Q19. Among those, AI Speaker (Xiaomi) ranked 3rd with total shipment of 2.9mn units in 1Q19 and its MAU had exceeded 45.5mn by the end of March.

17 Jul 2019

Apple tested AirPods production in Vietnam as to reduce China reliance

Smartphone

Apple

Goertek

Goertek will start trial production of the newest generation of AirPods wireless earphones in its factory at Northern Vietnam this summer, to test the resilience of the manufacturing processes - the first time to produce AirPods outside China. It is part of Apple's plans to cut its reliance on China to diversify risk. Apple has long produced its traditional EarPods in Vietnam, while AirPods are currently made only in China with the three manufacturers, Inventec, Luxshare-ICT and Goertek. (Source: [NikkeiAsianReview](#))

AMTD comments: Goertek will probably lose market share on Apple to Luxshare in 2H19. Nevertheless, Airpods TWS is still the key driver of the company and expected to gain market share from the Android camp. However, its GM may be under pressure given the lower ASP.

10 Jul 2019

TSMC's revenue up 10% QoQ in 2Q19

Semiconductor

TSMC

Huawei/Bitmain

TSMC's post June sales of NT\$85,868mn, up 6.8% MoM, and 2Q revenue came to NT\$240,999mn, up 10% QoQ and beating the company's guidance. (Source: [TSMC](#))

AMTD comments: We believe the strong 2Q sales was attributable to new orders from Huawei's inventory build-up. For the positive 3Q revenue guidance (+17%~19% QoQ), we think crypto ASIC orders from Bitmain and recovery orders from Huawei after G20 will be the major growth drivers.

9 Jul 2019

IBM strengthened hybrid cloud with Red Hat acquisition at US\$34bn

Cloud/Hybrid

IBM

Red Hat

IBM has closed its landmark acquisition of Red Hat's all common shares for US\$190 per share in cash, representing a total equity value of US\$34bn. IBM and Red Hat will work together on the next-generation hybrid multicloud platform. The acquisition is expected to position IBM as the leading hybrid cloud provider and accelerate its high-value business model, extending Red Hat's open source innovation to a broader range of clients. Red Hat will remain independent and neutral. (Source: [RedHat](#))

AMTD comments: With the acquisition, IBM now gains exposure to open source technologies such as Linux and Kubernetes, which provide a common bridge between the datacenter and public cloud environment, and enable true hybrid cloud computing. In the meanwhile, as Red Hat has strategic partnership with other public clouds such as AWS and Azure, IBM can provide SaaS to more clients by migrating its software such as analytics and Watson onto the Red Hat platform. IBM and Red Hat together can provide more complete hybrid cloud solution going forward, in our view.

9 Jul 2019

Google to acquire enterprise cloud storage provider Elastifile

Cloud/IaaS

Google

Elastifile

Google has entered a definitive agreement to acquire Elastifile, a scalable, enterprise file storage provider for the cloud. The acquisition is expected to close later this year. Elastifile will be integrated with Google Cloud Filestore, allowing for broader computing and storage capabilities. It is a new attempt of Google to grow its market share in the cloud market, in which Google had a share of 7.6% by the end of 2018, ranking after Amazon (32%) and Microsoft (13.7%), according to Canalys. It is rumored that Google will pay around US\$200mn for the acquisition. (Source: [Google](#))

AMTD comments: In the past two months, Google Cloud has announced another two acquisitions: 1) in early June, to buy Looker for US\$2.6bn to expand its cloud data management and analytics offering; 2) on 27 June, to acquire Alphabet's Chronicle to provide more comprehensive security solution to its existing clients.

17 Jul 2019

Neuralink plans 2020 human test of brain-computer interface

Semiconductor

Neuralink

Neuralink has developed a chip to enable brain-computer communications by feeding thousands of electrical probes into a brain. The technology, which has already worked in animal tests, will be brought into human test in 2020, said by the CEO, Elon Musk. It aims to help people deal with brain and spinal cord injuries or congenital defects, helping paraplegics who have lost the ability to move or sense because of spinal cord injury. (Source: [Cnet](#))

17 Jul 2019

Amazon facing antitrust probe in Europe over its use of merchant data

E-commerce

Amazon

Amazon is facing an antitrust investigation in the Europe over its treatment of merchants' data who sell goods on its platform. The European Commission, the top antitrust enforcer in EU, will examine whether the tech giant is abusing its dual role as a marketplace for merchants as well as their competitor to grow its own market power. The preliminary fact-finding was that Amazon "appears to use competitively sensitive information", and the Commission will continue to look into the standard data agreement between the two parties and the role of Amazon's "Buy Box". (Source: [Reuters](#))

16 Jul 2019

Murata to start mass production of the world's smallest SAW

Components

Murata

Murata has developed and started volume production of the world's smallest surface acoustic wave (SAW) duplexers – the SAYAV Series, SAYARV Series, and SAYAP Series; and SAW filters—the SAFFW Series. The components could realize transmission and isolation characteristics equal or superior to those of conventional products, with the size reduced by 24% and 37% for duplexers and filters respectively, as well as improved power durability that meets 5G requirements. The products will contribute to denser circuit design and enhanced smartphone functionality. (Source: [Murata](#))

16 Jul 2019

Tencent Cloud officially released smart city service "WeCity Future City"

Cloud/IaaS

Tencent

On July 16, Tencent Cloud officially released its new municipal business project "WeCity Future City". The "WeCity Future City" project will apply cloud technology on digital government and government services such as culture and tourism, medical services, transportation and education, providing solutions for urban governance, urban decision-making and industrial interconnection. In June, Tencent Cloud won the bid for Changsha Super Brain project at RMB520mn. (Source: [Sina](#))

16 Jul 2019

Apple's trademark Apple Card and Apple Cash gained approval in EU and HK

Smartphone

Apple

Goldman Sachs

Apple has filed trademarks for Apple Card and Apple Cash in the Europe and Hong Kong, in both simple text and figurative form. It shows Apple's ambition in entering the financial services market. Apple Cash is a feature in Apple Pay allowing money transfer from one user to another via iMessage. Apple Card, to be launched by Apple and Goldman Sachs this summer, is a special credit card that will be linked with Apple's Wallet app and work through Apple Pay. (Source: [PatentlyApple](#))

11 Jul 2019

MediaTek's revenue up 16.8% QoQ in 2Q19

Semiconductor

MediaTek

MediaTek's reported June sales of NT\$20,893mn, up 9.27% MoM, and 2Q19 revenue came to NT\$61,567mn, up 16.8 QoQ, and fulfilling the company's guidance. In addition to its chip business for mobile phones, MediaTek is looking into AloT. The company recently announced the world's first flagship smart TV chip S900, which supports 8K resolution. It also launched the AloT platform i700 with fast image recognition. The two products both feature high-speed AI edge-computing capacity and are expected to start shipment in 2020. (Source: [Mediatek](#))

10 Jul 2019

IDT and EDC collaborate on wireless Industry 4.0

Module

IDT

EDC

IDT, a wholly owned subsidiary of Renesas Electronics, announced its collaboration with the Germany-based Electronic Design Chemnitz (EDC) to integrate IDT's 6LoWPAN wireless modules and sensor products into EDC's Industry 4.0 platform. IDT's fully featured over-the-air update (OTAU) capability will enable EDC to distribute firmware upgrades or new algorithms to every sensor node. IDT expects to introduce its humidity, VOC gas, temperature and flow sensor technology to EDC's SmartFIT system. IDT's ZWIR45xx family of wireless modules are ideal to embed wireless connectivity into EDC's SmartFIT Connect Platform, and the new ZWIR4532 will further reduce both space and power consumption. (Source: [Bloomberg](#))

10 Jul 2019

Global mobile downloads and spends shattered records in 2Q19

Smartphone

Apple

Google

According to App Annie, global mobile downloads and consumer spends both reached their highest in 2Q19. In this quarter alone, consumers downloaded over 30.3bn apps as new installs, and spent nearly US\$22.6bn, up 20% YoY. In terms of downloading, Google Play has a total of nearly 22.5bn, up 10% YoY, and led iOS by 185%. Emerging markets contributed the most with India, Brazil and Indonesia as the top 3 markets in both absolute number and YoY growth for Google Play. In terms of spending, gross consumer spends in iOS were around US\$14.5bn, 80% higher than those in Google Play, thanks to the growth in the U.S., China and Japan markets. (Source: [AppAnnie](#))

9 Jul 2019

Qualcomm unveiled the new 28nm Qualcomm 215 for entry-level market

Semiconductor

Intel

Qualcomm announced its new 28nm-based Qualcomm 215 Mobile Platform, a successor to the Snapdragon 212, providing reliable and lasting solution for entry-level smartphones. The chipset features ARM Cortex-A53 cores, could deliver up to 50% increased CPU performance compared to the previous generation. Qualcomm 215 is embedded with Qualcomm Adreno 308 GPU, offering up to 28% increased gaming performance enabling smooth graphics for casual gaming. It is the first to realize HD+ resolution displays in the 2-series and to feature dual ISPs supporting dual cameras. (Source: [Qualcomm](#))

9 Jul 2019

Intel unveiled new tools in its advanced chip packaging toolbox

Semiconductor

Intel

At SEMICON West, Intel introduced three advanced packaging capabilities and unveiled new building blocks. The three new technologies include: 1) Co-EMIB: allows for the interconnection of two or more Foveros elements with essentially the performance of a single chip; 2) ODI (Omni-Directional Interconnect): provides even greater flexibility for communication among chiplets in a package; 3) MDIO: provides better power efficiency and more than double the pin speed and bandwidth density offered by AIB. (Source: [Intel](#))

9 Jul 2019

Cisco to buy Acacia Communications at US\$2.6bn

Semiconductor

Cisco

Acacia

Cisco will acquire Acacia Communications, a fabless semiconductor company, for about US\$2.6bn. According to the terms of deal, Cisco will pay US\$70 a share in cash, a 46% premium to Acacia's closing price on 8 July. The acquisition is expected to close in 2H2020. As Cisco's existing supplier of optical interconnect technology, Acacia develops algorithms for digital signal processing as well as technology for ASIC design and verification, software, integration, and optics optimization. Acacia's optical technology will be integrated in Cisco's switching, routing, and optical networking portfolio aimed at cloud providers, service providers, and enterprises. (Source: [Bloomberg](#))

8 Jul 2019

Cadence and Synopsys' tools certified for Samsung 5LPE process

Semiconductor

Samsung

Samsung Foundry certified the Cadence Full-Flow Digital Solution full-flow design tools as well as the Synopsys Fusion Design Platform for its 5LPE technology. Chip designers could use the two pre-verified designing tool sets to transform 7LPP into 5LPE technology, attaining optimal power, performance and area (PPA) benefits. The set of tools from Cadence and Synopsys includes compilers, validators, power circuit optimizers as well as EUV-specific tools. Samsung invested KRW6tn in the 5LPE EUV production line in Hwaseong, which is expected to be completed this year and start mass production in 2020. (Source: [Anandtech](#))

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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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AMTD Global Markets Limited has an investment banking relationship with Xiaomi Corporation and/or its affiliate(s) within the past 12 months.

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