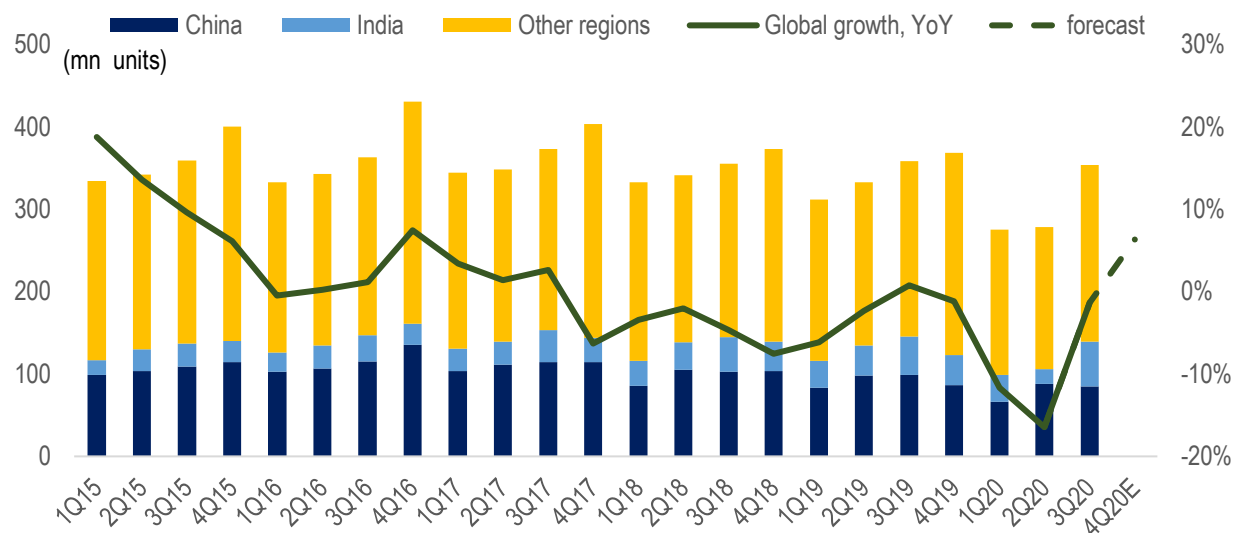




Global smartphone shipment – bottomed out stronger than expected

Figure 1: Global smartphone shipment (mn units) and growth, YoY



Source: IDC, AMTD Research estimates

**AMTD views:** According to IDC, global smartphone shipments were 353.6mn units in 3Q, slightly down 1.3% YoY but rebounded strongly by 27.0% sequentially from last quarter, ahead of our expectation. The strength mainly came from the recovery of India market, where shipment reached all-time records of 54.3mn in 3Q, up 16.5% YoY/198% QoQ, driven by online push and offline stores re-open. However, China saw a substantial decline in 3Q20 mainly due to the absence of new iPhone 12 and Huawei’s shipment constraints. Overall, the market has gradually bottomed out. Given the recent upbeat news on vaccine development, surging order for new iPhone 12, and new 5G model launches by other vendors, we expect the global smartphone shipment will continue to recover in 4Q and reach around 1.3bn units (down 5.3% YoY) in the full year of 2020.

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## Smartphone

## Shipment

### **Samsung – regained the lead globally**

According to IDC, Samsung took back the lead in the global smartphone market with a total shipment of 80.4mn units in 3Q, up 2.8% YoY, and a market share of 22.7%. The strength primarily came from: 1) low/mid-end M series were selling quite well online in the recovering India market, where 84% of total shipment was priced below US\$200 and 48% was sold through online channels in 3Q; 2) A series sales momentum in US market along with the Note 20 and Note 20 Ultra, jointly contributed to almost 20% of total shipment globally in 3Q. Besides, according to Strategy Analytics, in the first half of 2020, the Galaxy S20, the Galaxy S20 Ultra 5G and the Galaxy S20 5G, grabbed top 3 best-selling 5G smartphones globally in terms of smartphone sales value.

### **Huawei – uncertainties ahead and plans to sell Honor**

According to IDC, Huawei's global/China's smartphone shipments were 51.9mn units/35.1mn units, down 22.1% YoY/15.1 YoY, respectively, mainly due to the supply chain uncertainties and GMS restriction in overseas markets caused by the US ban. Although obtained approval for chip procurement, Huawei's 5G chip procurement has not yet been approved. In late Oct 2020, Huawei launched its new flagship Mate 40 5G series, however, current Kirin 9000 SoC inventory won't be enough to meet the huge demand for its Mate 40 5G series and its high-end models, indicating a lot of uncertainties ahead for Huawei. According to the latest news, Huawei plans to sell its budget-brand smartphone unit Honor to a consortium led by handset distributor Digital China for RMB100bn (US\$15bn) to circumvent the restrictions on supply chain. If this transaction is successfully concluded, at least Honor will rejoin the competition with Xiaomi, Oppo, and Vivo, in our view.

### **Xiaomi – ranked the third globally for the first time**

According to IDC, Xiaomi smartphone shipment surpassed Apple to become the top 3 worldwide for the first time, with a total shipment growing by 42.2% YoY to 46.5mn units in 3Q. The outperformance was driven by: 1) in Indian market – Xiaomi led the market with 13.5mn units in shipments with a market share of 25% (online market share of 35%) and its POCO brand shipped more than 1mn units in 3Q; 2) in China market – heavy promotional offers and campaigns during the brand's 10<sup>th</sup> year anniversary and strong performance of mid-range Redmi K30 Ultra and high-end MI 10 Ultra launched in Aug 2020; 3) in European and other markets – took the market share left by Huawei. For the next quarter, Redmi K30S, Redmi Note 9 or 10, the new model from Xiaomi's bestselling Redmi Note series, is expected to launch and further strengthen Xiaomi's competitive position in the smartphone market.

### **Apple – the quarter with no new iPhone**

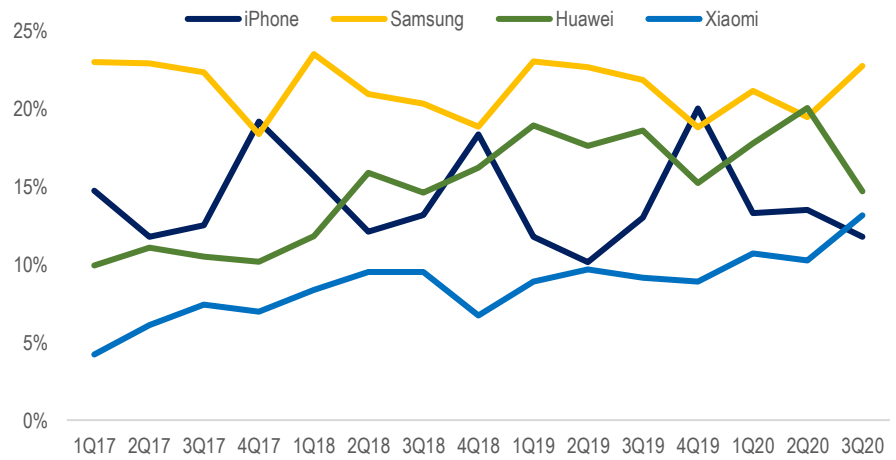
According to IDC, iPhone smartphone shipment was 41.6mn units in 3Q20, down 10.6% YoY, primarily due to the delay of new iPhone 12 series. However, given the strong pre-order, we expect new iPhone 12 sales will boost sales in the following quarters. In the long run, we believe Apple with its unique ecosystem-focused strategy is well positioned in the competition with Android camp, since new iPhone 12 with LiDAR scanner supported by its ARKit will break a new ground for AR/VR applications in the 5G era.

**Figure 2: Quarterly global smartphone shipments and YoY growth by manufacturer**

Company	Shipment (mn units)					Growth, YoY	
	3Q19	4Q19	1Q20	2Q20	3Q20	3Q19	3Q20
Apple	46.6	73.8	36.7	37.6	41.6	-0.6%	-10.7%
Samsung	78.2	69.4	58.3	54.2	80.4	8.3%	2.8%
Huawei	66.6	56.2	49.0	55.8	51.9	28.1%	-22.1%
Xiaomi	32.7	32.8	29.5	28.5	46.5	-3.3%	42.2%
OPPO	31.2	30.6	n.a.	24.0	n.a.	4.3%	n.a.
Vivo	n.a.	n.a.	24.8	n.a.	31.5	-2.8%	6.2%
<b>Total</b>	<b>358.3</b>	<b>368.8</b>	<b>275.8</b>	<b>278.4</b>	<b>353.6</b>	<b>0.8%</b>	<b>-1.3%</b>

Source: IDC, AMTD Research

**Figure 3: Top 4 smartphone companies' global market share by shipment**



Source: IDC, AMTD Research

## News update

29 Oct 2020

SaaS/eComm

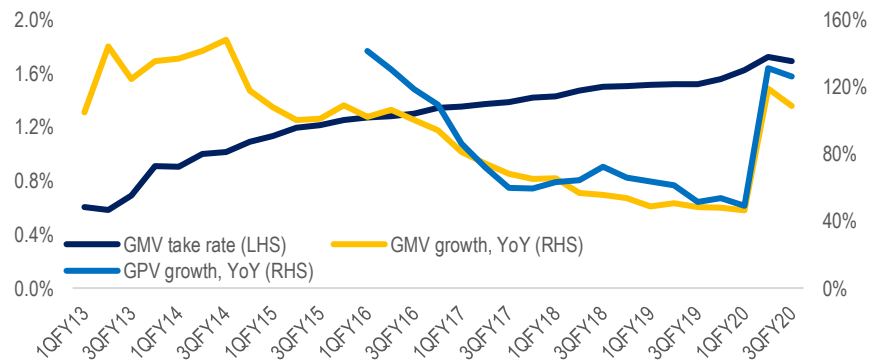
Shopify

### Strong Q3 results, GMV growth maintaining high and MRR growth accelerating

Shopify reported strong Q3 results. Total revenue doubled again in Q3, up 96% YoY to US\$767mn, driven by both merchant solutions and subscription solutions. Merchant solutions revenue grew 132% YoY to US\$522mn in Q3, boosted by a strong GMV, which increased 109% YoY to US\$30.9bn, the second consecutive quarter over 100%. US\$14bn of GMV was processed on Shopify Payments with Payments penetration of 45.3% vs 44.5% in Q2'20 and 41.8% Q3'19. Take rate stayed high at 1.69%. Subscription solutions revenue increased 48% YoY to US\$245mn in Q3, largely due to the accelerating growth of MRR, which reached 47% YoY in Q3. Free trial has improved customer conversion rate. Non-GAAP operating margin improved to 16.5% in Q3 compared to 2.3% in Q3'19, thanks to strong topline growth and moderate spending. (Source: [Shopify](#))

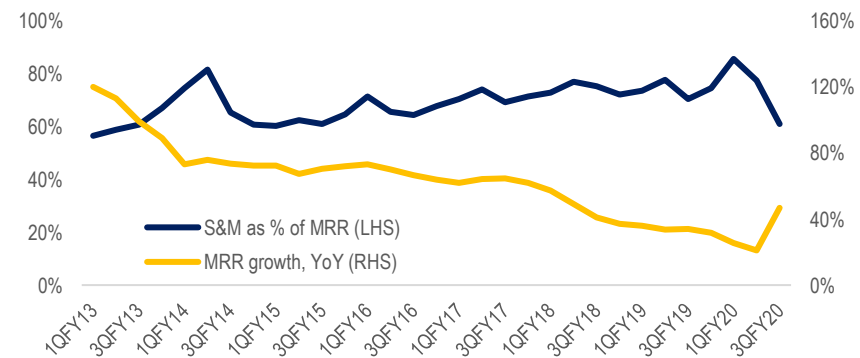
**AMTD views:** Shopify adopted free trial strategy, which helped convert large potential customers into paying merchants despite more in Standard merchants this quarter. We believe it will drive subscription upside in NT and health revenue growth in LT. On the other hand, Shopify continued to build and made solid progress in SFN in Q3, developed the foundation of SFN software infrastructure, activated more partner nodes in the U.S., added Six River Systems technology and more partner nodes. More than half of eligible merchants in the U.S. and Canada adopted Shopify Shipping in Q3, up from 45% in the same period last year. We see the consumer spend shifting from offline to online is more like a structural change, since Shopify's GMV growth has maintained more than 100% for the second consecutive quarter, however, headwinds are still ahead as churn rate could rise post pandemic.

Figure 4: GMV and GPV growth, YoY and GMV take rate



Source: Company data, AMTD Research

Figure 5: MRR growth, YoY and S&M as % of MRR



Source: Company data, AMTD Research

29 Oct 2020

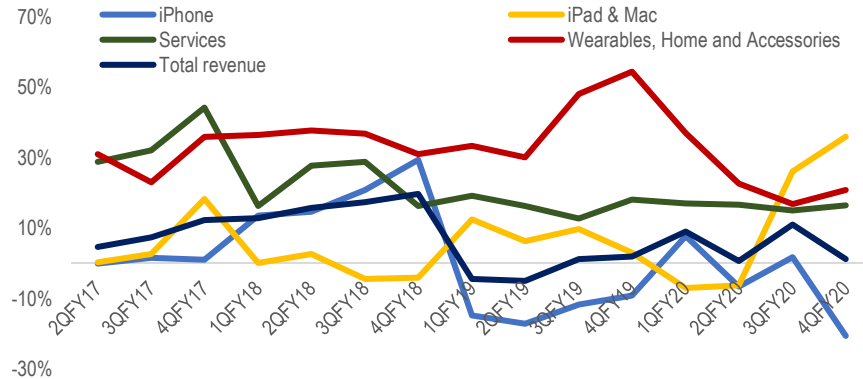
Smartphone  
Apple

**Good results excl. iPhone but no guidance for next quarter**

Apple delivered a good Q4FY20 results despite absence of new iPhone. Total revenue was US\$64.7bn, up 1% YoY. Outside of iPhone, iPad, iMac and Wearables achieved 46% YoY/ 29% YoY/21% YoY growth, respectively. Products gross margin was 29.8%, up 10bps sequentially, driven by cost savings. Services revenue growth remained strong, up 16.3% YoY to US\$14.5bn. App store, cloud services, Music, advertising and payment services all grew strong double digits and set all-time revenue records. Services gross margin was 66.9%, down 30bps sequentially, due to the unfavorable mix. EPS came in at US\$0.73/shr, ahead of consensus of US\$0.70. No detailed Q1FY21 guidance was offered by the company. (Source: [Apple](#))

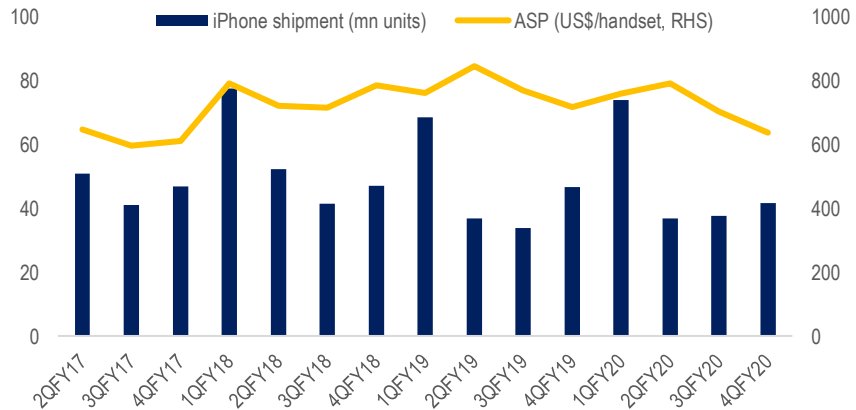
**AMTD views:** in terms of regions, Great China was most heavily impacted by the absence of new iPhone 12, where revenue was down 29% YoY. But we expect iPhone sales will pick up in the following Dec/Mar quarter as new iPhone 12 orders surged. In the long run, we believe Apple is well positioned in the competition with its unique ecosystem-focused strategy, as: 1) new iPhone 12 with LiDAR scanner supported by its ARKit will break a new ground for AR/VR applications in 5G era; 2) Apple planned to launch first three new Arm-based laptops in Nov aiming to fully integrate the entire software and hardware ecosystem; 3) moderate iPhone pricing strategy to expand customer base for its ecosystem.

**Figure 6: Apple's revenue growth by segment, YoY**



Source: Apple, AMTD Research; Note: 4QFY20 ended 26 September 2020

**Figure 7: iPhone's quarterly shipment (mn units) and implied ASP (RHS)**



Source: Apple, AMTD Research; Note: 4QFY20 ended 26 September 2020

28 Oct 2020

Semiconductor

AMD

### Solid Q3 results with full year guidance lifted

AMD delivered solid Q3 results. Revenue grew by 55.5% YoY/45.0% QoQ to US\$2.8bn, 10% ahead of its guidance in Q2, mainly driven by strong Ryzen and EPYC process sales and the ramp of its new semi-custom SoCs. CGS's revenue was US\$1.67bn, up 30.6% YoY/21.9% QoQ, higher Ryzen processor sales more than offset lower graphic sales. EECS's revenue was US\$1.13bn, up 116% YoY/100% QoQ. Non-GAAP gross margin was 44.0%, up 1ppt from same period last year, driven by server and client processor. Non-GAAP EPS came in at US\$0.41/shr compared to US\$0.18/shr a year ago. For the full year of 2020, the company expected higher revenue growth of 41% YoY, vs. prior 32% YoY in Q2, driven by the strength of PC, gaming and HPC products, and gross margin was guided to 45%. (Source: [AMD](#))

**AMTD views:** 1) AMD gained client CPU share for the 12<sup>th</sup> straight quarter. Desktop and notebook processor ASPs increased and total unit shipments grew by a strong double-digit percentage in Q3. We believe AMD will continue this momentum as its new launched 7nm Zen 3-based Ryzen 5000 for desktop will be on sale on 5 Nov. So far, more than 105 AMD-based notebooks have been launched in 2020. 2) On EPYC processor side, major IaaS vendors, including Azure and Google, have expanded their second-gen EPYC processor deployments and offerings in Q3. In addition, AMD is on track to begin volume shipments of its next-gen Zen 3-based Milan server processors. 3) We see AMD will benefit from new game console cycle as it ramped game consoles Q3 and three new GPUs, Radeon RX 6800/6800 XT/6900XT, for PC game will be launched for sale in Nov and Dec this year. 4) In addition, on the earnings call, the company announced the intention to acquire Xilinx. The acquisition will allow AMD to better compete in the data-center sphere and expand its TAM by US\$30bn from Xilinx to US\$110bn. We expect cost synergies from the M&A in the long term, which will be accretive the AMD's EPS.

8 Nov 2020

Cloud

Amazon

### Amazon to invest US\$2.8 billion to build its second data center region in India

Amazon will invest about US\$2.8 billion in Telangana to set up a new AWS Cloud region in the southern state of India. The investment will allow Amazon to launch an AWS Cloud region in Hyderabad by mid-2022. The new AWS Asia Region will be Amazon's second infrastructure region in India. (Source: [Techcrunch](#))

6 Nov 2020

Smartphone

Xiaomi

### Mi 11 to launch, first to come with Snapdragon 875 SoC

Xiaomi's Mi 11 series is likely to launch early next year. The smartphone lineup is said to come with the top-end Qualcomm chip. Xiaomi's Mi 11 will come with a 48-megapixel ultra-wide camera. It is also expected to come with improved image stabilization. (Source: [Tech](#))

5 Nov 2020

Semiconductor

Samsung

### Samsung unveiled new 3D ToF sensor - ISOCELL Vizion 33D

After launching four new sensors as part of its ISOCELL 0.7µm product lineup earlier in Sep this year, Samsung has now added a new ToF sensor - ISOCELL Vizion 33D sensor, to its portfolio. The new ISOCELL Vizion 33D ToF boasts of a 4-tap demodulation system that it says solves the problem of fast-moving objects. It offers enhanced depth-sensing capabilities for best-in-class photography and AR/VR experiences and can be used for a variety of applications, ranging from 3D scanning to implementing video bokeh effect. The 3S ToF sensor may be debuted in the Galaxy S21 early next year. (Source: [Xda-developers](#))

5 Nov 2020

IoT

Xiaomi

### **Xiaomi launched a new IoT Software Platform “Xiaomi Vela”**

Xiaomi has launched a new IoT Software Platform called “Xiaomi Vela” at MIDC 2020 in China. Through this, Xiaomi aims to bring all the fragmented AIoT technologies under one roof. Xiaomi Vela is an IoT Software platform based on Open Source Embedded Operating System NuttX. (Source: [Xiaomi](#))

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4 Nov 2020

Semiconductor

Samsung

### **Samsung planned to supply Exynos chips to Xiaomi, Oppo, Vivo in 2021**

Samsung is set to supply its smartphone processor Exynos to Xiaomi, Oppo and Vivo as early as the first half of next year. The company is reportedly set to begin with the entry-level models initially, though it may offer its SoCs for third-party premium smartphones after gaining some recognition in the market. (Source: [Gadgets](#))

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4 Nov 2020

Smartphone

Oppo

### **Oppo K7x was officially announced with Dimensity 720, priced at RMB1,499**

Oppo K7x has been launched officially in China. It has a Dimensity 720 SoC paired with 6GB RAM. It offers a 6.5-inch full-HD+ (1,080x 2,400 pixels) display with 90Hz refresh rate, 180Hz touch sampling rate, and quad rear cameras, and an octa-core processor. Oppo K7x also supports for 30W fast charging and comes with Oppo's Hyper Boost 3.0 technology that can improve performance when gaming. It is priced starting from RMB1,499. (Source: [OPPO](#))

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4 Nov 2020

Semiconductor

TSMC

### **TSMC 28nm process capacity utilization ramp up to nearly 100%**

TSMC has seen capacity utilization rates for 28nm process technology surge and come to nearly 100% in 4Q20, thanks to the bulk of orders transferred by Qualcomm and other fabless chip vendors. (Source: [Digitimes](#))

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4 Nov 2020

Smartphone

Samsung

### **Samsung launched Galaxy W21 5G foldable phone with Snapdragon 865+**

Samsung unveiled a second version of its 2020 foldable flagship to China - Samsung W21 5G, powered by the Snapdragon 865+ chipset. Successor to the last year launched Galaxy W20 5G, the smartphone offers similar specifications as the Galaxy Z Fold 5G. Now it is available for pre-order at a price of RMB19,999. (Source: [Gsmarena](#))

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3 Nov 2020

Semiconductor

Xiaomi

### **Xiaomi to launch 3 smartphones in Redmi Note 9 series in Nov**

It is reported that Xiaomi tipped to launch 3 new smartphones on its Redmi Note 9 series instead of the Note 10 series. One of the Redmi Note 9 is equipped with a 108-megapixel HM2 camera product. (Source: [Timesnownews](#))

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2 Nov 2020

Semiconductor

Intel

### Intel launched its first discrete graphics product, now available in laptops

Intel Iris Xe MAX is Intel's first discrete graphics product, delivering amazing experiences for creation and gaming. The chip designer has announced that the first laptops using its Iris Xe Max graphics chip are available in some form, including the previously revealed Acer Swift 3X, the ASUS VivoBook Flip TP470 and Dell's Inspiron 15 7000 2-in-1. Intel's platform approach makes it possible, combining 11th Gen Intel Core™ processors, discrete graphics capabilities, and unique software and hardware optimizations to maximize gaming, creation, productivity, and more. (Source: [Intel](#))

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31 Oct 2020

Semiconductor

MediaTek

### MediaTek is developing two 5nm chipsets with Cortex-A78 cores

MediaTek is developing two new smartphone chipsets, MT6893 and MT6891, based on cutting-edge 5nm (or possibly 6nm) technology. The two chipsets will be high-performance processors as they feature the more powerful Cortex-A78 Arm CPU core. They should also launch under the Dimensity series and with built-in 5G modems. MediaTek's current most powerful mobile processor is 7nm Dimensity 1000+ with Cortex-A77 cores. (Source: [GizChina](#))

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30 Oct 2020

Smart Devices

### Global tablet growth hit seven year high at 33%, reaching 50.6mn units in 3Q

According to Strategy Analytics, global tablet shipments increased by 33% YoY, a seven-year-record high, to 50.6mn in 3Q20, mainly driven by booming needs in the back-to-school season, as consumers and educational institutions bought a record number of tablets to support the transition to e-learning environments. iPad shipment was 15.1mn units in 3Q20, up 49%YoY, followed by Samsung with 9.4mn units, up 87% YoY. Apple ranked top with 29.8% of market share, while Samsung, Huawei, Amazon and Lenovo grabbed 18.6%, 10.1%, 9.6% and 8.1% of total market share, respectively. (Source: [Strategy Analytics](#))

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29 Oct 2020

Semiconductor

Samsung

### Samsung announced record-high foundry sales in Q3

In the third quarter's announcement, Samsung has reported a record-high foundry business sales, on the back of a recovery in mobile demand and increased demand for HPC chips. The Company has established a position for future growth by beginning the shipment of 5-nm mobile products and 2.5D packages. In 4Q, the business aims to achieve another record quarterly revenue by expanding mobile SoC and HPC chip shipments to major customers. In 2021, the Company expects growth in the Foundry Business to exceed the industry's growth significantly. It plans to diversify applications to HPC, consumer and network products, and secure additional major customers. (Source: [Samsung](#))

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29 Oct 2020

Semiconductor

Marvell/Inphi

### Marvell to acquire Inphi for US\$10 billion to accelerate growth in Cloud and 5G

Marvell announced that it will acquire Inphi in about US\$10 billion cash-and-stock deal aimed at broadening Marvell's footprint in data centers and 5G network infrastructure. Combining Marvell's storage, networking, processor, and security portfolio, with Inphi's leading electro-optics interconnect platform, will position the combined company for end-to-end technology leadership in data infrastructure. This highly complementary transaction expands Marvell's addressable market, strengthens customer base, and accelerates Marvell's leadership in hyperscale cloud data centers and 5G wireless infrastructure. (Source: [Marvell](#))

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29 Oct 2020

Semiconductor

Huawei

### US allowed sales of chips to Huawei's non-5G businesses

US is reportedly allowing sales of semiconductor chips to Huawei's non-5G businesses. The move comes after the Trump administration's attack on Huawei seems to shift gears, as the US is now granting certificates to selected firms supplying certain products to Huawei. (Source: [Globaltimes](#))

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28 Oct 2020

AI

Apple/Vilynx

### Apple bought a self-learning AI video startup for US\$50 million

Apple acquired an AI startup Vilynx for about US\$50 million. Barcelona-based Vilynx specialized in advanced artificial intelligence and computer vision technology and Apple could potentially apply this technology to the company's digital assistant, Siri, and other Apps. Apple is keeping Vilynx's Barcelona office and intends to make it one of the company's main artificial intelligence research and development centers in Europe. (Source: [Bloomberg](#))

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28 Oct 2020

Smartphone

Realme

### Realme C15 with Snapdragon 460 was launched again in India

Realme launched the Realme C15 in India at a starting price of Rs 9,999. The new Qualcomm Edition comes with the same specifications as the MediaTek variant except for the processors. It is powered by the Qualcomm Snapdragon 460 chipset and offers up to 4 GB RAM and up to 128 GB internal storage. (Source: [Realme](#))

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27 Oct 2020

Semiconductor

Xilinx

### Xilinx launched Zynq RFSoc DFE for mass 5G radio deployments

Xilinx has introduced the Zynq RFSoc DFE, a new class of adaptive radio platforms that have been designed to meet the evolving standards of 5G NR wireless applications. Zynq RFSoc DFE has been designed to provide a balance of technologies between the cost economies of an ASIC using hardened blocks and the flexibility, scalability, and time-to-market benefits of a programmable and adaptive SoC. (Source: [Xilinx](#))

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27 Oct 2020

Cloud

Alibaba

### Alibaba unveiled the world's first real-time livestreaming translation

AliExpress, a global retail marketplace under the Alibaba Group, unveils the world's first real-time livestreaming translation feature on an e-commerce platform. The new feature supports simultaneous translation from Chinese to English, Russian, Spanish and French, as well as from English to Russian, Spanish and French. (Source: [RTIH](#))

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27 Oct 2020

Semiconductor

Samsung/Huawei

### Samsung Display got approval to export OLED to Huawei

Samsung Display has received licence from the US Department of Commerce to export some OLED panels to Huawei. The company is the first to receive the licence for a South Korean firm, while LG Display, Samsung Electronics and SK Hynix are yet to receive licences to export to Huawei. (Source: [Thelec](#))

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27 Oct 2020

Cloud

Microsoft

### Microsoft announced its first Azure data center region in Taiwan

Microsoft announced its plans to establish its first cloud datacenter region in Taiwan as a part of its “Reimagine Taiwan” initiative. Microsoft will accelerate digital transformation and innovation in Taiwan through access to secure enterprise cloud services, expansion of Taiwan’s Azure engineering group and local talent development for over 200,000 people by 2024. (Source: [Microsoft](#))

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27 Oct 2020

Smartphone

Xiaomi

### Xiaomi Redmi K30S to officially launch with Snapdragon 865

Xiaomi was officially released Redmi K30S. It comes with a 64 MP main camera, Snapdragon 865 chipset by Qualcomm, and up to 144 Hz refresh rate for the 6.67” screen. The Xiaomi Redmi K30S is priced at RMB2,599 (US\$390). (Source: [Gsmarena](#))

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26 Oct 2020

Smartphone

Apple

### Apple surpassed 1 billion iPhone user milestone

Apple has surpassed the milestone of one billion iPhone users last month. The iPhone was the largest contributor to Apple growing its overall installed base from 125 million people in 2010 to more than a billion in 2020. Besides, given the fact that the pace of growth in the iPhone installed base has slowed due to high smartphone penetration, Apple Watch is expected to take the company to the 2 billion milestone, according to Above Avalon’s estimate. (Source: [Above Avalon](#))

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## IMPORTANT DISCLOSURES

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### Analyst Certification

We, Brian Li, Halsey Wu and Alyssa Han, hereby certify that (i) all of the views expressed in this research report reflect accurately our personal views about the subject companies and their securities; and (ii) no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed by us in this research report, nor is it tied to any specific investment banking transactions performed by AMTD Global Markets Limited.

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

### Firm Disclosure

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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