

Deutsche Bank Markets Research

North America

United States

TMT

IT Hardware and Supply Chain

Industry

Scribner's Slice of Apple

Date

3 December 2017

Periodical

A weekly take on Apple news

For the week ending December 1, 2017

iPhone X wait times continue to improve, and AirPods and iPads were the most popular purchases over Cyber Monday. Also this week, Apple corrected a security bug in the new macOS High Sierra operating system which allowed anyone to log on without a password, and Apple is reportedly developing their own power management chips. The supply chain is also reporting that a lower priced iPad may come next year, while patents suggest Apple may be developing a foldable iPhone. In other Apple news, IDC ranked Apple in third place in the C3Q-17 wearables market, Apple and Qualcomm continue to sue each other, Apple launched Apple Heart Study with Stanford, and the FDA approved an EKG reader for Apple Watch.

iPhone X wait times see further improvement

Availability of iPhone X continues to improve with our checks on Apple's website on Friday showing a December 11 delivery date in every area we sampled across the U.S. The roughly one week ship time is an improvement over the 1 to 2 week wait time last week and the initial 5 to 6 week window. Our checks also found that the 64GB and 256GB iPhone X versions remain available at stores in at least seven states (AL, IA, KY, MI, MO, TN, WA).

(www.apple.com)

iPads and AirPods popular among online shoppers

AirPods and iPads were some of the most popular shopping items on Cyber Monday, according to Adobe. AirPods made the list of overall top selling items during the day, while iPads and AirPods were both on the list of best-selling electronic items. Among purchases made via smartphones, the average order value for iOS was $123, compared to $110 for Android. [(http://news.adobe.com/press-release/experience-cloud/adobe-data-shows-](http://news.adobe.com/press-release/experience-cloud/adobe-data-shows-) cyber-monday-largest-online-sales-day-history-659) (ht[tps://www.macrumors.com/2017/11/28/airpods-and-ipad-listed-c](http://www.macrumors.com/2017/11/28/airpods-and-ipad-listed-cyber-)yber- monday/)

Fix released for password ﬂaw in macOS High Sierra

Apple has released a software security update for the new macOS High Sierra operating system, ﬁxing a critical security ﬂaw reported earlier in the week by Bloomberg. The bug allowed any user to log in to a Mac with the username "root" and a blank password. Following discovery of the ﬂaw, Apple announced plans to review its software development process, according to Reuters.

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Companies featured

Apple Inc. (AAPL.OQ),USD171.05 Hold

2017A 2018E 2019E

|  |  |  |  |
| --- | --- | --- | --- |
| EPS (USD) | 9.21 | 10.45 | 9.70 |
| P/E (x) | 14.9 | 16.4 | 17.6 |
| EV/EBITDA (x) | 7.9 | 8.9 | 9.6 |
| *Source: Deutsche Bank* |  |  |  |

*Our price target is based on shares trading at 16x our FY-19E EPS. Upside risks include stronger-than-expected smartphone sales and share gains, signiﬁcantly higher margins, and a faster ramp of new product categories including Watch and Apple Pay. Downside risks include slower smartphone sales, market share losses in smartphones, and weaker growth in Services sales.*

Deutsche Bank Securities Inc.

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In-house iPhone power management chips in the works

Apple is reportedly developing proprietary iPhone power management chips to be used in devices starting in 2018 or 2019, according to the Nikkei. Industry sources suggest the chips, which control battery charging and management as well as energy consumption, will be manufactured by TSMC. As we have noted in previous Slices, Apple has reportedly been developing proprietary graphics chips, a T310 chip for Macs, and an AI-focused chip called the Apple Neural Engine. (https://asia.nikkei.com/Business/Companies/Apple-to-design-power-chips-in- house-as-early-as-2018-Sources)

IDC ranks Apple third in C3Q-17 wearables market

Global wearables shipments reached 26.3M units in C3Q-17, up 7.3% Y/Y, according to IDC. Apple shipped 2.7M units and was the third largest vendor with 10.3% share of the market. Fitbit reportedly regained a slight lead in the market, although unit shipments of 3.6M were tied with second place vendor, Xiaomi. Apple's unit shipments grew by 139% Y/Y, due to the rollout of the Apple Watch 3 series and demand for units featuring cellular connectivity. (ht[tps://www](http://www.marketwatch.com/story/%EF%AC%81tbit-xiaomi-knock-apple-down-to-3rd-in-).mark[etwatch.com/story/ﬁtbit-xiaomi-knock-apple-down-to-3rd-in-](http://www.marketwatch.com/story/%EF%AC%81tbit-xiaomi-knock-apple-down-to-3rd-in-) wearables-sales-2017-11-30)

Supply chain suggests lower cost iPad model coming in 2018

Apple may be planning to launch a less expensive 9.7-inch iPad in 2018, according to Digitimes. Supply chain sources say the device would sell for $259 or $70 less than the current base model. The devices could go on sale in C2Q-18. [(http://www.digitimes.com/news/a20171201PD205.html?mod=2)](http://www.digitimes.com/news/a20171201PD205.html?mod=2))

Apple may be developing a foldable iPhone

Apple has ﬁled a patent application for a foldable display, suggesting a foldable iPhone model could be coming in the future, according to Patently Apple. The patent describes the potential use of micro LED displays and liquid metal in the foldable device. We note that rival Samsung has been widely known to be developing a foldable smartphone with company executives indicating Samsung plans to release a foldable smartphone in 2018, according to Business Korea. [(http://www.patentlyapple.com/patently-apple/2017/11/future-foldable-iphone-](http://www.patentlyapple.com/patently-apple/2017/11/future-foldable-iphone-) may-use-a-micro-led-display-and-liquid-metal-as-a-shape-memory-alloy.html) [(http://bgr.com/2017/12/01/galaxy-x-release-date-samsung-foldable-](http://bgr.com/2017/12/01/galaxy-x-release-date-samsung-foldable-)

phone-2018/)

Legal battle wages on between Apple and Qualcomm

Apple has ﬁled a countersuit against Qualcomm in a San Diego U.S. District Court, claiming Qualcomm's Snapdragon mobile phone processors violate Apple's battery life patents. According to Business Insider, the suit is in response to Qualcomm's July lawsuit against Apple, alleging Apple engaged in unfair trade practices by importing and selling mobile devices in the U.S. that infringe on its patents. One day after Apple's countersuit, Qualcomm ﬁled a new patent infringement suit against Apple as well as a new U.S. International Trade Commission (ITC) suit, seeking to ban U.S. importation of iPhone 8 and X. As we have written in previous Slices, Apple and Qualcomm's legal ﬁght stems from Apple's decision to sue Qualcomm in January for overcharging for chips and

failure to pay agreed-upon rebates. Apple and its contract manufacturers are currently withholding royalty payments to Qualcomm while Qualcomm is trying to block iPhone imports into the U.S. and suing for breach of contract. [(http://www.businessinsider.com/apple-countersuing-qualcomm-2017-11)](http://www.businessinsider.com/apple-countersuing-qualcomm-2017-11)) [(http://appleinsider.com/articles/17/11/29/qualcomm-targets-apple-iphone-8-](http://appleinsider.com/articles/17/11/29/qualcomm-targets-apple-iphone-8-) iphone-x-in-new-patent-suit)

Stanford and Apple launch research study of irregular heart rhythms

Apple has oﬃcially launched the Apple Heart Study app, an app for gathering heart rhythm data from the heart rate sensor on the Apple Watch. The app will be used to detect irregular heart rhythms and is part of research study with Stanford Medicine on pro-active health care that was ﬁrst publicized in September. BioTelemetry, a provider of remote heart monitoring technology, announced it will provide its services for the study. (ht[tps://www](http://www.apple.com/newsroom/2017/11/apple-heart-study-launches-to-).apple[.com/newsroom/2017/11/apple-heart-study-launches-to-](http://www.apple.com/newsroom/2017/11/apple-heart-study-launches-to-) identify-irregular-heart-rhythms/)

(https://globenewswire.com/news-release/2017/11/30/1212055/0/en/ BioTelemetry-Inc-Enters-Agreement-to-Provide-Cardiac-Monitoring-for-Apple-s- Heart-Study.html)

FDA approves ﬁrst medical device accessory for Apple Watch

The Federal Drug Administration (FDA) has approved AliveCor's KardiaBand electrocardiogram (EKG) sensor for heart rate detection with the Apple Watch. Speciﬁcally, KardiaBand is FDA approved to detect normal heart rhythms as well as atrial ﬁbrillation (AFib), which is the most common heart arrhythmia, and a leading cause of stroke. The KardiaBand sensor attaches to the watch's band to detect heart rhythms. The app displays an EKG reading on the Apple Watch face or sends the EKG to a doctor. KardiaBand retails for $199 plus a required $99 per year subscription to AliveCor's Premium service, which includes the paired Kardia App, data storage, and other services.

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Apple Investment Thesis

Outlook

Apple has a dominant position in smartphones and tablets where its products represent the gold standard in both categories. These segments continue to oﬀer good growth opportunities, particularly smartphones, allowing Apple to outgrow overall IT spending. Despite healthy growth, slowing smartphone and tablet sales, as well as Apple’s already signiﬁcant revenue levels suggest growth will be more diﬃcult going forward. With puts and takes currently balanced, in our view, we consider shares as fairly valued and rate Apple a Hold.

## Valuation

Apple has traded at an average forward P/E of 13x since 2010 with a range of 9x to 16x. We believe shares should trade in line with these historical multiples and, because of its large market cap (3-4% of the S&P 500), should trade at a modest discount to the market. Our price target is based on shares trading at 16x our FY-19E EPS.

## Risks

Company-speciﬁc positive risks to Apple include stronger-than-expected smartphone sales and share gains, signiﬁcantly higher margins, and a faster ramp of new product categories including Watch and Apple Pay. Negative risks include slower smartphone sales, market share losses in smartphones, and weaker growth in Services sales.