June 13, 2016 8:05 pm JST

Source confirms iPhone sales will fall for the first time in 2016

DEBBY WU and CHENG TING-FANG, Nikkei staff writers

With iPhone sales falling flat, Apple is set to follow Samsung's lead with a more curved design.

TAIPEI -- Apple Inc. will see the first annual decline in iPhone shipments this year since the smartphone's debut in 2007 due to lukewarm demand for a new model, people familiar with the matter told Nikkei Asian Review.

According to a person at a major supplier, overall iPhone shipments will total 210 to 220 million this year, falling as much as 8.6% from 2015.

"Hon Hai Precision Industry Chairman Terry Gou has told his staff that the demand for iPhones will remain feeble until at least early next year," a source said. Hon Hai, better known as Foxconn Technology Group, declined to comment.

Gou told Chinese Premier Li Keqiang in China in late May that the company's overall orders were falling this year, although Foxconn did receive a sudden rush of orders in April and May. Foxconn makes about 70% of iPhones sold globally.

Foxconn reported that its revenue fell 5.5% year-on-year in the January-May period. Apple also reported its first sales decline in 13 years in the quarter ended in March, and forecast another drop in the current quarter.

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Sources said that iPhone 7, the newest, lacked innovation, although the 5.5-inch model would feature dual lens, which offers a more powerful zoom.

Jeff Pu of Yuanta Investment Consulting estimated in a May report that total iPhone production this year would fall 12% year-on-year to 207 million units due to weak sales of iPhone 6s and 6s Plus.

China challenge

Apple's troubles are further exacerbated by growing challenges it faces in the slowing Chinese economy, a key market accounting for about 25% of its sales.

Suppliers said that a perceived change of strategy at Apple was also causing them problems. A source at a major supplier said that Apple's current strategy of selling different colored iPhones has led to an inventory build-up for suppliers, compared with simpler color schemes and lower costs previously.

"Apple's resorting to colors instead of pursuing innovative features to boost sales shows that the company now has no way of breaking out of the current doldrums," the source said.

Apple's tendency to place extra orders also hurts suppliers. "Apple is always overbooking its capacity. It works only when demand is strong. However, when demand softens, it leads to inventory correction for all the suppliers," said Lin Chien-nan, president of Wintek, a former major touch module supplier to Apple.

WinTek filed for restructuring in late 2014 after expanding aggressively.

"There is no concrete contract between suppliers and Apple. Apple never signs a contract with a fixed price and guaranteed orders," said Lin, "The orders are dynamic and could be adjusted every quarter."

Apple did not immediately return a request seeking comments.

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August 23, 2016 12:15 am JST

High-end iPhone to have Samsung-like curved OLED display in 2017: source

DEBBY WU and CHENG TING-FANG, Nikkei staff writers

With iPhone sales falling flat, Apple is set to follow Samsung's lead with a more curved design.

TAIPEI -- Apple Inc. has come up with three new iPhone models for next year, including a premium handset that will sport a curved display like the one Samsung Electronics has adopted for its top-of-the-range smartphones, a source familiar with Apple's plans told the Nikkei Asian Review.

"There will be a 4.7-inch model, another that will be 5.5-inches and a premium handset that will be either 5.5-inches or larger equipped with a screen bent on the two sides," the source said, adding the first two will continue to have flat screens, like current Apple mobile devices.

Apple's planned iPhone overhaul next year shows the growing pressure the No. 2 smartphone brand by shipments faces from the Android camp, spearheaded by Samsung, in a saturated market.

David Hsieh, a senior director at market reserach specialist IHS DisplaySearch, said that while the premium handset will adopt advanced organic light-emitting diode panels, the other two models will stick with low-temperature poly-silicon panels. Compared with LTPS screens, OLEDs offer sharper color contrast. And while LTPS panels are rigid, OLED displays are flexible and allow manufacturers to create curved and even foldable screens.

Competitor and partner

Samsung Electronics is the only company at the moment that offers the flexible OLED screens. The South Korean conglomerate was the global leader in smartphone shipments last year and in the first quarter of 2016 and the only smartphone maker that offers curved OLED displays. It introduced curved displays with the Galaxy Note Edge and Galaxy 6 Edge last year. Its latest product lineup includes two premium handsets, the Galaxy 7 Edge and Note 7, with curved screens

Hsieh said that Samsung Electronics will be Apple's sole OLED supplier next year but that the Suwon-based company will not be able to fully meet demand for both itself and its U.S. customer next year.

Meanwhile, Jeff Pu, an analyst at Taipei-based Yuanta Investment Consulting, said Apple is likely to give up metal casings for iPhones and shift to a new look -- a front glass cover and chassis, joined by a metal bezel for all its handsets next year.

The Nikkei Asian Review reported earlier in August that Hon Hai Precision Industry, also known as Foxconn Technology Group, has been developing glass casing technology since last year in the hope of winning orders from Apple orders for the new chassis in 2017.

Foxconn, a key iPhone assembler, is a major supplier of metal casings for iPhones. It dominates orders for 5.5-inch iPhones and the lower priced iPhone SE. It splits the market for 4.7-inch iPhones with Catcher Technology of Taiwan and U.S.-based Jabil.

Foxconn's large production capacity means it will be able to provide Apple with enough glass chassis for all its new handsets next year, should the Taiwanese manufacturer win orders for the new casings.

Since the beginning of 2016, Apple has been grappling with falling demand for its premium iPhone 6s and iPhone 6s Plus handsets around the world. Its sales dropped, year on year, for the first time in 13 years in the January-March period and the downtrend continued in April-June. The average selling price for iPhones fell in the quarter ended in June, suggesting stronger demand for the lower-priced iPhone SE. Sales in greater China plummeted 33%.

By contrast, Samsung Electronics saw sales growth in the first half, thanks to the popularity of its premium handsets with curved screens. China's Huawei Technologies, the world's third-largest smartphone brand, also saw its business grow in the January-June period

Apple is bracing for another significant drop in sales of its new iPhone 7 range to be unveiled in September.

A major supplier has received component orders for 54 million units for the two new models, the iPhone 7 and iPhone 7 Plus, according to the source familiar with the iPhone design, and the lack of demand is likely to drag down shipments for the full year to less than 200 million handsets, compared with the 231 million phones Apple sold last year.

Both Yuanta's Pu and Arthur Liao, an analyst at Fubon Securities, expect full-year iPhone shipments to be around 208 million units.

Faced with mounting challenges from Android rivals, Apple killed off plans for a premium iPhone 7 model in the second quarter, less than six months before its planneed launch in September, the Nikkei Asian Review reported earlier in August.

The scrapped model was to be a 5.5-inch handset equipped with a dual lens camera. The move leaves Apple with only two models.

The 4.7-inch iPhone 7 will have a single lens camera, while the 5.5-inch iPhone 7 Plus will have a dual lens camera, according to a person familiar with the matter.

Apple did not respond to an emailed request seeking comments.

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October 26, 2016 11:34 pm JST

Exclusive

All three iPhone 8 models to have glass backs

DEBBY WU, Nikkei staff writer

TAIPEI -- The three new iPhone models to be launched next year are likely to sport glass backs supplied by China's Biel Crystal Manufactory and Lens Technology, an industry source told the Nikkei Asian Review.

Apple is preparing to unveil a made-over iPhone at the device's 10th anniversary in 2017. The source said however, that the U.S. tech titan could change its plans for the new backs, given that it ceased production of the 5.5-inch iPhone 7 model bearing a single lens less than six months before launch.

"Apple has tentatively decided that all the 5.5-inch, 5-inch and 4.7-inch models will have glass backs, departing from metal casings adopted by current iPhones, and Biel and Lens are likely to be providing all the glass backs for the new iPhones next year," the source said.

The new iPhone 8 range is now expected to also bear glass covers supplied by Biel and Lens. The glass front and back will be held together by a metal frame.

Apple is in a drive to woo potential customers and nudge its existing fans into buying the new range by coming up with a radically different look after its iPhone 7s were criticized for being too similar to previous models and lacking innovative features.

The source said that while key iPhone assembler Hon Hai Precision Industry, also known as Foxconn Technology Group, and its subsidiaries have been working to develop glass backs, it is unlikely the Taiwanese manufacturing mammoth will be able to secure orders for this component for the iPhone 8 series because its Chinese rivals have the technological edge.

Foxconn is also a major metal casing supplier to Apple, its biggest customer that accounts for over 50% of its total sales. Foxconn is the key metal casing maker for iPhone 7 Plus and iPhone SE and splits iPhone 7 orders with Catcher Technology and U.S.-based Jabil.

The source said that it was unclear if Foxconn's revenue would be affected next year as Apple had not made a final decision on the design of the new

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metal frames.

Apple did not respond to an email seeking comments. Biel Crystal, which is reportedly preparing for a listing in Hong Kong, Foxconn and Shenzhen-listed Lens all declined to comment.

Nikkei Asian Review reported late August that Apple's iPhone overhaul will also see the premium 5.5-inch iPhone 8 model sporting a curved display using advanced organic light-emitting diode panels, reportedly to be supplied by embattled Samsung Electronics, while the other two handsets will stick with low-temperature poly-silicon panels adopted by iPhone 7.

Vincent Chen, an analyst at Yuanta Investment Consulting, wrote in an Oct. 20 note that another major improvement in the iPhone 8 series would be the inclusion of a wireless charging feature.

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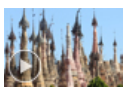
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November 10, 2016 12:00 pm JST

Apple mulls iPhone overhaul as Foxconn ponders its future

DEBBY WU and CHENG TING-FANG, Nikkei staff writers

iPhone 7 vs. iPhone 8 in 2017

CHASSIS

iPhone 7

Metal casing

Suppliers: Foxconn Technology, Catcher Technology

iPhone 8

Glass casing

Likely suppliers: Biel Crystal Manufactory, Lens Technology

PANELS

iPhone 7

LTPS panels

Suppliers: LG Display, Japan Display, Sharp

iPhone 8

Flexible OLED panels

Likely suppliers: Samsung Electronics, LG Display

iPhone 8 new features: Wireless charging, curved screen

CORE PROCESSOR CHIP

iPhone 7

A10 core processor chip, 16-nanometer process technology

Supplier: Taiwan Semiconductor Manufacturing Co.

iPhone 8

A11 core processor chip, 10-nanometer process technology

Likely supplier: Taiwan Semiconductor Manufacturing Co.

TAIPEI Apple's iPhone 7 has been a disappointment for both the company and its suppliers, and now the Cupertino, California-based gadget maker appears to be working on a major overhaul for its next generation of smartphones.

All three iPhone 8 models will sport glass backs, joined to the front cover by a metal frame, according to a person familiar with Apple's plans.

Curved organic light-emitting diode screens may also be in the cards, at least for Apple's premium handset. Wireless charging is another expected feature of the iPhone, which marks its 10th anniversary next year.

"Apple has tentatively decided that all the 5.5-inch, 5-inch and 4.7-inch models will have glass backs, departing from the metal casings adopted by current iPhones, and Biel and Lens are likely to be providing all the glass backs for the new iPhones next year," an industry official said.

China's Biel Crystal Manufactory and Lens Technology supply front glass covers for iPhones.

Apple is trying to woo new customers and persuade existing ones to move upmarket with a radically different look for its new handset. The iPhone 7 was criticized for being too similar to older models and lacking innovative new features.

The industry official said that although key iPhone assembler Hon Hai Precision Industry, also known as Foxconn Technology Group, and its subsidiaries have been working to develop glass backs, it is unlikely the Taiwanese company will receive orders for this component because its Chinese rivals have the technological edge.

Foxconn is a major supplier of metal casings to Apple, which is its biggest customer overall, accounting for over 50% of its total sales. Foxconn supplies casings for the iPhone 7 Plus, and iPhone SE, splitting its iPhone 7 business with Catcher Technology and U.S.-based Jabil. The industry official said it was unclear whether Foxconn's revenue will be affected next year as Apple has not made a final decision on the design of the new metal frames.

Biel Crystal, Foxconn and Lens all declined to comment.

Foxconn is making wireless charging modules for the iPhone range slated for release in 2017, according to another person familiar with the matter. "But whether the feature eventually makes it into Apple's updated devices will depend on whether Foxconn can boost the yield rate to a satisfactory level later on."

The yield rate measures the number of nondefective units in a batch of components. The lower the yield rate, the lower the profit. If it is too low, a component may be left out of the final product altogether.

The person said the charging modules will be incorporated into the handsets, but it is unclear whether all iPhones coming out next year will feature

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wireless charging.

The Nikkei Asian Review reported in late August that the high-end 5.5-inch iPhone 8 will have a curved OLED display, reportedly to be supplied by Samsung Electronics, while the other two handsets will stick with the low-temperature polysilicon, or LTPS, panels used in the iPhone 7.

Terry Gou, chairman of Hon Hai Precision Industry, talks with an attendee at a business conference in Hong Kong on Nov. 5. (Photo by Debby Wu)

While wireless charging and curved OLED screens will be new to the iPhones, some premium Android handsets, such as Samsung's Galaxy S6 Edge, the Galaxy S7 Edge and the now terminated Galaxy Note 7, and Chinese smartphone maker Xiaomi's latest Mi Note 2 already have such screens. Likewise, the Android camp has had phones with wireless charging for some time now, with Samsung and LG Electronics leading the trend.

Tai Jeng-wu, president of Sharp, the Japan-based electronics company recently acquired by Foxconn, knows that Apple lags behind in these areas. Sharp, which supplies LTPS panels to Apple, has said the U.S. company faces a crisis. Speaking to students at his alma mater, Tatung University, on Oct. 29, he confirmed that Apple will use OLED displays in the future, without saying when.

"The iPhone has been evolving, and now it is switching from LTPS to OLED panels," Tai said. "We don't know whether Apple's OLED iPhones will be a hit, but if Apple doesn't walk down this path and transform itself, there will be no innovation. It is a crisis, but it is also an opportunity."

Apple has declined to comment on new features for the iPhone 8. In fact, it may not even be called that. Some market watchers suspect the handset may get a new name to mark the 10th anniversary of the product.

Apple's revenue suffered its first annual decline since 2001, falling 7.7% on the year to $215 billion, in the year to September.

Foxconn also saw its sales drop 3.2% to 2.95 trillion New Taiwan dollars ($93.7 billion) in the first nine months of the year. Competitor Catcher Technology reported a net profit of NT$4.47 billion, a 45% on-year drop, on sales of NT$20.73 billion, down 3%, in the July-September period.

LIFE AFTER APPLE To stanch the bleeding from falling iPhone sales, Foxconn Chairman Terry Gou has been searching for new revenue in cloud computing, robotics and semiconductors.

In an exclusive interview with the Nikkei Asian Review on Nov. 5, the head of the world's largest contract electronics maker said he is working with new subsidiary Sharp to improve Foxconn's capabilities in chips. "We are now integrating the two companies' semiconductor expertise, as we use many

chips ourselves," Gou said on the sidelines of a German business forum in Hong Kong.

"If Sharp can integrate with Foxconn, we can create a lot of room for growth by leveraging Sharp's know-how, Taiwan's own semiconductor manufacturing expertise, and young engineers in China," the Taiwanese entrepreneur said. Gou said he initially wants to make chips for internet-enabled TVs, a major Sharp product. But he hinted at bigger aspirations, saying emerging technologies such as cloud computing will require chips as well.

Foxconn is also setting up a chip design center in the southern Chinese city of Shenzhen with help from British chip designer ARM, now controlled by Japanese tech giant SoftBank Group. Shenzhen is Foxconn's Chinese headquarters.

While Gou did not offer details on the partnership, he appeared to confirm it, asking, "How did you know all about this?" in reference to the Shenzhen center.

In addition to expanding into the chip sector, Foxconn hopes to improve its profitability by cutting labor costs in China through automation. "Right now we use some 60,000 robots on our production lines. We plan to increase that number by 20-30% every year," Gou said. Foxconn makes its own robotic arms, called "Foxbots," for use in its factories.

"We've already had some lights-off facilities, [which require no human presence] and we will have more of them in the future," Gou said.

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November 18, 2016 12:20 am JST

Exclusive

Apple could make iPhones in US in future: sources

DEBBY WU, Nikkei staff writer

Sources say Apple has asked its assemblers to look into making iPhones in the U.S. © AP

TAIPEI -- iPhones might one day soon carry "Made in America" labels.

Key Apple assembler Hon Hai Precision Industry, also known as Foxconn Technology Group, has been studying the possibility of moving iPhone production to the U.S., sources told the Nikkei Asian Review.

"Apple asked both Foxconn and Pegatron, the two iPhone assemblers, in June to look into making iPhones in the U.S.," a source said. "Foxconn complied, while Pegatron declined to formulate such a plan due to cost concerns."

Foxconn, based in the gritty, industrial Tucheng district in suburban Taipei, and its smaller Taiwanese rival churn out more than 200 million iPhones annually from their massive Chinese campuses.

Another source said that while Foxconn had been working on the request from Apple Inc., its biggest customer that accounts for more than 50% of its sales, Chairman Terry Gou had been less enthusiastic due to an inevitable rise in production costs.

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"Making iPhones in the U.S. means the cost will more than double," the source said.

The person added that one view among the Apple supply chain in Taiwan is that U.S. President-elect Donald Trump may push the Cupertino, California-based tech titan to make a certain number of iPhone components at home.

According to research company IHS Markit, it costs about $225 for Apple to make an iPhone 7 with a 32GB memory, while the unsubsidized price for such a handset is $649.

Apple, Foxconn and Pegatron all declined to comment.

Not Made in America

Apple's move appears to fall in line with Trump's pledge to push American companies to make their products at home. There is a widespread perception among American voters that the U.S. is losing manufacturing jobs to other countries in this age of globalization and free trade.

Other than having its popular gadgets assembled in China, Apple also procures most of the key components for its flagship iPhones from Asian suppliers.

Taiwan Semiconductor Manufacturing Co. makes chips for iPhones, Japan's Japan Display and Sharp supply panels for Apple's handsets, and South Korea's SK Hynix and Japan's Toshiba produce memory chips for the device.

Trump singled out Apple several times earlier this year to hammer home his point, and vowed to slap a 45% tariff on goods made in China.

"We're going to get Apple to build their damn computers and things in this country instead of in other countries," he said at Liberty University in Virginia in January.

In March, Trump further pointed the blame at China, where Apple's assemblers churn out iPhones, iPads and MacBooks.

"How does it help us when they make it in China?" Trump said during his Super Tuesday victory speech.

The anxiety among Trump's mostly white working-class supporters in the Rust Belt of America is understandable. While Apple claims that it created and supports 2 million jobs domestically, U.S. think-tank Economic Policy Institute estimated that America had lost 5 million manufacturing jobs between 2000 and 2014.

On the other hand, Foxconn employs some 690,000 workers in China as at the end of April, equaling the entire population of Detroit.

Even though the number is down from the peak of 1.3 million in 2012, it is still a high head count that many heads of countries, including Indian Prime Minister Narendra Modi, would like to secure for their people.

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Yet some in the Apple supply chain said it would be impossible to move iPhone production back to the U.S. due to a lack of infrastructure and a steep hike in costs.

Apple's Chief Executive Tim Cook told CBS' 60 Minutes program in December 2015 that America simply did not have enough skilled workers for the production of iPhones.

An industry executive familiar with the iPhone production process also said it would be difficult to produce the device in large quantities in the U.S.

"To make iPhones, there will need to be a cluster of suppliers in the same place, which the U.S. does not have at the moment," the executive said. "Even if Trump imposes a 45% tariff, it is still possible that manufacturers will decide to continue production overseas as long as the costs together with the tariffs are lower than the amount they need to spend on building and running production lines in the U.S."

Another industry source said: "It is not easy to make iPhones in America, unless the U.S. government subsidizes local companies for producing domestically."

Meanwhile, Beijing is getting edgy too. The state-run Global Times warned on Nov. 13 that if Trump starts a trade war with China, "U.S. auto and iPhone sales in China will suffer a setback."

Politics will trump everything

Yet there was precedent in the administration of incumbent President Barack Obama for political factors to overpower economic concerns when companies and governments haggle over corporate practices.

Faced with political pressure to bring jobs home under Obama's government, Apple helped its Singapore-based contractor Flextronics build a Mac Pro production line in Austin, Texas in 2013, after Foxconn set up an iMac assembly line in the same state the year before.

Sharp President Tai Jeng-wu, right-hand man to Foxconn's Gou, also hinted in late October that if Apple eventually decided to produce in the U.S., he would have no option but to follow his customer's instructions.

"We are now building a new [advanced organic light-emitting diode] facility in Japan. We can make [OLED panels] in the U.S. too," he said. "If our key customer demands us to manufacture in the U.S., is it possible for us not to do so?"

"Politics will trump cost concerns in the end," the industry executive familiar with iPhone's production process said. "The Apple supply chain must treat Trump's campaign pledge seriously and not write it off."

Mark Li, an analyst at Sanford C. Bernstein, echoed the sentiment.

"Although TSMC is very clear that it would be much more expensive to make chips outside of Taiwan, it's inevitable for the world's largest contract chipmaker to take 'Made in the U.S.' into consideration if the alternative is

that it would lose Apple orders without moving to America," Li said.

Yet the big question is -- even if Apple moves the mundane assembly line back to the U.S., will American workers be keen for such monotonous and labor-intensive jobs that often attract criticism from rights groups and that even Chinese youngsters are turning their noses up on?

"Young people in China no longer want to work in factories but instead they want to be a Didi driver or run their small business on WeChat," an industry executive said.

Didi is the Chinese equivalent of Uber, and WeChat is China's homegrown real-time messenger.

"As a Didi driver, you can work whenever you want. But there is no freedom in a factory -- once you're on duty, you'll be on the production line for 10 hours or more," the executive said.

Nikkei staff writer Cheng Ting-fang contributed to this report

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