

TSMC will soon release 5 nanometer chips with many notable improvements

In the face of a large demand from the market, TSMC recently voiced that their new 5nm super modern chip manufacturing process has been successfully built and will start operating under the proposed plan. released right from the first half of 2020.

Demand for semiconductors in general is likely to drop slightly this year, but one of the world's largest mobile chip manufacturers, TSMC, said demand for microprocessor chips is The high track has increased significantly. The reason for this strangeness is that the business situation has prospered for devices supporting 5G in the smartphone market in the first half of this year, leading to the current big smartphone manufacturers like Apple, LG or Xiaomi are in great demand for more advanced CPUs, with 5G support to equip the next generation of products, with slightly improved technology compared to the expected.

1. Samsung is ready to pump an additional \$ 116 billion for the battle in the mobile chip market



TSMC is still a highly regarded name in the processor chip market

In the face of a large demand from the market, TSMC recently voiced that their new 5nm super modern chip manufacturing process has been successfully built and will start operating under the proposed plan. From the first half of 2020, the world's first 5nm chips will be ready to go on shelves and be used in smartphones around this time next year.

TSMC began producing mass-scale 7nm chips last year, allowing its key partner, Apple, and another major manufacturer in the Android world, Huawei to become first names. Using this state-of-the-art technology on smartphone products, although in fact, processors from Apple's A12 Bionic series only reach consumers via the iPhone XS launched last September.

The 7nm CPU models reportedly went into mass production at the end of May 2018, and Apple products were released about 4 months later. Thus, this schedule is likely to be repeated next year for A14 chips - as well as rival products produced by Huawei.

1. This is why you will choose AMD's latest 3rd generation Ryzen CPU instead of Intel chips



TSMC has successfully built a new 5nm super modern processing chip process

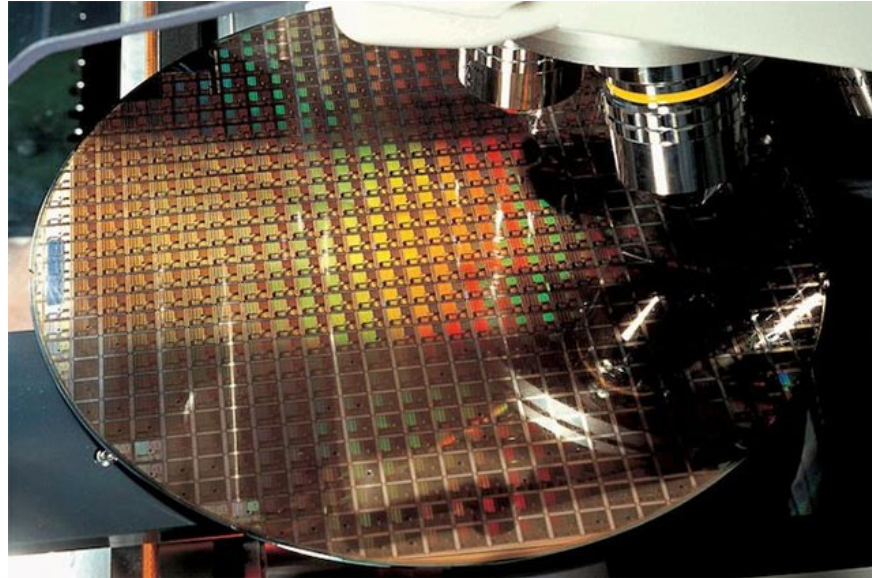
Instead of shifting the entire production plan from the 7nm process, which is still new to the more modern 5nm technology, TSMC decided to expand the 7nm line capacity to meet the growing demand of the market, in particular, is from 5G wireless device manufacturers. TSMC CFO Lora Ho said the company expects stronger demand from smart phone manufacturers as well as major telecommunications equipment providers. TSMC is currently processing the chip for the biggest names in the market today such as AMD or Intel, in which, Samsung is the biggest and most advanced competitor, can directly threaten market share of the company.

1. Snapdragon 855 Plus will be a high-end chip, "special treatment" with very noticeable improvements

As one of TSMC's most 'aggressive' customers, Apple is expected to use the second-generation 7nm chip manufactured by TSMC by the end of 2019 for iPhone and iPad, switch to 5nm by 2020 and then "non-linear" to 3nm by 2022. In an industry in which delays in intermediaries, in particular here is the production of processing chips, frequently occurring and can cause a lot of trouble. As with the smartphone market today, TSMC is still a name worthy of receiving compliments about its goals, cooperative attitude and hard work in innovation, upgrading production lines.

In addition to the advanced 5nm chip, in addition to being physically smaller than the 7nm 'predecessor', which also possesses extremely compact dimensions, 5nm chips can deliver power efficiency. Higher, as well as better processing capabilities, depending on the actual needs of the chip designer.

1. Qualcomm fosters new CPU models for smart, faster, more compact, and better compatibility



The 5nm process possesses many advantages in processing performance and power efficiency

According to analysts, chips produced on the 5nm process may allow previous CPU systems that are only suitable for smartphones to be scaled down and used in devices. wear technology like AR glasses and headphones, while consuming less power, which means to bring more optimal usage time, along with a significantly improved user experience. Not only that, it will also allow future 5G devices to operate significantly more efficiently than current products, while running cooler, with significantly more efficient energy consumption.

You finished reading the article "**TSMC will soon release 5 nanometer chips with many notable improvements**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.