Huawei CEO Richard Yu presents the new Huawei Balong 5G01, a 5G commercial chipset, on Feb 25 in Barcelona, Spain, on the eve of the inauguration of the Mobile World Congress. PROVIDED TO CHINA DAILY

Huawei makes strides in global 5G race

Chinese giant unveils chipset in push to lead next-generation mobile technology deployment

By MA SI
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Huawei Technologies has unveiled its first 5G chipset compatible with global telecom standards, as the Chinese technology giant accelerates steps to commercialize the next generation of mobile communications technology.

The move is Huawei's latest effort to take on global chip giants Qualcomm and Intel, which are also scrambling to enable the application of 5G in consumer electronic devices.

Known as Balong 5G01, Huawei claims the chip is the world's first commercial chipset to meet 5G standards. It can deliver an Internet speed of up to 2.3 gigabits per second, far faster than the speeds currently reached on 4G networks. However, it remains considerably slower than the industry promises of 20 gigabits per second when 5G matures.

The superfast technology is still in its infancy, as the 3rd Generation Partnership Project, or 3GPP, a body that governs global cellular standards, only agreed late last year on the technical specifications of how 5G should work.

Yu Chengdong, CEO of Huawei's consumer business group, said the company aims to launch a 5G phone powered by the new chipset in the third or fourth quarter of this year.

The chipset puts Huawei in the same league as Qualcomm, which has unveiled its own modem, known as the X50. The US semiconductor giant is partnering with a string of smartphone vendors, most of which are Huawei's rivals, to work on 5G handsets.

Xiang Ligang, a telecom veteran and CEO of industry website Cctime, said having in-house 5G chips highlights Huawei's technological strength and will reduce its reliance on foreign suppliers.

"It makes Huawei a strong player to offer an end-to-end 5G solution through its network, devices, and chipset-level capabilities," Xiang said.

The new chip is part of Huawei's broad efforts to gain a lead in the global 5G race. The technology is expected to allow consumers to download large movie files in seconds and help to make autonomous driving a reality, causing ripples across most industries and sectors in a new Internet revolution.

According to the company based in Shenzhen, South China's Guangdong province, it has invested around $600 million in 5G research and development since 2009.

China Mobile to launch five-city trial

Field tests to pave way for world's largest 5G network as nation steps up as global pioneer in telecoms arena

By CHENG YU and **MA SI**

China Mobile Communications Corp aims to build the world's largest 5G trial network and will start tests in five Chinese cities this year, according to the company's chairman.

The company will conduct outdoor field tests in Hangzhou, Shanghai, Guangzhou, Suzhou and Wuhan, and will establish more than 100 5G base stations in each city, said Shang Bing, China Mobile chairman, at the Mobile World Congress in Barcelona.

He said the company will accelerate 5G operation and application in 12 cities including Beijing, Chengdu and Shenzhen.

The move comes as China evolves into a pioneer in the global telecoms arena and the country's telecom operators scramble to gain a lead in the race to commercialize 5G or the next-generation mobile communication technology.

The superfast 5G network is expected to allow consumers to download movies in seconds and help to make autonomous driving a reality.

To make the most of the opportunities, China is rushing to finish its own series of 5G trials.

The country's telecoms authority said on Feb 26 that it has started the third phase of 5G technical research and development by involving Huawei Technologies, the country's biggest telecom equipment maker.

The move is designed to get pre-commercial 5G products ready as soon as possible.

At the conference, China Mobile also said that it succeeded in developing end-to-end connection between the largest base station, terminal chip and testing instrument based on the new radio standard of 3GPP, or 3rd Generation Partnership Project, a body that governs global cellular standards.

The Beijing-based company is now the world's largest telecoms carrier by subscribers. It said earlier that it aimed to deploy more than 10,000 5G base stations by 2020.

"Despite the fast development of 5G, its commercialized progress has entered a crucial phase where telecom carriers are faced with an array of challenges," said Li Zhengmao, vice-president of China Mobile.

Li said that greater efforts are needed to develop the technology required to commercially apply 5G.

"In addition, telecom carriers also need to come up with lower-cost solutions for large-scale 5G application," he said.

Li noted that the integration of 5G with different sectors will be an important development, but work needs to be done to overcome a number of obstacles to the deployment of 5G in various sectors.

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