

Rooted in China, sharing wisdom and enabling innovation

植根中国 分享智慧 成就创新

—— Interview with Mr. Frank Meng, Chairman of Qualcomm China

—— 访美国高通公司中国区董事长孟樸先生

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创立于 1985 年的美国高通公司，是全球 3G、4G 与下一代无线技术的领军企业。自成立之日起，高通致力于移动基础科技的发明，不断推动无线通信技术向前发展，从根本上改变了世界相互连接、沟通和计算的方式。30 多年来，高通的技术一直驱动着智能手机的变革，开启了移动互联网时代，将数十亿人连接起来。高通在 3G 和 4G 当中做出了开创性的贡献，现在正在引领 5G 之路，迈向智能互连的新时代。高通的技术产品正在改变汽车、移动计算、物联网、健康医疗、数据中心等行业，支持数以百万计的终端以从未想象的方式相互连接。

在中国，高通开展业务已经超过 20 年，与中国生态伙伴的合作已拓展至智能手机、集成电路、物联网、软件、大数据、汽车等众多行业。通过受认可

的商业模式、领先的技术和产品、共创价值的合作伙伴关系，以及在中国长期的投资和承诺，高通与中国企业、产业和社区共同成长。高通先后在北京、上海、深圳、西安、无锡开设公司，在北京和上海设立了研发中心，并在深圳设立其全球首个创新中心。2016 年，又成立了高通（中国）控股有限公司，成为高通未来在中国投资的载体。2016 年，在上海成立高通通讯技术（上海）有限公司，首次涉足半导体制造测试业务，不断扩大在华的市场布局。秉承“植根中国，分享智慧，成就创新”的理念，高通致力于在中国向下一代无线技术演进的过程中，为中国的运营商、制造商和开发商等合作伙伴提供全力支持。

适值改革开放 40 周年，为进一步了解高通的发展成就，记者专程采访了美国高通公司中国区董事长孟樸先生。

高通的竞争优势一方面体现在其“发明-分享-协作”的理念上。高通在中国的发展得益于全球移动通信在过去 30 多年的快速



美国高通公司中国区董事长孟樸先生
Mr. Frank Meng, Chairman of Qualcomm China

发展，通过分享发明成果和协作，高通助力更多的中小公司进入到移动通信产业里面来。这也是高通公司在过去 30 多年里对产业所做的重要贡献之一。孟樸董事长说：“公司非常注重技术研发和发明创造，每年 20% 的收入都用于研发，把创新看成是驱动产业发展的一个重要引擎。当然，高通的另外一个优势在于人才。像我们这种高科技公司，最主要的财富就是人。高通集合了全球最优秀的无线通信领域、无线通信系统方面的技术专家和工程技术人员，包括很多非常优秀的中国研发人员。所以在移动通信产业领域我们一直走在产业的前端，通过我们的研发推动整个产业不断从 2G 到 3G，从 3G 到 4G，现在正在从 4G 到 5G 进行演进。”

高通其实是整个移动通信产业里重要的创新引擎，为产业提供基础研发。高通很重要的一个合作对象就是运营商。高通



Qualcomm 办公楼 Qualcomm Office Building



Qualcomm 深圳创新中心开业
Qualcomm Shenzhen Innovation Center opens

不仅仅提供半导体产品，它在整个全球移动通信系统中尤其是标准方面都有很多研发成果和成就，与包括中国在内的全球运营商一起合作推动每一次的技术演进，使得通信系统对人们的生活和工作能够提供更好的支持。在整个移动通信和移动互联网时代，是高通通过和运营商的合作把技术平台搭起来的。高通另外一个重要的合作对象就是众多的手机厂商，比如小米、OPPO、vivo 等，帮助他们打造高品质的移动终端。

近几年，中国一直大力推动半导体产业的发展，高通也积极参与到支持和扶持中国的半导体产业的发展中，帮助中国半导体产业实现跨越式发展。孟樸董事长举例说：“中芯国际是我们 10 多年的合作伙伴，我们帮助他们实现 28 纳米制程的商用，并采用其 28 纳米制程工艺用于制造我们的芯片产品。高通还和比利时微电子研究中心、华为公司一起联合投资中芯国际集成电路研发上海公司，以 14 纳米先进制程工艺研发为主，打造了中国最先进的集成电路



Qualcomm 在全球首次涉足半导体制造测试业务，2016 年在上海外高桥自贸区成立高通通讯技术（上海）有限公司
Qualcomm stepped into semiconductor manufacturing and testing business for the first time globally through the establishment of Qualcomm Communication Technologies (Shanghai) Co. Ltd. in Shanghai Waigaoqiao Free Trade Zone in 2016

研发平台，促进了中国半导体制造产业的快速发展。高通是全球最大的晶圆芯片设计公司，所以无论是对晶圆生产制造技术的掌握还是商业采购量的规模化方面，都能够像对中芯国际这样的中国企业提供帮助。高通携手中芯国际投资的江苏长电半导体有限公司，是中国内地第一家最早进入 10 纳米先进技术节点产业链的半导体中段硅片制造公司。我们支持中国半导体产业并不止针对中芯国际，而是针对整个产业链，帮助中国在整个半导体制造的各个环节加速成长。”

高通还积极推动中国移动通信业在技术研究、人才培养和科研成果产业化等方面的发展。1998 年，北京邮电大学和高通联合成立研究中心，目前已将联合研发项目扩大到清华大学、北京大学、香港中文大学等知名学府和科研院所。孟樸董事长说：“2018 年是我们和中国高校合作 20 周年，通过合作大家可以快速分享科研成



Qualcomm 亮相 2018 世界移动大会
Qualcomm at Mobile World Congress 2018

果，通过与高校合作搭建起一个培育人才的平台，现已培养出大批移动通信领域的专家。另外，我们作为从一个很小的初创企业成长起来的公司，非常关注中国初创企业的成长。前几年，高通在中国设立总额 1.5 亿美元的中国风险投资基金，到现在已经投资了 40 多家创业公司。我们在中国还在做很多的投资，希望通过我们公司的一些先进理念和技术，在初期对他们能够有一个正面的影响。”

展望未来，中国经济稳中向好，中国高科技产业正迈入“黄金时代”。5G 通信被认为是“开启真正万物互联的钥匙”，全球正迎来 5G 时代，中国有望成为领跑者。孟樸董事长表示：“希望我们的理念能够在中国植根，和合作伙伴一起分享智慧，成就创新，与中国合作伙伴和客户一起成长。随着 5G 技术地不断实现，通过 5G 连接万物，加上人工智能、大数据这些不同技术联合起来，高通在中国会有更多的发展空间。同时，我相信高通和合作伙伴在‘一带一路’的发展中，也会获得更多的商业机会，大家能够一起推动中国产业和整个社会的进一步发展！”

Established in 1985, Qualcomm is a leading company specialized in global 3G, 4G and next-generation wireless technology. Since its establishment, it has been committed to creating foundational technologies that transform how the world connects, computes and communicates. For more than 30 years, Qualcomm's technological breakthroughs have powered the smartphone revolution and connected billions of people. Qualcomm pioneered 3G and 4G – and are now leading the way to 5G and a new era of intelligent, connected devices. Qualcomm's products are revolutionizing industries, including automotive, computing, IoT, healthcare and data center, and are allowing millions of devices to connect with each other in ways never before imagined.

Qualcomm has been rooted in China for over 20 years



搭载 Qualcomm 骁龙智能手机终端亮相 2018 世界移动大会·上海
Qualcomm Snapdragon enabled mobile devices exhibited at Mobile World Congress Shanghai 2018

and has been collaborating with Chinese enterprises in many industries like smartphone, integrated circuit, IoT, software, Big Data and automobile. Through its recognized business model, leading technology and products, value-creation partnership and long-term investment and commitment in China, Qualcomm has been growing together with Chinese enterprises, communities and industries. Qualcomm has set up offices in Beijing, Shanghai, Shenzhen, Xi'an and Wuxi; R&D centers in Beijing and Shanghai; and its first global innovation center in Shenzhen. In 2016, Qualcomm (China) Holding Co., Ltd. was established as the company's future investment carrier in China. Qualcomm also opened Qualcomm Communication Technologies (Shanghai) Co. Ltd., a semiconductor test facility in Shanghai in 2016; its first foray into providing manufacturing services for semiconductors. Qualcomm embraces the idea of "rooted in China, share wisdom and enable innovation" and is devoted to providing great support

to Chinese operators, OEMs and other ecosystem players in the evolution to the next-generation wireless technology.

To learn more about Qualcomm's development and achievements in China, Multinationals in China talked with Frank Meng, Chairman of Qualcomm China.

Qualcomm's "Invent - Share - Collaboration" business model is one of its competitive advantages. Qualcomm's fast development in China has benefited from the 30-year rapid growth of global mobile communication. Through sharing inventions and collaboration, Qualcomm has helped more small and middle companies to expand into the mobile communications industry. This is also one of the important contributions Qualcomm has made to the industry in the past 30 years. "Qualcomm attaches significant importance to R&D and invention. Approximately 20% of our annual revenue is re-invested into R&D. We see innovation as a key driving force to the development of the industry. Talent is another advantage of Qualcomm. In high-tech companies like Qualcomm, talents are the foremost treasure. We have the most talented inventors and engineers in wireless communication area, including many Chinese research staffs. These have made it possible for us to lead the mobile communication industry and continue to drive the evolution from 2G to 3G, from 3G to 4G; now we are leading the way to 5G," said Frank.

In fact, Qualcomm acts as the R&D engine of the mobile communication industry by inventing the foundational research and development. Operators are important partners for Qualcomm. Qualcomm owns many R&D achievements in global mobile communication system, particularly in terms of standard and specification in addition to delivering semiconductor products. Working with global operators,



Qualcomm 5G NR 原型系统、5G 测试平台以及 5G 参考设计
Qualcomm 5G NR prototype system, 5G test platform and 5G reference design

Qualcomm has been driving the technology evolution generation by generation and enabling innovation that benefits many industries and billions of people. Throughout the development of wireless communication and the Mobile Internet, Qualcomm has worked with operators to establish the technology platform. Qualcomm also partnered with smartphone makers such as Xiaomi, OPPO, vivo etc. to support them in developing high-quality mobile devices.

In recent years, China has been vigorously promoting the development of the semiconductor industry. Qualcomm has also actively participated in supporting the development of the Chinese semiconductor industry. Frank said, "we have been collaborating with Semiconductor Manufacturing International Corporation (SMIC) for over 10 years. We supported SMIC on the commercialization of 28nm process technology and we worked together to successfully fabricate



世界地球日，Qualcomm 与 NGO 合作伙伴 WABC 合作发起 CSR 主题活动
Qualcomm and its NGO partner WABC's CSR campaign at World Earth Day

Qualcomm Snapdragon processors at 28nm. In addition, Qualcomm also joined SMIC, imec (a nanoelectronics research and development center in Belgium), and Huawei to form SMIC Advanced Technology Research & Development (Shanghai) Corporation, focusing on R&D towards next generation CMOS logic technology and build China's most advanced integrated circuit development R&D platform. As the largest fabless IC design company in the world with strong expertise in wafer manufacturing and economy of commercial scale, Qualcomm is well positioned to work with and provide support to Chinese enterprises like SMIC. SJ Semiconductor Corp. (SJSemi), jointly invested by Qualcomm and SMIC, becomes Mainland China's first middle-end semiconductor company to enter the industrial chain with 10nm advanced process node production. We actually accelerate the growth of the entire Chinese



Qualcomm 骁龙 845 移动平台
Qualcomm Snapdragon 845 Mobile Platform

semiconductor industry," said Frank.

Qualcomm also actively promotes the development of China's mobile communications industry in aspects such as technology research, talent cultivation and industrialization of research findings. In 1998, Qualcomm and Beijing University of Posts and Telecommunications jointly established a research center. Now, the joint research program has been extended to many renowned universities and academics such as Tsinghua University, Peking University and Chinese University of Hong Kong etc. "2018 marks the 20th anniversary for Qualcomm's collaboration with Chinese universities. We can quickly share the research priorities and establish a platform of talent development through our collaborations," said Frank. "Qualcomm also attaches significant importance to Chinese start-ups. Qualcomm has set up the \$150 Million strategic China venture fund, and to date Qualcomm Ventures already invested in 40+ Chinese startups. We will continue to make more investment in China and expect to bring positive influence to hoping to influence them at their early stages in a positive way through our advanced philosophy and technologies."

Looking into the future, the Chinese economy is growing steadily, and the Chinese high-tech industry is stepping into a "golden age". 5G is regarded as "the key to truly open Internet of everything," and China is poised to take a leading role in the coming 5G era. Frank expressed that Qualcomm would like to share wisdom, enable innovation and grow together with Chinese partners and customers. While 5G is being commercialized and combined with the development of artificial intelligence and Big Data, Qualcomm will boast more opportunities in China. We believe that Qualcomm and its partners will see more business opportunities and jointly impel the further development of industries and the entire society under the Belt and Road Initiative.

我们的发明 让世界智能互连

Qualcomm

Inventing the tech the world loves

发明人人喜爱的科技

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