As prepared for submission

Testimony of Sean Maloney Executive Vice President and General Manager, Mobility Group Intel Corporation

On behalf of The US Chamber of Commerce

"US – China Economic Relations"

Before the Finance Committee United States Senate

June 23, 2005

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to appear before you today at this important hearing on US-China economic relations. My name is Sean Maloney, I am Executive Vice President and General Manager, Mobility Group for Intel Corporation. I am pleased to testify today on behalf of Intel and the US Chamber of Commerce.¹

Let me begin by thanking the members of this Committee for holding this hearing about the significance of our trade relationship with China.

China holds tremendous opportunities for US companies and for our industry specifically. In spite of these opportunities, concerns have been rising about the US - China economic relationship. Because of the importance of the Chinese market, it is not surprising that the challenges that arise can be difficult to address. We believe that clear and constructive dialogue between both governments is critical to resolving these problems. Industry and other stakeholders must also work together to implement capacity building programs and share best practices in order to help prevent future difficulties.

¹ For a more detailed review of the US Chamber of Commerce's position on the United States- China economic relationship, pleas refer to the testimony presented by Myron Brilliant Vice President East Asia of the US Chamber of Commerce before the Ways & Means Committee, April 14 2005.

US High Tech in the Global Economy

Intel Corporation was founded in 1968 with operations in California and since then we have become the world's largest semiconductor company and have expanded our manufacturing presence in the US and around the world. Today, 12 of our 16 factories are located here in Arizona, California, Colorado, Massachusetts, New Mexico and Oregon (the 4 others are in Ireland and Israel). In addition to these manufacturing facilities (called "fabs" in the semiconductor industry), we have supporting assembly and test facilities in various countries including in Costa Rica, China, Malaysia and the Philippines. These assembly and test facilities are used to package and perform tests on our products after the manufacturing process has taken place. These facilities have been established abroad since the early 1970's when we opened the first assembly & test facility in Malaysia.

As our industry has become more engaged around the world, we also have experienced strong growth at home. Intel's Shanghai assembly & test facility for example, is part of a network of such facilities worldwide that help make our US operations more competitive. The jobs created in Shanghai complement high-end US manufacturing jobs, as nearly all of the chips assembled and tested there are produced by Intel manufacturing sites in the US.

This global structure ensures our closeness to our customers, helps diversify risks in case of regional emergencies and allows us to tap into a talented workforce with a variety of skills around the world. Indeed, to optimize global competitiveness, it is important to locate manufacturing and other facilities around the world.

Although approximately 75% of the Intel Corporation's \$34 billion annual sales come from outside the US, we employ 60% of our workforce here. Of our 80, 000 employees world wide, over 50,000 employees work in the US at average compensation levels substantially higher than the national average.² In addition, Intel facilities are often the central businesses of information technology "clusters" that, in conjunction with local municipal services, attract numerous other large and small information technology companies to an area. Intel's large facilities in Arizona, Oregon, California and other states have also had an economic multiplier effect that generates economic growth, tax revenue and personal income at substantially higher levels than that directly produced by Intel. For instance, EcoNorthwest estimated that Intel generated \$9 billion in positive economic impact to the state of Oregon in 2003, substantially higher than Intel direct payroll of \$1.5 billion.³

In addition to our contributions through direct employment in communities across the U.S, we have also invested over \$40 billion in manufacturing, R&D, training and

² According to AeA' s Cyberstates 2005, US high-tech industry workers were paid an average of 69,000 in 2003, the most recent wage data available for the tech industry. High-tech wages were 84 percent higher on average than other jobs in the private sector at 37,500 in 2003. (p. 7)

³ "Economic Impact of Intel's Oregon Operations", EcoNorthwest, 2003

education across the country since 2000. Our commitment to the United States is manifest and enduring.

Our future ability to invest, grow and remain competitive however is clearly linked to our continued access to world markets. Sales to foreign markets will increasingly be an engine of growth of the technology industry. By improving access to these markets, US companies and their workers will be more competitive.

Growth through trade is also critical to our industry's success against competitors around the world. In fact, during the 2000- 2001 economic downturn, sales to China, Russia, Eastern Europe and other emerging markets were the bright spots in an otherwise soft market. These opportunities for our products abroad are illustrated by the sheer volume of US technology product exports. US high-tech merchandise exports reached \$191 billion in 2004.⁴ In 2004 tech goods exports represented 23% of all exports from the United States, while high-tech goods represented 18% of total US imports.⁵ On average, over 60 percent of the US high-tech industry's revenues come from outside the US (compared to over 75% for Intel Corporation). Semiconductor industry exports specifically are the leading US high-tech industry export, reaching \$48 billion in 2004, a 27% increase over the same statistic for 1998.⁶

Opportunities in China

The United States-China commercial relationship is of immense and increasing importance to both countries. US-China trade has boomed in recent years. The United States ranked second among China's global trading partners in 2004, and China was again the 3rd largest trading partner for the United States. US exports to China have grown by 114% since 2000—five times faster than to any other country.

From the US semiconductor industry's perspective, China represents an ever more remarkable opportunity. Semiconductors were the second largest US export to China in 2004 with a trade surplus nearing \$1 billion.⁷ Four of the ten most successful semiconductor companies in the Chinese market are American. This large market is expected to grow; in 2004, China' consumption represented 19.7% of the world semiconductor market (\$35 billion); by 2006 the Chinese market is expected to account for up to 30% of the world market for semiconductors.⁸

⁴ AeA's Cyberstates 2005

⁵ Ibid., p. 36

⁶ Ibid., p. 41

⁷ In 2004 soybeans were the largest US exports to China. Source: US Department of Commerce, Bureau of the Census. According to the US Department of Commerce, US semiconductor exports to China only reached \$2.3 billion in 2004. However, this official data underestimates the size of the Chinese market for US semiconductor exports because it does not take into account the US semiconductor products that were manufactured in the US but exported to China via supply chains in 3rd countries.

⁸ World Semiconductor Trade Statistics research presented at the World Semiconductor Council in May 2005.

In 1985, Intel became one of the first American semiconductor companies to establish a presence in the People's Republic of China. From that first 2 person office in Beijing, we have grown to a workforce of close to 5,000 people and have invested \$1.3 billion in extensive research and development (R&D) centers, assembly and testing facilities, as well as sales and marketing operations across the country including in Beijing, Chengdu, Shanghai, and Shenzhen. Intel has invested in all these areas in order to ensure we remain one of the preeminent suppliers of IT to the burgeoning China market. Supply chain economics, brand-building, the access and recognition that comes from being part of the local community, all mandate that we "live near our customers".

As a young child in London in the 1960s, I lived near the British operations of the Ford Motor Corporation. Parents of classmates and friends worked for the plant. My friends and I regarded Ford as a British company, and Ford cars as British cars. To one day own a Ford automobile was a common dream for a teenager awaiting his license. It was during these years that Ford was growing rapidly and profitably in both Britain and Europe. By being aggressively local, Ford achieved foreign success that helped propel the domestic automotive industry forward as the then driver of the American economy. There is no other winning formula for American companies looking to succeed abroad.

This past week, I had the privilege of visiting Intel's partially-constructed assembly and test site in Chengdu, Sichuan province. There, Chinese citizens, Americans, and many other nationalities are working hand-in-hand to build a world-class facility that will import very high value integrated circuits, manufactured primarily in United States facilities, and complete their final assembly for sale across Asia. Intel's local presence in Chengdu gives it deep ties to a community that will undoubtedly help drive future commercial success in this rapidly growing region. That success will benefit US-based employees and their American employer.

In 2001, China became the fastest country to adopt our newly introduced Pentium 4 processor. Today, China is adopting the Intel® Pentium® 4 processor more quickly than any other country in the world and the Chinese notebook market has transitioned to Intel® CentrinoTM Mobile Technology at a faster rate than any other region. As we celebrated the 20th anniversary of our presences in China just last week, we have become the world's largest semiconductor exporter to China. Intel sales to China were nearly \$5 billion in 2004, representing over 10% of our worldwide sales.⁹ This represents an almost 500% increase in revenue since 1997, Intel's first billion dollar year in China.

⁹ According to the World Semiconductor Trade Statistics research presented at the World Semiconductor Council in May 2005, Intel Corporation's share of the Chinese semiconductor market was 16.6% of the Chinese market in 2004.

Improving US trade with China

Considering the importance of the US - China economic relationship and the speed at which it has developed spurred by China's World Trade Organization (WTO) accession, it is not surprising that when problems occur, they tend to have significant commercial and often political ramifications.

Since China's accession to the WTO in 2001, there has been remarkable progress in our ability to ship products to China. Most notably, tariffs on most high-tech products immediately went to zero when China joined the WTO's Information Technology Agreement (ITA).¹⁰ Since the year 2000, US semiconductor exports to China have increased by just over 200%¹¹. Our industry has also benefited from the Chinese government's efforts to improve transparency in the promulgation of laws and regulations in some areas. For example, the Ministry of Information Industry (MII) has worked very closely with the electronics industry to develop a feasible and effective regulation that restricts the use of certain hazardous substances in electronic products. When the regulated community at large is invited to provide technical expertise in the development of laws and regulations, there is an opportunity to ensure that various interests have been considered, thus preserving and promoting open trade.

Despite progress in some legal and policy areas, we must continue to work together to address the problems that remain and perhaps endeavor to avoid new ones. Looking at the opportunities for our industry to increase its exports, strong enforcement of intellectual property rules, commitment to global standards as well as open and transparent government procurement policies must be top priorities in China.

a) Intellectual Property Rights: improving protection and enforcement

Innovation driven by investment in R&D is the fuel of success in the information technology industry. Thus, intellectual property rights are the legal bedrock of the information technology industry. Maintaining these rights with equanimity and diligence is a fundamental joint responsibility of both industry and national governments that want to ensure the success of information technology endeavors.

However, Intellectual property (IP) theft today is an increasing global problem which has significant impacts on the growth of the high-tech industry. We recognize that the Chinese government, at the central level and under the leadership of Vice Premier Wu Yi and the Market Order Rectification Office of the Ministry of Commerce, is taking important and constructive steps to improve coordination among relevant agencies responsible for IP protection and enforcement. We also note that the Supreme People's Court and the Supreme People's Procuratorate recently [12/04] issued new Judicial Guidelines which have lowered the threshold for criminal prosecution of certain Intellectual Property offenses in China. While China's leadership is working on this

¹⁰ Tariffs on semiconductors exported to China ranged between 6 and 12 percent prior to their joining the Information Technology Agreement (ITA).

¹¹ US exports to China for HTS 8542 increased by 207.45% between 2000 and 2004; for products in HTS 8541 exports increased by 23.50%. Source: US Department of Commerce, Bureau of the Census.

issue, we encourage them to continue to focus efforts on addressing these concerns to ensure that IPR infringers are effectively deterred.

Chinese companies are increasingly challenged by IPR infringement as well and are beginning to appreciate how strong IPR enforcement could contribute to their own competitiveness. Consequently, China's efforts to increase IPR enforcement will not only help our bilateral business relations, they will greatly benefit China by fostering incredible innovation, spurring private enterprise and jobs, and ensuring the health and safety of the Chinese people.

b) Global standards

The basic economic 'facts of life' in the information technology industry—economies of scale, economies of scope, steep learning curves and extremely rapid price-performance improvements of information technology products—make technology market segments based on open, global standards, for which companies worldwide can compete evenly, far more likely to flourish than those based on national or proprietary standards.

China has made progress in improving the transparency and openness of its own standards process. However, there is still a concern that China has moved to develop, and adopt unique technology standards across a range of technology products. Examples include a mandated encryption standard for wireless communications devices and the development of unique standards for AVS for media/TV, IGRS for connectivity and EVD for recording media among others. The trend toward mandated unique standards is of particular concern. Competition, innovation, and interoperability are best served by standards that are adopted through market forces.

With its strong manufacturing capabilities and rapidly growing consumer base, China is playing an increasingly important role in the development of the Asian and global IT industry. Although it may appear to be beneficial to local companies in the short term, the use of duplicative local standards as a tool to protect local industry or force technology transfer is harmful to China's interests in the long term. To compete in markets outside of China, these Chinese companies will need to continue to contribute to and adopt global standards as they have been doing in many instances through the International Organization for Standards (ISO), the International Telecom Union (ITU) and the International Electrotechnical Commission (IEC). Most successful high-tech companies have done well due to their ability to innovate based on global standards, including standards developed by ISO, IEC and ITU as well as those developed by other global standards setting organizations such as the Institute of Electrical and Electronics Engineers (IEEE). Doing so allows them to manufacture the same products for a global market, reducing product costs and increasing product value for end users in the process.

c) Government procurement

China became an observer to the WTO's Agreement on Government Procurement upon its accession in late 2001 and agreed at that time to enter into negotiations to join the agreement as soon as possible. China's passage in late 2002 of its new Government Procurement Law that aimed to improve transparency, limit corruption, and remove local protectionism marked a step forward in these areas.

China's implementation of its procurement law should not exclude or diminish the ability of foreign companies to fully participate in China's procurement market. There is a concern that the recently issued Trial Implementing Regulations on Government Procurement of Software would effectively close the door for most non-Chinese companies trying to sell software products and services to China's largest purchaser, the Chinese Government.

An open, competitive, transparent, nondiscriminatory and technology-neutral government procurement regime is in China's interest and in the interest of China's trading partners. We hope that the Chinese government will commence negotiations to accede to the GPA. This would encourage investment and active participation by leading foreign companies in China's economy and bring the best products and services for the best value to China's government and consumers.

Strengthening the US- China economic relationship

Various factors have contributed to rising anxiety about US commercial relations with China. In the short and medium term, these concerns must be dealt with through clear and consistent communication between governments aimed at solving problems at hand in a timely manner.

From our industry's perspective, constructive negotiations and open communication between both governments have successfully resolved important issues while avoiding lengthy legal proceedings in the WTO.

Through 2003 and 2004, the Administration and Members of Congress worked with the Chinese government to resolve an important issue facing the US semiconductor industry: the value-added tax (VAT) rebate on semiconductors manufactured in China. China's VAT regime had provided for a rebate of all but 3 percent of a 17 percent VAT on semiconductors manufactured in China thereby raising market access concerns among non-Chinese semiconductor designers and manufacturers. In addition to the rebate for domestically produced chips, China's VAT regime also accorded favorable treatment to semiconductors manufactured abroad from Chinese designs.

In July 2004, the US and Chinese governments announced that they had successfully negotiated an agreement on the issue while avoiding a formal WTO dispute resolution proceeding. The quick and mutually satisfactory resolution of this problem was a very positive development US-China economic relations and for the worldwide semiconductor industry. We believe this approach provides a good example of how negotiations can help avoid a potentially damaging long term trade dispute. In light of this success, we

encourage both governments to exhaust all possibilities before resorting to litigation or retaliation.

Beyond areas where urgent action and government to government negotiations are required, industry and other stakeholders can play an important role in preventing problems from escalating into formal disputes, through capacity building and exchanges of best practices. Several companies, industry groups, universities and agencies have already engaged in capacity building programs in a variety of policy and legal areas.

For example, in November 2004, the Semiconductor Industry Association (SIA) worked with the US Department of Commerce, the Chinese government and Chinese industry to hold an IP seminar for China's semiconductor sector. This seminar informed Chinese policymakers and industry executives about the range of benefits of IP protection for both the domestic and worldwide semiconductor industry, the steps companies can take to protect their IP, and actions that can be taken to reduce IP violations in China.

The U.S. Chamber is also prepared to support the Chinese government in its efforts to extend greater protection to U.S. goods. They have embarked on a targeted program offering on the ground capacity building efforts in the provinces, fostering public awareness of the importance of IPR protection among the Chinese public, and advising on policy changes to better strengthen the legal framework.

Conclusion

The United States has a substantial proportion of the world's most successful and dynamic information technology companies---and they generate an incredible number of high-paying, desirable US-based jobs and pay billions in US taxes. Intel Corporation, and our American workers, benefited from our growth overseas. Between 1999 and the present day, while our foreign revenues increased substantially, Intel added over 15,000 net jobs at our US locations.¹²

Our industry, and our American workers, are extremely well-positioned to continue to benefit from the opportunities presented by large and growing global markets. It is through greater economic integration, the reduction of trade barriers, the mediated resolution of trade disputes, the growth of the information technology sector of China, and by 'going local' that these benefits will be realized. At the same time, China possesses a large number of information technology companies and a technically educated workforce that are ready and willing to compete on a world stage. It is through adherence to international technology standards, the reduction of tariff and non-tariff barriers, and the dedicated protection of intellectual property rights, that the Chinese government will encourage the success of these endeavors.

¹² Today, over 75% of Intel Corporation's revenues come from foreign markets, compared to 60% just 5 years ago.

We believe that positive and proactive steps taken by both Governments in cooperation with industry and other important stakeholders will be critical to improving our long-term economic relationship with China. As other countries and industry groups around the world are investing heavily in similar programs, it is essential that we continue to improve this type of US-led engagement over time.

Our economic relationship needs to remain healthy for both sides, indeed for the world economy, to prosper. The US and China must remain committed to resolving issues at hand without resorting to measures that will negatively impact workers and industries on either side.