

**JOINT STATEMENT OF THE 10TH ANNIVERSARY MEETING OF THE
WORLD SEMICONDUCTOR COUNCIL (WSC)**

MAY 11, 2006

SAN FRANCISCO, CALIFORNIA

The world's leading semiconductor industry associations today held the 10th Anniversary meeting of the World Semiconductor Council (WSC). The meeting, held in San Francisco, California, was conducted under the "Agreement Establishing a New World Semiconductor Council" approved at the third WSC meeting and signed on June 10, 1999, and amended on May 19, 2005.

The WSC meets annually to bring together industry leaders to address issues of global concern in the semiconductor industry with a goal of expanding the global market for information technology products and services, and promoting fair competition and technological advancement and sound environmental, health and safety practices. The WSC encourages cooperation in such areas as environment, safety and health practices, protection of intellectual property rights, open trade, investment liberalization, and market development. All WSC activities are guided by principles of fairness and respect for market principles consistent with the World Trade Organization (WTO) rules and with the laws governing the respective WSC member associations. The WSC reaffirmed that markets should be open and competitive. Antitrust counsel were present throughout the meeting.

The meeting was chaired by Brian Halla of National Semiconductor; regional delegations attending the meeting were chaired by Carlo Bozotti of STMicroelectronics, Satoru Ito of Renesas Technology, Chang-Gyu Hwang of Samsung Electronics, and Frank Huang of Powerchip Semiconductor.

During the meeting, the following reports were given and discussed, and actions on these were approved:

Membership

In light of the purposes of the WSC and GAMS, it is hoped that the semiconductor industry associations of countries or regions with major presence and importance in the world semiconductor industry will join the WSC. The WSC today represents the leading countries/regions in the semiconductor industry. The WSC re-confirmed its willingness to welcome the China Semiconductor Industry Association (CSIA) as a member of the WSC, a step which requires the support of the Government of the People's Republic of China.

Free and Open Markets

The WSC re-confirms, as a founding principle, the importance of ensuring that markets be open and free from discrimination, and that the competitiveness of companies and their products be the principal determinant of industrial success and international trade. Governments and authorities should, therefore, insure full intellectual property protection, full transparency of

government policies and regulations, non-discrimination for foreign products in all markets, a tariff- and barrier-free global environment for semiconductor products, an end to investment or other regulatory restrictions tied to technology transfer requirements, and removal of unreasonable burdens on world commerce.

Access to advanced and affordable semiconductor technology promotes economic development by increasing productivity and providing the infrastructure needed to compete in the digital age. Accordingly, the Doha Round of the World Trade Organization (WTO) should focus on policies that promote complete open-access to semiconductors and other information technology goods and foster investment in these sectors. In addition, in order to spread the benefits of information technology (IT) to consumers around the world, complete tariff elimination on all semiconductors should be achieved through additional countries joining the Information Technology Agreement (ITA).

A recent evolution in packaging technology applied to semiconductor products such as multi-chip ICs led to the reclassification of certain semiconductors for customs purposes. WSC members appreciate the support of our GAMS members in eliminating all existing duties on Multi-chip ICs as of April 1, 2006. The WSC urges the GAMS to achieve zero duties on these products worldwide by securing additional signatories to the Multi-chip IC zero tariff agreement. WSC also urges the GAMS to expand geographic and product coverage by ensuring that all types of semiconductors, including certain types which are not covered by the current "Agreement on Duty Free Treatment of Multi-chip Integrated Circuits," are included in ongoing tariff elimination efforts under the auspices of the WTO. The WSC instructed the JSTC to assess where further progress could be made to eliminate tariff and nontariff barriers that adversely affect semiconductor trade.

Levies

Semiconductors are the building blocks of the modern information technology economy. The semiconductor industry is characterized by rapid innovation that allows us to offer our customers ever higher functionality at ever reduced costs. Many of our products contribute directly to enhanced economic productivity. Copyright levies on digital media have the opposite effect by increasing the taxation burden as the functionality of a device increases, thereby erasing the cost savings that can be passed on to the consumer. Recent reports indicate that the amount of levies collected has increased dramatically over the past few years.

The WSC believes that governments/authorities should not allow the establishment of new levies on digital equipment and blank digital recording media or any equipment that can support content protection such as digital rights management solutions and technical protection systems.

In addition, members of the WSC encourage our governments/authorities to ensure that language opposing levies is included into new trade agreements and utilize WTO mechanisms to address levies as inhibitors to market growth.

Governments/authorities should also ensure proper accountability and transparency of

levy schemes, in order that the public may be made aware of every instance where levies are imposed, their amounts and the purposes that they are designed to serve.

Effective Protection of Intellectual Property

Semiconductor producers invest a very high percentage of their revenues in R&D and the intellectual property (IP) that results is the lifeblood of these companies. Failure to adequately protect IP is damaging to the semiconductor industry and ultimately impedes the technological progress that has benefited consumers around the world. The WSC discussed the activities of the IP Task Force, which the WSC had created in 2004 to review IP issues relevant to semiconductors around the world.

The WSC reiterates its call for all governments/authorities to implement effective enforcement measures for protection of IP rights within their jurisdictions. WTO members are obligated under Article 41 of the TRIPS Agreement (Agreement on Trade-Related Aspects of Intellectual Property Rights) to ensure that enforcement procedures of IP rights “are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement.”.

The WSC appreciates efforts undertaken since last year in countries where enforcement is a substantial concern, including increased constructive dialog on the need for increased transparency on enforcement and private sector initiatives to inform companies about IP rights. To achieve further deterrence of IP violations, the WSC encourages stepped up efforts by the governments of these countries to review and enhance their IP enforcement measures including remedial measures under civil law and, where appropriate, criminal proceedings as well as further improvements in transparency regarding their enforcement efforts.

The WSC again called attention to the WSC’s 2004 paper, “WSC Policy Regarding Layout Design Intellectual Property,” which set out a multi-pronged approach to address counterfeiting of ICs and other semiconductors. In addition to the lost revenues suffered by the original designer of the legitimate IC, counterfeiting can result in unreliable parts being purchased by unwary consumers. The WSC encouraged all segments of the semiconductor industry to review the WSC position to be found on the WSC website (at <http://www.semiconductorcouncil.org/news/agreement.php?rowid=9>).

This year the WSC received a report on the discussions in the IP-TF relating to the recent improvements in automated design tools that allow semiconductor layout designs to be made by copying a protected layout design with virtually no intellectual effort. The copy may not appear to be facially identical to the original and these copies may cause damage to companies that own the protected layout designs and need to recoup their R&D costs. These factors may deter the significant R&D investments that lead to innovation and ultimately would prevent consumers

from benefiting from new chip innovations. The WSC adopted the IP-TF statement, attached, which seeks to clarify the layout design protection laws.

The WSC received an initial report regarding a government initiative toward an international agreement to address the growing problem of counterfeiting and pirated goods. In the report, these goods were described as a consumer protection risk which dilute the value of rights holder's brands and are often a source of funds for organized crime. WSC intends to discuss this topic after further study.

Measures to Support the Growth of the "Internet Society"

Semiconductors are the key enabling technology of the information technology revolution, and they are key component of the growth and spread of the internet society. It is vital that trade in this area remains as open as possible and that international rules and domestic regulations foster an open and competitive market.

Legislative & Regulatory Issues

High technology goods including semiconductors and products in which semiconductors are the principle components are increasingly affected by a wide array of regulatory measures in markets around the world. In situations where product regulations are deemed necessary, they must be nondiscriminatory and based on sound and widely accepted scientific principles and available technical information and should not impede the effective functioning of the market.

Consistent with existing WTO rules, regulations should be the least trade-restrictive as possible. The WSC continues to examine legislative and regulatory issues from this perspective.

Cooperative Approaches in Protecting the Global Environment

The WSC is firmly committed to sound, scientifically based, positive environmental policies and practices. The members of the WSC are proactively working together to make further progress in this area.

(1) PFOS (Perfluorooctane Sulfonate)

As part of the WSC's proactive approach to sound Environment, Safety and Health practices, members of the WSC and SEMI have endorsed a plan which applies to both critical and non-critical photolithography applications of perfluorooctyl sulfonate (PFOS)-based chemicals in semiconductor manufacturing. Very small amounts of PFOS-based compounds are critical ingredients in leading edge photoresists, materials used in the photolithographic process for imprinting circuitry on silicon wafers. Under the agreement, members of the WSC are committed to ending non-critical uses of PFOS and will work to identify substitutes for PFOS in essential uses for which no other materials are presently available. Additional details on this global voluntary agreement can be found at www.semiconductorcouncil.org.

(2) PFC Emission Reduction

Each member of the WSC has committed to reduce PFC gas emissions by at least 10% from a baseline value¹ by the year 2010 even while production volumes are increasing substantially. The WSC members also actively share non-competitive information on technologies that can aid in reducing PFC emissions. Since the start of the program, WSC members have devoted considerable resources to meet their PFC reduction goals and these investments have paid off as emissions for 2005 were far below projected levels. According to an assessment performed by SEMATECH, alternative chemicals and new technology now exist to either consume or abate most PFCs before they are emitted. Annual aggregate data on PFC emissions can be found in Annex I.

(3) Energy Savings in semiconductor manufacturing

The WSC believes that the efficient utilization of energy resources is an important factor in the realization of cost effective manufacturing for both semiconductor makers and their suppliers, and sees energy saving as an important issue. The WSC has established a partnership with suppliers to the semiconductor industry (represented by the trade association SEMI) in a joint effort to achieve energy-savings. As part of this effort, best practices for energy saving activities in high volume manufacturing sites have been shared as part of the effort to reduce energy use across the industry.

(4) Contribution of semiconductors to end-product energy savings

The semiconductor industry has already benefited society by making substantial energy savings possible through end-products utilizing semiconductors. The WSC directs JSTC to further study this issue.

(5) Quantitative Targets

The WSC's objective is to specify environmental performance indicators that reflect the levels of energy and water consumption by the semiconductor industry as well as the waste that it generates; and to establish feasible quantitative targets that WSC members can jointly work towards. The WSC recognizes the achievements already made on common metrics which are currently being applied to a pilot project, and the WSC is hopeful that positive progress on common targets can be made. The pilot project was launched to address key challenges in the area of energy savings, waste reduction and water savings.

(6) Other Environment, Safety and Health Issues

The WSC has a great interest in addressing the global impact of ESH regulations on our industry and in ensuring that regulatory programs are technologically feasible, coordinated and effective in achieving environmental protection. Examples of legislation of interest include Japan's Greenhouse Gas legislation, Korea's High Pressure Gas Safety Control Act, the EU's REACH program concerning chemical usage [and its Energy Using Products (EuP) framework

¹ The base year for JEITA, EECA/ESIA and SIA is 1995, for KSIA it is 1997 and for TSIA it is 1998* (1998* represents the average of 1997 and 1999 emissions)

that seeks to establish eco-design criteria for energy using products]; as well as several regions' RoHS (Restrictions on Hazardous Substances) regulations. The semiconductor industry has long recognized the importance of proactively protecting the global environment – as is demonstrated by our numerous efforts in this area.

Technical Standards

The WSC recommends that when standards are necessary, they be industry led, open, voluntary whenever possible, and fully comply with existing WTO rules—including the Technical Barriers to Trade (TBT) agreement. In accordance with existing WTO TBT rules, the WSC believes that it is important that international standards should be used whenever possible and that any WTO member should notify the other WTO members of any standard that may have a significant effect on trade. The WSC requests the governments and authorities participating in GAMS to continue their efforts to ensure that all WTO members observe the principles set forth above.

Analysis of Semiconductor Market Data

The WSC has reviewed semiconductor market reports covering such trends as market size and growth. The long-term outlook for the industry remains robust as advances in technology continue to bring benefits to consumers and businesses worldwide.

Report to Governments/Authorities

The results of today's meeting will be submitted by representatives of WSC members to their respective governments/authorities for consideration at the annual meeting of WSC representatives with the governments/authorities (GAMS) to be held in September 2006 in Tokyo, Japan.

The WSC's report will include the following:

- (1) An updated report on semiconductor market data prepared by industry experts;
- (2) Recommendations on trade-related issues, including free and open markets, levies, intellectual property protection, technological standards, and ongoing WTO negotiations; and
- (3) Reports on cooperative ESH activities, and recommendations regarding the development of regulations.

Next Meeting

The next meeting of the WSC will be hosted by EECA-ESIA in May 2007.

Key Documents and the WSC Homepage

Annexes:

1. PFC emission reduction announcement and data
2. WSC Statement on the Application of Layout Design Laws to Copying of Protected

Layout Designs Using Improved Automated Design Tools

All key documents related to the WSC can be found on the WSC website, located at:
<http://www.semiconductorcouncil.org>.

Information on WSC member associations can be found on the following website:

- EECA-ESIA : <http://www.eeca.org>
- JEITA-JSIA : <http://semicon.jeita.or.jp/en/>
- KSIA : <http://www.ksia.or.kr>
- SIA : <http://www.sia-online.org>
- TSIA : <http://www.tsia.org.tw>

WSC Statement on the Application of Layout Design Laws to Copying of Protected Layout Designs Using Improved Automated Design Tools

The WSC has long recognized that intellectual property (IP) is the lifeblood of its member companies. Semiconductor makers invest a very high percentage of sales for the R&D necessary to develop IP. Inadequate protection of IP is damaging to the world semiconductor industry and is a serious impediment to the technological progress that has benefited consumers around the world.

Over twenty years have passed since legislation was first enacted to protect the layout design of semiconductor chips. Since that time, many nations have passed such laws and layout design protection was included in the TRIPs agreement. During this period, technological progress has dramatically changed the design and manufacturing of integrated circuits. The importance of IP protection in the semiconductor industry has not lessened, but rather has become more crucial.

In 2004, the WSC mandated that its IP Task Force further review IP protection around the world and report back to the WSC on additional actions that industries and governments/authorities can take to protect IP. Soon thereafter, the WSC adopted its policy statement regarding the protection of layout design intellectual property, in which we called for stopping the unauthorized direct optical copying of a chip layout design protected by valid intellectual property rights.

The IP Task Force reported to WSC that: (1) recent improvements in automated design tools allow semiconductor layout designs to be made by copying a protected layout design with virtually no intellectual effort; (2) the copy may not appear to be facially identical to the original; and (3) these copies may cause damage to companies that own the protected layout designs and need to recoup their R&D costs. These factors may deter the significant R&D investments that lead to innovation and ultimately would prevent consumers from benefiting from new chip innovations.

However, since there have been relatively few court cases construing the layout design protection law, the interpretation of the laws in different jurisdictions is unpredictable. Therefore, the WSC believes this statement clarifying layout protection for original designs would be of value to industries and governments/authorities around the world.

The drafters of the layout design laws carefully balanced the need to allow innovators to earn a return on their R&D investments with the need to encourage others to invest in new and better designs. They thus included a specific exception for copies made in the course of reverse engineering so that others could understand the concept behind the original layout design and create new and better chips based on this understanding. Implicit in the reverse engineering exception was the assumption that there would be some intellectual effort to create the new layout design. It is worth noting that simple or commonplace designs are not eligible for protection, so the innovator is also required to exert intellectual effort.

The WSC, through its IP Task Force, conducted surveys and research on reported cases and the scope of the legislative acts and the TRIPs agreement. Under these provisions, the copied layout design does not have to be identical to the original to be a violation of the law; it only need be substantially similar. In cases that have been litigated, courts have largely relied on the fact finder – e.g., juries – to determine whether a layout design is protected and an unauthorized copy is substantially similar to the original layout design. When determining if a layout is substantially similar to the original protected layout design, the fact finder must assess the degree of difference between the two layout designs. On the basis of the surveys and research, the IP Task Force concluded

that layout designs made through improved automated technology may potentially give rise to policy concerns where they are not the result of their creators' own intellectual efforts.

Recognizing that infringement claims should be judged in a court of law, the WSC

- recommends that the existence of intellectual effort shall be carefully reviewed when courts consider whether an allegedly copied layout design, created through the use of improved automated design tools, is substantially similar to the original protected layout design;
- encourages semiconductor industries to continue to create new and innovative products for the world's consumers, and requests that the GAMS support and communicate this WSC position to the appropriate IP policy makers; and
- states that these recommendations are for purposes of clarification and not to expand the scope of what may be deemed to be infringing or illegal.