JOINT STATEMENT ON THE EIGHTH MEETING OF WORLD SEMICONDUCTOR COUNCIL (WSC) May 13, 2004 ♦ Busan, Korea

The European Semiconductor Industry Association (EECA-ESIA), the Japan Electronics and Information Technology Industries Association (JEITA), the Korea Semiconductor Industry Association (KSIA), the U.S. Semiconductor Industry Association (SIA), and the Taiwan Semiconductor Industry Association (TSIA) today held the eighth meeting of the World Semiconductor Council (WSC). This meeting - held in Busan, Korea - is the fifth meeting conducted under the "Agreement Establishing a New World Semiconductor Council" approved at the third WSC meeting signed on June 10, 1999.

It is the purpose of the WSC 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 and investment liberalization, and market development. All WSC activities are guided by principles of fairness and respect for market principles consistent with 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 Chang Gyu Hwang of Samsung Electronics (KSIA), and opening statements were made by Scott McGregor of Philips Semiconductors International (EECA-ESIA), Kaoru Tosaka of NEC Electronics Corporation (JEITA), Steven R. Appleton of Micron Technology (SIA), and Morris Chang of Taiwan Semiconductor Manufacturing Company (TSIA).

During the meeting, the following reports were given and discussed, and actions taken:

<u>Membership</u>

The WSC re-confirmed its interest in having the China Semiconductor Industry Association (CSIA) join the WSC in time for its Government to join the next Government/Authorities Meeting on Semiconductors (GAMS) in September 2004. The WSC asks Governments and Authorities to actively support the resolution of the current unresolved issues to facilitate CSIA's application. The WSC welcomes the fact that the CSIA has expressed its continued interest in joining the WSC. The WSC welcomed a report on the progress that has been made on this issue; it recognizes and supports current efforts with respect to membership, if the parties involved find it acceptable; and it is prepared to take action on an application from CSIA for membership as soon as it is received, without the necessity of waiting for a WSC meeting. It is the hope of the WSC that participation of the PRC in the September 2004 GAMS meeting will be possible.

Cooperative Approaches to Protecting the Global Environment

The WSC is firmly committed to sound, scientifically based, positive environmental policies and practices. The semiconductor industry is making a major contribution toward protection of the global environment, and the members of the WSC are proactively working together to make further progress in this area.

(1) PFC Emission Reduction

The members of the WSC have proactively formulated an industry-wide PFC emission reduction plan, and are continuing efforts to reduce the emissions of PFC gases. That plan calls for the WSC members to reduce PFC emissions by at least 10% by 2010 against the base year, even as semiconductor production is increasing. 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). Since the start of the program, WSC members have devoted considerable resources to meeting or exceeding their PFC reduction goals, and each member pledged to continue to meet their set commitments.

(2) Energy Savings

The WSC believes that the efficient utilization of energy resources is an important ingredient to the realization of cost effective, environmentally sound manufacturing for both semiconductor makers and their suppliers. To that end, the WSC is dedicated to promoting cooperation and sharing of information among members of the semiconductor manufacturing community worldwide on environmental issues, with a priority focus on the issue of energy savings. A data collection program is being formalized that will foster our efforts in this area. In addition, recognizing that the semiconductor industry's strategic suppliers play an important role in accomplishing energy reduction objectives, work is continuing with the supplier community on this issue. Detailed work is underway to identify and share best practices within the industry.

(3) Chemical Management

Chemical management is a key focus of WSC efforts – specifically in the areas of chemical risk assessment and pollution prevention. The WSC is actively working to share best practices throughout the industry.

(4) Quantitative targets

The WSC confirms the objective of setting feasible quantitative common targets and urges the ESH Task Force to discuss and propose feasible targets by September 2004.

(5) Other ESH Issues

Regulatory and legislative issues covered that have a global impact were the EU Chemicals Policy (REACH) and the EU's review process of the RoHS (Restriction on Hazardous Substances) Directive. The WSC has just begun a review of the recent global developments on the issue of the RoHS.

Free and Open Markets

The WSC re-confirms as a founding principle the importance of insuring 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, nondiscrimination for foreign products in all markets, and an end to investment restrictions tied to technology transfer requirements.

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 Development Agenda of the World Trade Organization should focus on policies that promote 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 to consumers around the world, additional countries should be encouraged to join the Information Technology Agreement (ITA). In this context, WSC Members welcome the formal accession of Bahrain and Morocco to the ITA, bringing the total number of signatories to 61.

As far as product classification for customs purposes are concerned, semiconductor industries all over the world have joined forces to launch a campaign for inclusion of multi-chip products in the general category of integrated circuits. These joint efforts have turned out to be quite successful. Positive results are attributable to the understanding and active involvement by the concerned authorities in each country. The WSC strongly hopes that multi-chip integrated circuits will eventually receive the same treatment as general integrated circuits not only in terms of HS classification codes, but also when import duties are levied. The WSC strongly encourages its members to clearly communicate the above message to their Governments and Authorities. WSC members encourage their respective Governments and other concerned Authorities to give the same status to multi-chip integrated circuits as conventional integrated circuits have under the ITA Agreement. The WSC looks forward to seeing its members continue such concerted efforts until the desired goal is achieved.

National Treatment for All Products and Services

The rules of the World Trade Organization require that products and services be granted national treatment status – this is a foundation upon which all companies rely in order to be able to compete fairly and openly in world markets. Denial of national treatment has the effect of limiting market access and distorting patterns of

trade and investment. At the 2003 WSC Meeting in Nice, the WSC noted that China taxes semiconductors, including imported semiconductors, at a 17% VAT, but provides eligible domestic producers with a rebate to lower the effective tax rate to a level of 3%. The WSC called for China to lower its VAT rate to 3% on all semiconductors regardless of origin. The WSC submitted its recommendation to the GAMS meeting in November 2003.

The GAMS responded to this request and a number of GAMS members held discussions with the government of China. In March 2004, the U.S. filed a WTO case to resolve this matter. The first WTO consultations were held in April 2004, and were joined in by several GAMS members.

The WSC asks the parties involved in the WTO consultations on the VAT to reach a prompt resolution that meets the objectives of the WSC noted above.

Effective Protection of Intellectual Property

Semiconductor makers must invest a very high percentage of sales in R&D, and the intellectual property (IP) that results is the lifeblood of the company. 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 calls on all Governments and Authorities to implement effective IP enforcement measures in their jurisdictions. It notes the obligation of each WTO member, under Article 41 of the Agreement on Trade-Related Aspects of Intellectual Property Rights, to ensure that IP enforcement procedures "are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by the Agreement." The WSC believes that enforcement in some countries remains ineffective and lacking in deterrence.

Recognizing the importance of effective IP protection, the WSC has created an IP Task Force to further review IP protection around the world and report back to the WSC at the 2005 meeting on additional actions that industries and Governments/Authorities can take to protect IP

In addition, the WSC recognizes that there are a number of instances of 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. One form of such counterfeiting is the unauthorized direct optical copying of a chip protected by valid IP rights, and the reproduction of a layout design based on the optical copying and then fabricating of a semiconductor based on this layout design. This type of counterfeiting must be quickly addressed and stopped. This form of counterfeiting is harder to detect and has become a serious problem, especially with the advent of lower cost technology for optical copying. Accordingly, the WSC has adopted the attached "WSC Policy Regarding Layout Design Intellectual Property," which sets out a multi-pronged approach to address this form of counterfeiting. The WSC will submit its recommendations as formal requests its respective to Governments/Authorities the Governments/Authorities Meeting at on Semiconductors (GAMS) scheduled to take place in Germany in September 2004. These recommendations should not impose new legal requirements on industry.

Finally, to fulfill the objectives of promoting technology development, the WSC asks its Governments and Authorities to review the ability and funding of their patent offices to insure the timely and accurate issuance of patents.

Technical Standards

The WSC recommends that when standards are necessary, they be industry led, open and voluntary whenever possible, and that they 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 Government/Authority notify WTO members of any standard that may have a significant effect on trade. More specifically, in the exceptional circumstances where standards must be mandated the following principles should be followed:

a. No unnecessary obstacles to international trade be created;

b. Intellectual property rights not be impaired through the implementation of standards, nor should any requirement be sought or imposed that requires the transfer of technology in order to meet the standard;

c. No standard be set in a manner that impairs national treatment by discriminating against imported goods; and

d. No condition be set that negatively impacts the right to access a market based on performance requirements, including the use of local content, the use of any local partner, or the transfer of technology.

The WSC requests that its Governments and Authorities which are participants in the GAMS commit to the above-mentioned principles when drafting and implementing legislation and continue to urge other countries to do so.

The WSC welcomes the fact that the Government of the People's Republic of China has decided to postpone the implementation of the WAPI mandatory standard indefinitely. The WSC will continue to work to ensure that internationally recognized standards will be adopted.

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 very important that trade in this area remains as open as possible, and that international rules and domestic regulations foster an open and competitive market. The WSC also reaffirms the importance of the principles set forth in its Paper on *The Dangers of Copyright Levies in a Digital Environment*, adopted at the WSC's 2003 meeting. Under the present system, levies are unfairly and indiscriminately imposed on all technologies regardless on their intended use. Levies also jeopardize the joint efforts by content providers and the technology industry to develop new ways for consumers to access and enjoy digital content while directly compensating artists. The WSC believes that Governments/Authorities should commit themselves to prohibiting levies from being collected on digital equipment and blank digital recording media. Industry efforts to develop DRM (Digital Rights Management) and TPM (Technical Protection Measures) should be supported.

Legislative & Regulatory Issues

High technology goods including semiconductors are increasingly affected by a varying array of regulatory measures in markets around the world, be it *e.g.* in trade or environmental policy areas. 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 possible. The WSC continues to examine legislative and regulatory issues from this perspective.

Analysis of Semiconductor Market Data

The WSC reviewed a semiconductor market report, including data on market size and market growth. The long-term outlook for the industry remains solid as advances in technology continue to bring benefits to consumers and businesses worldwide. Semiconductor market growth will be further stimulated by the rapid development of the Asia Pacific market, including China.

Future Semiconductor Technology Development

Much of the growth in productivity gained by our economies has been the result of advances in semiconductor technology. The benefits of furthering these trends are similarly significant; by the end of the decade, the cost of memory may decline to 1/20 of today's cost and microprocessors may become 10 times faster, thus allowing for affordable streaming internet video, telemedicine, and other significant advanced applications. The WSC recognizes that making these advances requires ever increasing investments and wide-ranging skills. In order to properly assess these issues, international collaborative and cooperative efforts are necessary. Therefore, the WSC will continue to support international conferences, the International Forum on Semiconductor Technology (IFST) and the International Technology Roadmap for Semiconductors (ITRS).

The ITRS identifies a number of challenges that must be overcome to continue the pace of technology advances, including the introduction of new materials, new lithography technology, and new device structures. The Members of the WSC

unanimously agree that solutions to these challenges are vital to the continued growth and development of the semiconductor industry and that additional resources are needed. For example, while projects are currently underway in several WSC member geographies to develop EUV and other advanced lithography technology to follow after 157nm, the task is beyond the capabilities of any single geography due to the significant cost and complexities involved. The WSC encourages researchers in all regions to further cooperate on this pre-competitive technology.

Report to Governments/Authorities

The results of today's meeting will be submitted to the respective governments/authorities of the members of the WSC for consideration at the annual meeting of WSC representatives with the governments/authorities to be held in September 2004 in Berlin, Germany.

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, intellectual property protection, tariffs, technological standards, the fostering of electronic commerce, national treatment, and copyright levies that can be pursued through the WTO and other means; 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 the Japan Electronics and Information Technology Industries Association (JEITA) in Kyoto, Japan, in May 2005.

Key Documents and the WSC Website

Attachments:

• WSC Policy Proposal Regarding Layout Design Intellectual Property

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

Information can also be found on each association's respective website:

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

WSC Policy Proposal Regarding Layout Design Intellectual Property

Semiconductor makers must invest a very high percentage of sales in R&D, and the intellectual property (IP) that results is the lifeblood of the company. Failure to adequately protect IP is very damaging to the semiconductor industry. There are many different kinds of IP violations – including violations of patent, layout design, copyright of embedded code, trademark, and industrial design rights. This paper is focused on counterfeiting that arises from copying of semiconductor layout designs. The WSC has formed an IP task force to discuss additional actions that can protect other forms of IP.

Background on counterfeiting

There are an increasing number of instances of counterfeiting of ICs and other semiconductors. One form of such counterfeiting is the unauthorized direct optical copying of a chip protected by valid intellectual property, and the reproduction of a layout design (also called "maskwork" under U.S. law or "layout (topography)" as defined in Article 2 of the 1989 WIPO Treaty on Intellectual Property in Respect of Integrated Circuits) based on the optical copying and then fabricating of a semiconductor based on this layout design. The copy is sold under the original company's name or under a different company's name. This type of counterfeiting must be quickly addressed and stopped especially since technology now exists to optically copy semiconductors and create a layout design from such copying at a lower cost than in the past.

Anticounterfeiting Policy

The WSC believes that a multipronged approach should be taken with regard to antipiracy efforts.

1. The industry associations confirm their commitment to respect intellectual property rights. We request that our respective governments/authorities reconfirm this commitment as well. This is not a new commitment and was affirmed by the WSC in Brussels, in Newport Beach, and elsewhere. All future members of the WSC and GAMS will be requested to specifically endorse this concept before joining the organization.

- 2. The WSC recognizes that unauthorized optical copying and counterfeiting is an increasing problem, due to the availability of less expensive technology to make the layout design copies, and the existence of manufacturing facilities to make semiconductors from the layout designs in question.
- 3. Recognizing that infringement and counterfeiting claims should be judged in a court of law, governments/authorities nevertheless can play an important role. To this end, governments/authorities should be encouraged to adopt a policy to deal with counterfeiting, including a fast track procedure allowing for a quick review of counterfeit activity and appropriate and effective action to stop it. All governments/authorities representing future WSC members should be required to adopt this policy.
- 4. All governments/authorities will be asked to commit to enforce this policy.
- 5. The WSC will develop guidelines as soon as feasible to encourage all semiconductor related companies to establish procedures facilitating the tracing of the source of manufacture of semiconductor products.
- 6. The WSC will encourage all segments of the semiconductor production industry to adopt the following principles as appropriate and make them available on request:
 - i. respect for intellectual property rights;
 - ii. establish IP layout protection guidelines so that semiconductor designers or suppliers of designs provide written assurances regarding their rightful ownership of the semiconductor layout design. This could include a declaration or representation that the layout design supplier is a legitimate owner or licensee of the layout design or any other intellectual property that it provides.
 - iii. where a company is presented with convincing evidence that a design is counterfeit, the company will investigate the matter and take steps to prevent counterfeiting.