



Press Release

Date **EMBARGOED UNTIL 8am EST on 14TH May 2015**

Contact Nicholas Braude, PwC
Tel: (617) 530-5435
e-mail: nicholas.braude@us.pwc.com

Pages 2

Demand for sensors driving growth in the semiconductor industry

Global semiconductor industry revenues set to show a compound annual growth rate of 5.2% to 2019

Thursday 14th May 2015 – We’re nearing a tipping point where everything that can be connected to the Internet will be connected to the Internet. According to a new PwC study, this connectivity of information—or the Internet of Things (IoT)—will drive a 29% increase in semiconductor industry billings over the next five years.

The Internet of Things: The next growth engine for the semiconductor industry, finds that global semiconductor industry billings will increase to US\$432 billion by 2019, corresponding to a compound annual growth rate (CAGR) of 5.2%. Connected devices—ranging from consumer-oriented technologies such as smartphones, tablets, cars and wearables, to industrial machinery, commercial jet engines and oil-drilling rigs—rely on data-collecting components, and these sensors will be one of the biggest growth drivers in the semiconductor industry.

“The Internet of Things, especially in the wearables space, affects not only the economy, but also our daily lives. This growing widespread connectivity will stimulate a huge demand for sensors and represents one of the most significant opportunities for the semiconductor industry since the Internet boom,” said Raman Chitkara, PwC Global Technology and Semiconductor Leader.

Internet of Things and wearables drive the growth

The IoT, which influences both industry and private life, will particularly drive the growth of the semiconductor industry. Connected smart devices can collect and exchange information with each other. Without sensor endpoints, this progress would not be possible. Semiconductor sales from sensors and actuators will reach US\$14 billion by 2019, with an annual growth rate of 10.4%. Examining the worldwide semiconductor market in terms of installed components, the sensors and actuators segment will show the highest growth rate.

One application that could be positively impacted by the IoT is wearables—a minicomputer that records a person’s movements and nutrition as they are worn. Wearables have seen some of the most advanced innovations of the last few years, and are now a booming consumer market. The market has been flooded with wearable personal health tracking products that promise to improve overall health by monitoring activity, exercise, sleep, nutrition and heart rate. Semiconductor revenue from wearables is expected to grow from a combined US\$15 million in 2013 to more than US\$7 billion in 2019.



Market share of semiconductor consumption

China's market share of semiconductor consumption will reach 60.5% by 2019, due in part to the continuing transfer of worldwide electronic equipment production into China, according to PwC's report. As a result, the Chinese semiconductor industry is expected to see strong growth along with an increasing market share.

PwC forecasts that Europe will see a moderate annual growth rate of 3.9% to 2019. "The European semiconductor companies often produce for the worldwide market and have their production facilities in different countries. A strong dollar will have a positive effect on the sales of European semiconductor companies," said Werner Ballhaus, PwC Germany's Head of Technology, Media and Telecommunications.

Ultramobiles will become another sales driver

In 2014, semiconductor sales in ultramobiles, an effective hybrid of PC and tablet, achieved a remarkable increase of 84.7%. Ultramobiles are designed to perform the same tasks as a notebook PC, but have the dimensions of a tablet, a touchscreen and some buttons at their edge for additional functionality. They're a good choice for "mobile workers," especially in today's world where mobile Internet access has come of age.

Demand for hybrid and electric cars is growing fast

The automotive industry is another important driver for the global semiconductor industry: the demand for hybrid and electric cars continues to rise—vehicle availability is growing and prices are falling. Compared with conventional cars, semiconductor content per vehicle is 1.5 to 3 times higher in electric cars and hybrids. The semiconductor content sales in the automotive market will reach an annual growth rate of 20.5% for electric and hybrid cars in the period up to 2019.

Semiconductor firms enabling the IoT

By providing the technology building blocks for the world's devices, components and machines, semiconductor companies serve as enablers of the IoT. That said, nascent markets can bring unique technical challenges and uncertainty, and require a carefully thought-out strategy.

"Users are very sophisticated, their needs change very fast. Strategic cooperation with companies from other industries, such as fashion or sporting goods manufacturers, can help overcome the hurdles successfully," said Ballhaus.

To read the report and to learn more about developing an approach to the IoT that spans strategy through execution, go to www.pwc.com/iot

About PwC

PwC helps organisations and individuals create the value they're looking for. We're a network of firms in 157 countries with more than 195,000 people who are committed to delivering quality in assurance, tax and advisory services. Find out more and tell us what matters to you by visiting us at www.pwc.com

©2015 PricewaterhouseCoopers. All rights reserved

PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.