

# Media Coverage Highlights:

Launch of A\*STAR IME's Advanced Semiconductor Joint Labs, 23 July 2014

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25 July 2014



# **Professional Impact**

### Channel NewsAsia



A\*STAR IME launches four joint labs to help semiconductor industry

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The four joint laboratories represent a commitment of S\$200 million from the private and public sectors.



SINGAPORE: A Singapore research institution on Wednesday (July 23) launched four laboratories as the Government takes further steps to position the city-state as a world-class innovation hub for the semiconductor industry

### The Straits Times

# THE STRAITS TIMES

#### \$200m boost for R&D on tiny semiconductors

24 July 14 The Straits Times by GRACE CHNG, SENIOR CORRESPONDENT

THE Government and 10 industry partners are injecting \$200 million over the next three to five years for research and development into the manufacture of smaller, more efficient semiconductors.

The R&D will be carried out in four joint labs set up by the Institute of Microelectronics (IME) and the 10 companies.

IME executive director Kwong Dim-Lee told The Straits Times yesterday that there is huge demand building for sensors and other devices designed to be always connected to the Internet.

"These devices are really tiny; some can be injected into the body. They are packed with electronics because they have many features. At the same time, they must use less power for longer periods and not give out a lot of heat," he said in an interview.

"New tools and processes are needed to make these kinds of devices."

The firms - Applied Materials, Dai Nippon Printing, Disco Corporation, KLA-Tencor, Mentor Graphics, Nikon, Panasonic Factory Solutions Asia-Pacific, Pink, Tokyo Electron and Tokyo Ohka Kogyo - all have operations here.

They are involved in different parts of the semiconductor manufacturing process such as cutting, grinding and polishing of metals, making high purity chemicals, process control and inspection and producing equipment.

Each lab at IME in South Buona Vista will focus on different parts of the manufacturing process.

They have been set up on the back of IME's success with a similar collaboration with packaging firm Applied Materials in 2012.

Mr Russell Tham, Applied's regional president for South-east Asia, told The Straits Times that the lab accelerated the development of Ventura, a machine used by electronics companies such as Qualcomm to package chips for smartphones.

"Smartphones have a number of chips crammed into it, resulting in limitations of battery life and power. Ventura packaged the chips in a different way. We're the first in the world with this ground-breaking product," he said.

Applied has sold about 30 machines worth hundreds of millions of dollars

Link: http://www.channelnewsasia.com/news/business/astar-ime-launches-four/1277916.html



# **Professional Impact**

### **Business Times**

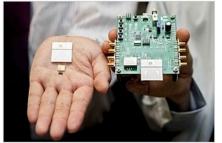
# BTPREMIUM

### A\*Star, partners unveil 4 joint semicon labs

They represent commitment of S\$200m

BY JACQUELYN CHEOK jaccheok@sph.com.sg @JacCheokBT

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Four advanced semiconductor labs - representing a commitment of S\$200 million from the public and private sectors - were launched yesterday by A\*Star's Institute of Microelectronics (IME) and 10 industry partners. - PHOTO: NTU

packaging, metrology and assembly.

FOUR advanced semiconductor labs - representing a commitment of S\$200 million from the public and private sectors - were launched yesterday by A\*Star's Institute of Microelectronics (IME) and 10 industry partners.

The joint labs will provide an integrated platform for semiconductor R&D, to facilitate "earlier, faster and cheaper" commercialisation, said A\*Star, Singapore's agency for science, technology and research.

Lim Chuan Poh, chairman of A\*Star, lauded the launch as an "excellent example of public-private partnership under an open innovation framework".

The labs will focus on developing technologies in lithography (the patterning of microchips), wafer level

Link: <a href="http://www.businesstimes.com.sg/premium/top-stories/astar-partners-unveil-4-joint-semicon-labs-20140724">http://www.businesstimes.com.sg/premium/top-stories/astar-partners-unveil-4-joint-semicon-labs-20140724</a>

### Nikkei Asian Review

# ASIAN REVIEW

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July 23, 2014 8:19 pm JST

# A\*STAR collaboration spawns advanced semiconductor project

TOMOMI KIKUCHI, Nikkei staff writer

SINGAPORE -- Through its Institute of Microelectronics, Singapore's Agency for Science, Technology and Research (A\*STAR) and ten top technology companies, including Japan's Panasonic and Nikon, launched a joint semiconductor research project on Wednesday.

The project will see 200 million Singapore dollars (\$160 million) committed to research and development and more efficient production systems. Four advanced semiconductor joint labs are to take on different aspects of semiconductor design and manufacture.



10 global technology companies and Singapore's A\*STAR launched a set of joint laboratories for semiconductor R&D

Link: <a href="http://asia.nikkei.com/Business/Asean-Business-File/A-STAR-collaboration-spawns-advanced-semiconductor-project">http://asia.nikkei.com/Business/Asean-Business-File/A-STAR-collaboration-spawns-advanced-semiconductor-project</a>



# **Professional Impact**

### Jiji Press

# JIJI PRESS

#### シンガポール科技庁、半導体製造技術を研究開発=東エレクなど日米独10社と

【シンガポール時事】シンガポール政府機関の科学技術研究庁(Aスター)傘下のマイクロエレクトロニクス研究所 IME)は23日、東京エレクトロンなど日系企業6社を含む10社と提携し、半導体製造技術の研究開発(R&D)に向け、共同研究所を開設した。今後3~5年で、2億シンガポールドル(Sドル)以上を投じる。

Aスターによると、高性能・低消費電力の小型スマート端末向 けの需要拡大を受け、高効率で革新的な半導体製造技術の開発 を目指す。

今回開設した「先端半導体共同研究所」は四つの研究室で、半 導体生産で用いるリソグラフィー技術、ウエハー・レベル・パッケ ージ (WLP) 技術、測定技術、組み立て技術の4分野を研究する。

日本からは東エレクのほか、大日本印刷、ディスコ、ニコン、パナ ソニック・ファクトリーソリューションズ・アジアパシフィック、東京 応化工業の6社が参加。年内に東エレクと経営統合する米アプライ

ドマテリアルズ、米KLA-テンコール、米メンター・グラフィックス、独PINKの4社も参画した。

東エレクの東哲郎会長兼社長は開所式で「半導体業界の主要な事業モデルは、垂直統合型から水平分業型に転換した」と強調。「プレーヤーが個別に問題解決するのが難しくなっている」と述べ、国・地域や業界、組織を超えた協力が不可欠との認識を示した。

シンガポールのイスワラン首相府相

(中央)と握手する東京エレクトロン

の東哲郎会長兼社長ら=23日

Article covered details on the four joint labs and specialisations. Quotes from 2M and TEL CEO were carried: the quote from 2M was on the prospect of the semiconductor technology market and the growing demands of the semiconductor industry. TEL CEO was quoted on the importance of forming such a partnership as it becomes more difficult to resolve problems on each player's own.

# The Daily NNA

2014年(平成 26年)7月24日(木)

The Daily NNA シンガポール & ASEAN 版 [Singapore & ASEAN Edition] 第 04787 号[1]



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# 日系主体で半導体"微細化"

# 官民連携、科技庁2億ドル投入

科学技術研究庁(ASTAR)所管のマイクロエレクトロニクス研究所(IME)は23日、日系6社を含む外資系10社と共同で半導体技術開発を手掛ける共同研究室を正式に開所した。露光装置や実装技術など4分野の研究室を開設。研究開発(R&D)費用として今後3~5年で2億Sドル(約162億円)を投じ、半導体集積回路(IC)の微細化などに取り組む。IMEは複数の半導体関連企業とのPPP(官民パートナーシップ)事業を通じて、国内半導体業界の高付加価値化を図る。



ョンズアジアパシフィック▽東京エレクトロン▽東京 応化工業▽米アプライドマテリアルズ▽米 K L A テンコール▽米メンター・グラフィックス▽独 P I N K — の 10 社。 I M E の施設内に共同研究室を設け、実装技術のウェハレベルパッケージング(W L P)、露光装置計測、組み立ての 4 分野について、各社の得意分野の知見を持ち寄り、次世代技術の開発に取り組む。

4分野のうち3分野の研究に参加する東京エレクトロンの東哲郎会長兼社長は、同日IMEで開かれた開所式に出席。「シンガポールには世界的な半導体企業が集まっており、最先端技術のR&Dに必要な環境が整って

The article covered the launch of IME's joint labs with 10 partners (of which 6 are Japanese semiconductor companies), elaborating how top players from respective fields are contributing to the partnership.

Institute of Microelectronics

### **Trade Impact**

### **EET India**



A\*STAR, industry team up to found semicon R&D joint labs



Keywords: Joint Labs IME-Applied Materials Centre of Excellence advanced semiconductor

A\*STAR's Institute of Microelectronics (IME) partnered with 10 industry players to form four joint laboratories, representing a commitment of \$161 million between private and public sectors.

The Advanced Semiconductor Joint Labs will develop and advance semiconductor technologies for future electronics markets. The industry partners involved in this international collaboration are: Applied Materials, Dai Nippon Printing, DISCO, KLA-Tencor, Mentor Graphics, Nikon, Panasonic Factory Solutions Asia

Pacific, PINK, Tokyo Electron Ltd. and Tokyo Ohka Kogyo.

While expectations are for smart devices to sustain a compact form factor, consumers also expect powerful performance and low power consumption. The challenge for the semiconductor industry is to meet these needs by addressing system and integration scaling in the electronics 2.4kbps and 4.8kbps mod labs in lithography, wafer level packaging (WLP), metrology, and assembly will provide an integrated platform for semiconductor R&D, starting with patterning, further development of 3D integrated circuits (IC), quality control, and finally, the assembly and high-volume manufacturing of chips



#### Link:

http://www.eetindia.co.in/ART 8800701792 1800 000 NT a845e17e.HTM

### new electronics













#### Singapore invests \$200m in semiconductor R&D

23 July 2014

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Faster and cheaper commercialisation of semiconductor technologies will be achieved with the launch of four new labs in Singapore.

That is the opinion of Professor Dim-Lee Kwong, executive director of the Institute of Microelectronics (IME), who said: "These collaborations will encourage semiconductor R&D that is relevant for industry, and provide solutions for a rapidly evolving global electronics market."

IME is a research institute within the Singapore government's Agency for Science, Technology and Research (A\*STAR). The four labs, which will come at a cost



of around S\$200m (£95m), are a joint venture between IME and ten industry partners: Applied Materials, Dai Nippon Printing, DISCO, KLA-Tencor, Mentor Graphics, Nikon, Panasonic Factory Solutions Asia Pacific, PINK, Tokyo Electron Ltd. and Tokyo Ohka Kogyo.

Link: http://www.newelectronics.co.uk/electronics-news/singaporeinvests-200m-in-semiconductor-rd/62732/



# **Trade Impact**

### **Solid State Technology**



# A\*STAR and industry partners form S\$200M semiconductor R&D joint labs

Four joint laboratories, representing a commitment of S\$200m between private and public sectors, were launched today between A\*STAR's Institute of Microelectronics (IME), and its 10 industry partners. The Advanced Semiconductor Joint Labs will develop and advance semiconductor technologies for future electronics markets. The industry partners involved in this international collaboration are: Applied Materials, Dai Nippon Printing, DISCO, KLA-Tencor, Mentor Graphics, Nikon, Panasonic Factory Solutions Asia Pacific, PINK, Tokyo Electron Ltd. and Tokyo Ohka Kogyo.

While expectations are for smart devices to sustain a compact form factor, consumers also expect powerful performance and low power consumption. The challenge for the semiconductor industry is to meet these needs by addressing system and integration scaling in the electronics market. The four joint labs in lithography, wafer level packaging (WLP), metrology and assembly, will provide an integrated platform for semiconductor R&D, starting with patterning, further development of 3D Integrated Circuits (IC), quality control, and finally, the assembly and high-volume manufacturing of chips.

The joint labs build upon the successful model of the IME-Applied Materials Centre of Excellence. Together, the four labs will enable the development of innovative semiconductor technologies and allow partners to undertake solutions-oriented semiconductor R&D and facilitate commercialisation that is earlier, faster and cheaper. This international partnership also bears testament to the industry relevance of IME's deep research capabilities, and will encourage further development of solutions for global implementation.

Link: <a href="http://electroiq.com/blog/2014/07/astar-and-industry-partners-form-s200m-semiconductor-rd-joint-labs/">http://electroiq.com/blog/2014/07/astar-and-industry-partners-form-s200m-semiconductor-rd-joint-labs/</a>

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#### Singapore finances \$200m Semiconductor R&D

24 Jul 2014 By Administrator



Four joint laboratories, representing a commitment of \$200m between private and public sectors, were launched today between A\*STAR's Institute of Microelectronics (IME), and its 10 industry partners. The Advanced Semiconductor Joint Labs will develop and advance semiconductor technologies for future electronics markets.

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This international partnership also bears testament to the industry relevance of IME's deep research capabilities, and will encourage further development of solutions for global implementation.

Link: <a href="http://etsp-engineering.com/news/singapore-finances-200m-semiconductor-r-d/">http://etsp-engineering.com/news/singapore-finances-200m-semiconductor-r-d/</a>



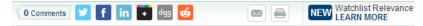
### **Financial Impact**

### **Market Watch**



July 23, 2014, 3:01 a.m. EDT

# A\*STAR and Industry Form S\$200M Semiconductor R&D Joint Labs



SINGAPORE, Jul 23, 2014 (PR Newswire Europe via COMTEX) -- SINGAPORE, July 23, 2014 /PRNewswire/ --

Public-Private Partnership to drive innovative solutions for complex micro chip manufacturing

Four joint laboratories, representing a commitment of S\$200m between private and public sectors, were launched today between A\*STAR's Institute of Microelectronics (IME), and its 10 industry partners. The Advanced Semiconductor Joint Labs will develop and advance semiconductor technologies for future electronics markets. The industry partners involved in this international collaboration are: <a href="Applied Materials">Applied Materials</a>, Dai Nippon Printing, DISCO, KLA-Tencor, Mentor Graphics, Nikon, Panasonic Factory Solutions Asia Pacific, PINK, Tokyo Electron Ltd. and Tokyo Ohka Kogyo.

While expectations are for smart devices to sustain a compact form factor, consumers also expect powerful performance and low power consumption. The challenge for the semiconductor industry is to meet these needs by addressing system and integration scaling in the electronics market[1]. The four joint labs in lithography, wafer level packaging (WLP), metrology and assembly, will provide an integrated platform for semiconductor R&D, starting with patterning[2], further development of 3D Integrated Circuits (IC)[3], quality control, and finally, the assembly and high-volume manufacturing of chips. Full details of the labs' capabilities are available in Annex A.

Link: <a href="http://www.marketwatch.com/story/astar-and-industry-form-s200m-semiconductor-rd-joint-labs-2014-07-23-3203037">http://www.marketwatch.com/story/astar-and-industry-form-s200m-semiconductor-rd-joint-labs-2014-07-23-3203037</a>

