LYON, France – April 4, 2019: Advanced packaging has entered its most successful era boosted by need for better integration, the end of Moore’s law and, beyond that, the megatrends, transportation, 5G, consumer, memory & computing, AI1 & HPC2… The market today is dominated by large IDMs3, such as Intel and Samsung, top 4 global OSATs4 and foundry with packaging house - TSMC, which jointly accounted for 62% of the total advanced packaging revenue. These leaders are working on numerous innovative advanced packaging platforms such as flip-chip BGA, Fan-Out packaging, 3D TSV5 and more… to answer to the market needs. Each platform has a lot of momentum but has different potential and different characteristics.

A few years ago, Yole Développement (Yole) and NCAP China decided to create a unique place in the world where leading companies could share their vision of the industry, evaluate the emerging platforms, and identify business opportunities. Today, both partners confirm their success with the 5th Advanced Packaging & System Integration Technology Symposium. Yole and NCAP China have combined their expertise to offer a powerful program directly related to the impact of megatrends on the advanced packaging industry.

With unique access to leading players and experts, the Advanced Packaging & System Integration Technology Symposium will take place in Shanghai at the end of the month and presents 5 key industry focuses: AI & HPC, memory & computing, transportation, 5G and consumer. The Organizing Committee is offering about 20
inspiring presentations, 2 market briefings and several networking times to cover a broad range of topics... Make sure you are part of the 2019 Symposium and register right now on i-micronews.com!

In 2015, the Fan-Out market was small and consisted mostly of standard devices like BB, RF, and PMU. But after TSMC’s 2016 game-changer with inFO for Apple’s iPhone APE, the market value increased 4x by 2018. Thus, the HD Fan-Out market segment was created, reducing the market-share ratio of OSATs.

Today, the fastest growing platform is, without doubt, Fan-Out packaging, with 25% CAGR growth and experiencing a diversification of its targeted applications beyond the consumer world. Moreover, this year Fan-Out packaging appears once again to be one of the most dynamic technologies, though needing a new wave of cost decreases to become even more widespread. This shall be achieved thanks to the move toward panel scale, once ambitious challenges have been overcome by the industry. The Fan-out market will reach almost US$3.8 billion by 2024.

The Advanced Packaging & System Integration Technology Symposium program follows the industry evolution and the emergence of innovative technologies. Based on the Fan-Out attractiveness, Yole and NCAP China propose several impressive presentations focused on this advanced packaging platform, especially with Bosch Sensortec’s keynote presentation: Mrs Bin Fu, Head of Business Development and Marketing, China, at Bosch Sensortec will take a closer look at how smarter sensors can contribute to the edge IoT edge trend, from the perspective of a sensor solution innovator.

In parallel, Farhang Yazdani, President & CTO, Broadpak, will be delivering the keynote presentation dedicated to the AI & HPC megatrend: “Semiconductor industry is at a turning point: the slowdown in CMOS scaling and escalated costs have prompted the industry to rely on IC packaging industry to extend the benefits of more-than-Moore era”, asserts Farhang Yazdani from Broadpak.

This Shanghai symposium has the opportunity to welcome leading companies as speakers: Amkor Technology, AT&S China, BESI, Bosch Sensortec, Boschman Advanced Packaging Technology, Brewer Science, Broadpak, China WLCSP, ERS

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6 BB : Baseband  
7 RF : Radio Frequency  
8 PMU : Power Management Unit  
9 HD : High Density  
10 Source: Fan-Out Packaging: Technologies and Market Trends report, Yole Développement, 2019
Moreover, the 2019 Symposium is supported by:

Yole Développement’s packaging and substrate analysts invite you to gain an in-depth understanding of the industry evolution and technology issues, with two dedicated market briefings focused on AI & HPC, memory & computing, transportation, consumer and 5G, moderated by Yole’s Semiconductor & Software team: Emilie Jolivet - Division Director, Favier Shoo - Technology & Market Analyst and Santosh Kumar - Principal Analyst & Director Packaging, Assembly & Substrates, Yole Korea, as well as Thibault Buisson, the Chief Operating Officer.

They will describe the new ecosystem currently emerging, pushed by the needs of innovative and disruptive technologies. Analysts will also detail the industry evolution and its consequence at each step of the supply chain.

An exciting and dynamic period is coming. Welcome to a new semiconductor world!
Registration & sponsorship opportunities are available on i-micronews.com.
ABOUT THE REPORT:

Fan-Out Packaging: Technologies and Market Trends 2019

Samsung and PTI, with panel-level packaging, have entered the Fan-Out battlefield. – Produced by Yole Développement (Yole).

Companies cited in the report:

Author:

Favier Shoo is a Technology and Market Analyst in the Semiconductor & Software division at Yole Développement, part of Yole Group of Companies. Favier is engaged in the development of technology & market reports as well as the production of custom consulting. After spending 7 years at Applied Materials as a Customer-Application-Technologist in advanced packaging marketspace, Favier had developed a deep understanding of the supply chain and core business values. Being knowledgeable in this field, Favier had given trainings and held numerous technical review sessions with industry players. In addition, he had obtained 2 patents.

Prior to that, Favier had worked at REC Solar as a Manufacturing Engineer to maximize production capacity. Favier holds a Bachelor in Materials Engineering (Hons) and a Minor in Entrepreneurship from Nanyang Technological University (NTU) (Singapore). Favier was also the co-founder of a startup company where he formulated business goals, revenue models and marketing plans.

ABOUT NCAP

The National Center for Advanced Packaging Co., Ltd. (NCAP China) is a joint venture established by ten investors, including the leaders of the IC packaging and testing industry in China. NCAP’s goal is to establish a world class R&D center for advanced packaging and system integration, play a leading role in the development and marketing of advanced technologies for microelectronics packaging and system integration, and promote and sustain the technological and commercial progress of the microelectronics industry in China.

As a national center for advanced packaging, testing and system integration, NCAP, in collaboration with system OEMs and supply chain partners, aggressively pursues research and development in order to offer complete solutions for the IC industry. NCAP’s current research areas include: 2.5D/3D technology (including TSV), high-density wafer level packaging, SiP product development capabilities, and certain advanced materials and equipment technologies for microelectronics packaging.

The NCAP R&D platform includes a 3200-m² fully equipped cleanroom, for 300mm wafer size, for 2.5D/3D IC backend processes, and packaging assembly, testing and reliability, as well as design and simulation capabilities. More information on www.ncap-cn.com.

ABOUT YOLE DEVELOPPEMENT

Founded in 1998, Yole Développement (Yole) has grown to become a group of companies providing marketing, technology and strategy consulting, media and corporate finance services, reverse engineering and reverse costing services and well as IP and patent analysis. With a strong focus on emerging applications using silicon and/or micro manufacturing, the Yole group of companies has expanded to include more than 80 collaborators worldwide covering MEMS & Sensors - Imaging - Medical Technologies - Compound Semiconductors - RF Electronics - Solid State Lighting - Displays - Photonics - Power Electronics - Batteries & Energy Management - Advanced Packaging - Semiconductor Manufacturing - Software & Computing and more...

The “More than Moore” market research, technology and strategy consulting company Yole Développement, along with its partners System Plus Consulting, PISEO and KnowMade, support industrial companies, investors and R&D organizations worldwide to help them understand markets and follow technology trends to grow their business. For more information, visit www.yole.fr and follow Yole on LinkedIn and Twitter.

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