

# “Aiming to be the Best OSAT Partner in Intelligent Generation in the world”



**Dr. Bill Shi**, CEO of TFME, explains his vision for the company and the importance of close partnership with key suppliers to meet the growing future technology demands of TFME's own customers.

## Working hard to fulfill our ambition

TFME has the vision to become a worldwide leading company in the Semiconductor Packaging & Testing industry, and with more than half of the global top ten semiconductor manufacturers as our major customers already and a global customer base of more than 300 I believe we are well on our way.

Quality and reliability of product are key success factors (KSFs) of semiconductor industry, especially within advanced packaging. As a market leader, TFME focuses on developing innovative technology, smart manufacturing and differentiated solutions to provide high quality, reliable solutions that meet our customers expectations. For example, we were the first China based corporation to realise the mass production of 12 inch 28nm mobile phone

processor chip backend processes, including Bumping, CP, FC, FT and SLT. 10nm processes are already qualified and 7nm processes are now under qualification.

But achieving our vision requires constant development, working together with equipment and material suppliers to enhance the levels of technology and service we can provide. Doing that not only from our existing locations but also from additional overseas locations in future is also essential to support international customers.

TFME currently has 5 manufacturing facilities in China, and one in Penang Malaysia, and is definitely looking for good opportunities to expand it's footprint in other countries to be "local" for those customers too.



## Offering broad capability is key

TFME already provides a broad range of technologies and solutions

- Advanced Packaging such as WLCSP (Cu / Au bumping), FOWLP
- SiP, 2.5D / 3D packaging
- Packaging solutions for Memory, MEMS, Optical and RF device manufacturing

In the “More than Moore” revolution, TFME is able to provide solutions with best in class Cost & Performance supporting customer’s needs for the emerging 5G, AI and intelligent generation. Smart manufacturing such as initiatives to use environmentally friendly manufacturing technologies help us reduce materials consumption, waste and costs and that’s where we rely on close cooperation with partners to help improve our process capabilities

## Choosing the right equipment suppliers

In such a dynamic semiconductor industry, it is very important for us to cooperate with equipment suppliers who can be our long term partners to deal with all the challenges we face.

Of course we need thin film technology suppliers with a proven track record who can not only provide hardware and process support for today, but also the technologies we need for future developments in advanced packaging.

Suppliers that have good local support close to our manufacturing facilities and that are flexible in thinking to work together finding customised solution are both crucial for us in choosing our long term partner. We want to work closely together with our suppliers in order to build up a long term Win-Win partnership!



Evatec's HEXAGON  
in action at TFME

### Why Evatec?

TFME has more than 20 years' working experience with Swiss equipment suppliers, starting with ESEC in 1990s and more recently with Evatec. We chose Evatec for its long history and reputation for providing best in class technology and innovation solutions in the advanced packaging industry. Evatec has a high market share, a big worldwide installed base and was qualified by most of the leading companies / T1 players in the advanced packaging industry. In addition, Evatec's continuous investment in R&D and "Swiss Made" quality gave us confidence that they would be a strong long term partner.

We already have a successful co-operation working on applications such as WLCSP and FOWLP to improve our process capability and lower our manufacturing cost. We very much appreciate the commitment, proactive support and tailor made solutions just for us.

In addition to the technology support that Evatec provides, we also gain both now and in the future from their developing customer service organisation which evolves to support our growing location base in China and overseas.

### Investment never stops

We will continue to invest in advanced packaging technologies such as WLCSP, FOWLP, SiP, 2.5DF/3D in alignment with the semiconductor industry roadmap. Combining that with our continuing strategy to build our team with international talent and extend our manufacturing footprint to provide "local" service to international customers should keep us well on track to becoming a worldwide market leader:

“We are definitely looking for further cooperation opportunities with Evatec as our long term partner.”

# About TFME



## The company

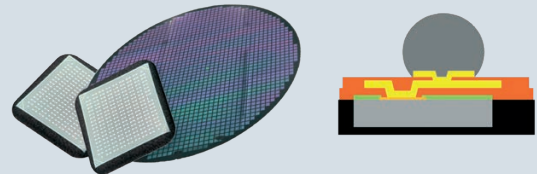
TFME, TongFu Microelectronics Co. Ltd, was established in October 1997 and an IPO in Shenzhen Stock Exchange on August 16, 2007. Our company has two major shareholders: Nantong Huada Microelectronics Group Ltd. and ICF (The Big Fund) since March 2018.

The corporation specialises in IC assembling and testing, and is one of China's top three IC Package and Test Enterprises. In 2017, TFME ranked 7th globally with revenues around US\$ 1B.

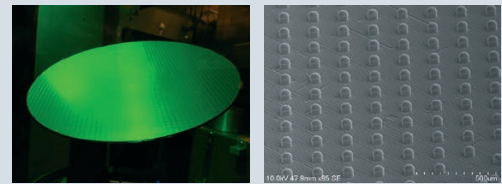
TFME have 6 production bases: The Headquarters in Nantong, Nantong Tongfu, Hefei Tongfu, TF-AMD Suzhou, TF-AMD Penang, Xiamen Tongfu. Through development and acquisition, TFME has become the local semiconductor multinational corporation and the leader of China IC Package and Test Industry. At present we have more than 13,000 employees.

TFME owns several advanced packaging & testing technologies such as WLCSP (Copper Pillar and Gold Bumping), Fan-Out Wafer Level Package (FOWLP), Flip chip, BGA, SiP etc. We provide traditional Package & Test technologies such as QFN, QFP, SO, TO and solutions for automotive electronics and MEMS products etc.; Testing technique such as: Wafer Test and System Level Test.

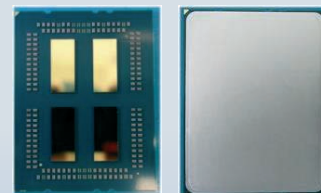
## The products



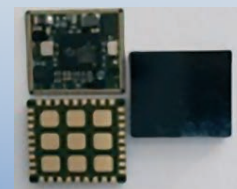
Fan-out wafer level package for AP/BP application  
AP/BP: application processor/baseband processor



12 inch (10nm) Cu Pillar Cu bump array



Size max to 75 x 58 mm  
FCBGA for high performance computing application



NB-ITO module

