

# Speech subject: High Density Glass Core Package Substrate

*Speech leader:* CUI Chengqiang, Professor, Chairman, Guangdong University of Technology Guang Dong FoZhiXin microelectronics Technology Research Co.Ltd.

## Speech Description/Objective:

As the demand for AI computing power and other application scenarios gradually increases, glass substrates have become a research focus for new advanced packaging technologies due to their inherent electrical properties, excellent mechanical performance, good thermal conductivity, and low thermal expansion coefficient. Their core technology, TGV is also considered a key process for next-generation advanced packaging. Professor Cui has worked on packaging interconnect technology and materials for over 30 years, especially on high density packaging substrate production. In the recent 4years, he is engaged in the research and production of glass substrates. He has developed the TGV technology at panel level with controllable hole shapes, diameters, and tapering. More importantly, The glass metallization at a high bonding strength for different kind of glass is achieved, meeting high density substrate requirement. This presentation will cover the challenges faced by glass substrates manufacturing and update its research progress.

### Speech Outline:

- Advantages of Glass as the Next-Generation Integration Substrate
- Current Major Challenges and Opportunities
- Solutions and Research Progress
- Product Applications

### Who Should Attend:

Researchers at universities and companies

#### Introduction of Speaker:

Prof.Cui is Distinguished Professor of Guangdong University of Technology and also founder/ Chairman of Guang Dong FoZhiXin microelectronics Technology Research Co.Ltd. He received his PhD in Chemistry from the University of Essex (ESSEX) in 1991, bachelor's and master's degrees in electrochemistry, Tianjin University in 1983 and 1985, respectively. He received Singapore prestigious Lee Kuan Yew Fellowship in 1993 for his outstanding research work. He has over 30 years' experience in R&D of advanced packaging technology and materials, especially on high-density packaging substrate production. His work experience covers from university research institute and manufacturing companies. He has hosted various national R&D projects including national 02 project and 863 project. So far, he has obtained more than 120 authorized patents at home and abroad, and published more than 160 papers in journals.