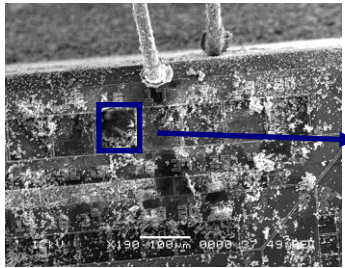
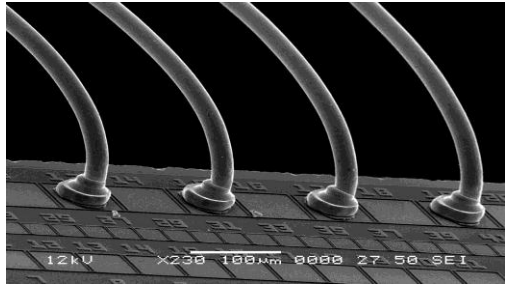
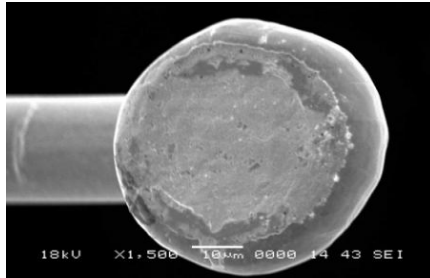


Galvanic corrosion of Cu/Al versus Au/Al



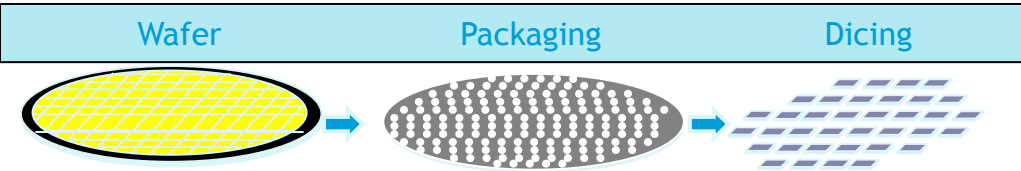
- Scope: Galvanic corrosion of Cu/Al versus Au/Al in wirebonding
- Application: Failure mechanism due the change of Cu and Au wire in micro-electronics areas
- Customer: World Gold Council
- Competency: DOE matrix for analysis, Galvanic corrosion of dissimilar metal, Au and Cu wirebonding processes, reliability testing, surface characterization

Ball-in-via architecture in Wafer Level Package (WLP) for Reliability and Productivity

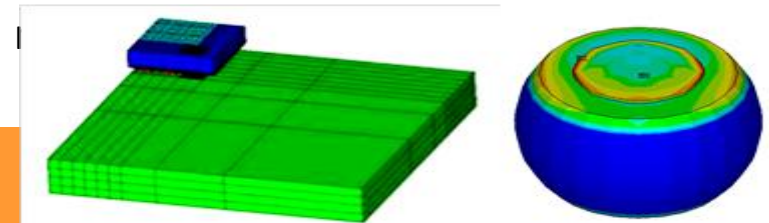
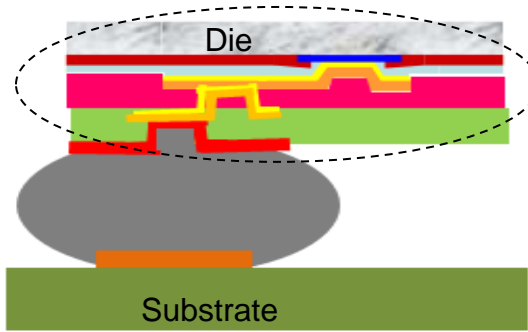
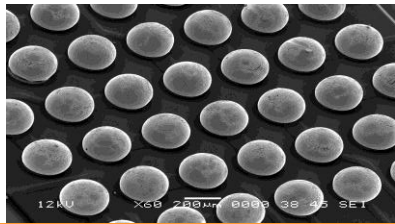
- Scope: Development a new architecture and process for WLP package for enhance reliability and productivity
- Application: WLP for use in mobile electronics applications
- Competency: Wafer process, micro-electronics packaging, reliability and failure analysis, CAE simulation and DOE

Wafer Level Package

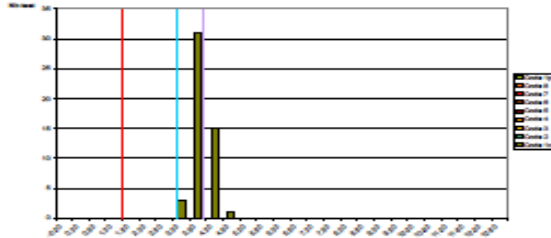
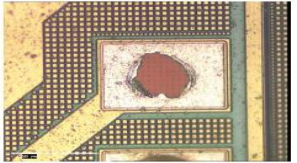
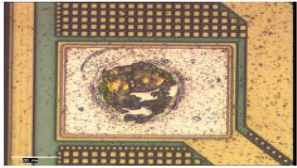
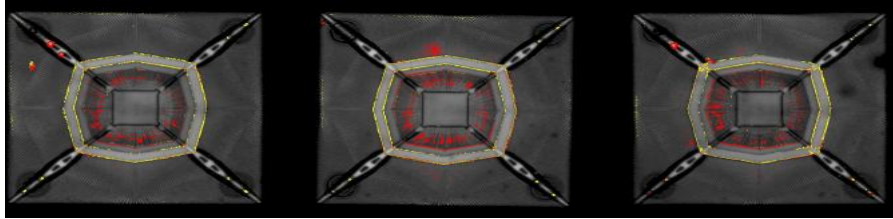
Ultimate Down-Sizing



BIV architecture remove the interlayer via and routing with direct access to the inner layer



Characterization of micro-electronics packages and its reliability



- Scope: Characterize microelectronic packages and its interconnect through mechanical test and surface characterization
- Application: Characterization the interconnect bond integrity to enhance interconnect
- Customer: Setsco Service Ptd Ltd
- Competency: Microscopic and Marcoscopic analysis, Chemical preparation of sample, SEM/EDX analysis, mechanical testing such as pull and shear analysis.