Analysis services

Analysis of internal voids, cracks, and delamination

High precision investigation of minute peeling and cracks

X-ray + SAT + cross-sectional polishing + SEM observation

It can detect defects such as internal voids, cracks, and peeling of packages, metals, resins, etc. in a non-destructive method.

1 X-ray observation

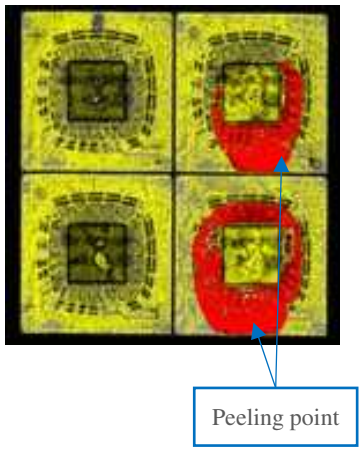
The sample can be observed without destruction.

Some voids are difficult to see on x-rays.

2 Observation by SAT (Ultrasonic test)

Even for internal voids and cracks in resin, which are difficult to confirm by X-ray observation, sometimes it is easier to detect by using ultrasonic examination.

■Example: SAT images (peeling)



3 SEM observations after cross-sectional polishing

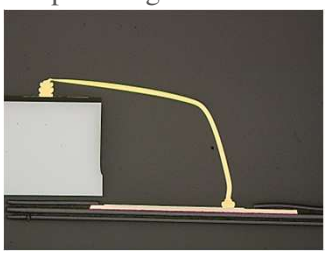
Using the method described above, the voids in the resin get to be visible by determining the void's location, implementing a cross-sectional polish, and observing the polished surface.

After polishing the cross section, the finish is etched by ion milling to produce a clean and distortion-free cross section, which can be observed in fine detail in SEM observations.

4 Observations are made according to various scenes.

- Failure analysis of the reliability test
- Implementation evaluation
- Evaluation of good products and prototypes

■Example: Optical microscope image of cross-sectional polishing



We pay close attention to the details of consultations and requests with the first priority on strict adherence. In particular, a confidentiality agreement shall be entered into in the event of a request.

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