



Contribution ID: 255

Type: **Poster**

## Effecting aging time of epoxy molding compound to molding process for integrated circuit packaging

*Thursday 25 May 2017 17:45 (15 minutes)*

This research studied about effecting aging time of epoxy molding compound (EMC) that effect to reliability performance of integrated circuit (IC) package in molding process. Molding process is so important of IC packaging process for protecting IC chip (or die) from temperature and humidity environment using encapsulated EMC. For general molding process, EMC are stored in the frozen at 5 degree celsius and left at room temperature at 25 degree celsius for aging time on self before molding of die onto leadframe is 24 hours. The aging time effect to reliability performance of IC package due to different temperature and humidity inside the package. In experiment, aging time of EMC were varied from 0 to 24 hours for molding process of SOIC-8L packages. For analysis, these packages were tested by x-ray and scanning acoustic microscope to analyze properties of EMC with an aging time and also analyzed delamination, internal void, and wire sweep inside the packages with different aging time. The results revealed that different aging time of EMC effect to properties and reliability performance of molding process.

**Author:** TACHAPITUNSUK, Jirayu

**Co-authors:** UGSORNRAT, Kessarat; SRISUWITTHANON, Warayoot; THONGLOR, Panakamon

**Presenter:** TACHAPITUNSUK, Jirayu

**Session Classification:** Poster Presentation II

**Track Classification:** Magnetic and Semiconductor Physics