

## عنوان مقاله:

Microwave Nondestructive Detection of Delamination in IC Packages Utilizing Open-Ended Coaxial Line Sensor

## محل انتشار:

اولین کنفرانس بین المللی بازرسی فنی و آزمون غیرمخرب (سال: 1386)

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## خلاصه مقاله:

A new method of microwave nondestructive testing which utilizes an open-ended coaxial line sensor is developed in an attempt to increase the spatial resolution. With the aid of this technique, the delamination in IC packages is inspected. An open-ended coaxial line sensor with inner and outer conductors in smaller dimension than the wavelength is used to incident and receives the test signal that interacts with the detected objects. The magnitude of effective reflection coefficient, which is proportional to the total reflection from different interfaces, is measured as a characteristic signal to distinguish the delamination. A phenomenon of magnitude coherent resonance is observed in detail, by which the measurement sensitivity is enhanced significantly. Four IC packages were used as samples, and the measurement results indicate that the microwave technique using an open-ended coaxial line sensor has a bright prospect to evaluate the delamination in IC packages nondestructively.

## کلمات کلیدی:

Coaxial line; Sensor; Delamination; IC package; Microwave; Nondestructive testing

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/53978>

