

ABSTRACT**METHOD AND APPARATUS FOR SINGULATION OF ELECTRONIC DEVICES**

An laser ablation apparatus for the singulation of IC packages that uses a cool, clean and dry process that does not result in the generation of burr or loose particles. The apparatus provides a novel method of cutting a panel of IC packages to achieve electrical isolation without singulation. The laser beam spot is kept very small while the frequency is high and pulse energy is low.

FIGURE 3