ABSTRACT

METHODS TO IMPROVE LASER MARK CONTRAST ON DIE BACKSIDE FILM IN EMBEDDED DIE PACKAGES

Apparatus including a die including a device side with contact points; and a build-up carrier disposed on the device side of the die; and a film disposed on the back side of the die, the film including a markable material including a mark contrast of at least 20 percent. Method including forming a body of a build-up carrier adjacent a device side of a die; and forming a film on a back side of the die, the film including a markable material including a mark contrast of at least 20 percent. Apparatus including a package including a microprocessor disposed in a carrier; a film on the back side of the microprocessor, the film including a markable material including a mark contrast of at least 20 percent; and a printed circuit board coupled to at least a portion of the plurality of conductive posts of the carrier.

(Figure No. 1)