DIRECT ATTACHMENT OF SEMICONDUCTOR CHIP TO ORGANIC SUBSTRATE

ABSTRACT

A method for attaching an integrated circuit chip to an organic substrate comprising the steps of providing an integrated circuit chip having an active and a passive surface, said active surface including a protective polymer layer; activating said polymer layer by exposing it to reactive ion etching plasma, thereby increasing the surface roughness and imparting affinity to adhesion; providing an electrically insulating substrate having first and second surfaces; and contacting said second surface of said substrate to said activated polymer layer on said chip, whereby strong adhesion is exerted at the interface between said layer and said substrate, directly attaching said substrate to said chip.

Figure 1