

Abstract

INTEGRATED CIRCUIT MODULES AND SMART CARDS INCORPORATING THE SAME

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Embodiments of the invention provide an integrated chip (IC) module having contact pads which are accessible by single-bond holes and module-side antenna contact pads which are accessible by multi-bond holes. Each multi-bond hole is apportioned by an encapsulation into adjoining bonding channels for separately receiving wire bond(s) and antenna-connecting element. Each module-side antenna contact pad is apportioned by the encapsulation into adjoining but electrically connected bonding areas to allow establishment of electrical connection of both wire bond(s) and antenna-connecting element to an IC chip. The first and the second bonding area are partitioned from each other, by the encapsulant, without requiring a presence of substrate therebetween.

(Figure 3C)

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