ANTENNA SYSTEM, AND METHOD OF FORMING THE SAME

ABSTRACT

Various embodiments may provide an antenna system. The antenna system may include a printed circuit board including a circuit board ground element. The antenna system may also include a package over a surface of the printed circuit board. The antenna system may further include a radiating element parallel to the surface of the printed circuit board. The package may include a first encapsulation portion, and a radio frequency integrated circuit chip embedded in the first encapsulation portion, the radio frequency integrated circuit chip parallel to the surface of the printed circuit board. The package may additionally include a package ground element over the first encapsulation portion and in electrical connection with the circuit board ground element, the package ground element parallel to the surface of the printed circuit board, and a second encapsulation portion between the package ground element and the radiating element.

FIG. 2