financial transactions, to provide personal identification, authentication, data storage, application processing and for other purposes.

[0005] Many smart cards include a pattern of metal contacts (e.g., a contact plate) to provide electrical connectivity (e.g., via a card reader) to the internal chip.

[0006] Current processes of manufacturing and/or assembling the chips, the contact plate and other elements within the card require a large number of steps, and as a result, are time consuming, expensive and prone to problems.

[0007] Accordingly, there is a need for a process of manufacturing and/or assembling packaged electronic modules for use within smarts cards that reduces the number of steps, the time required for the process, the expense of the process and the problems that may occur.

Summary of Invention

[0007a] According to a first aspect of the present invention, there is provided a method of assembling a packaged electronic module for use with a smart card, the method comprising the steps: (A) providing a first contact plate including a first electrical connector, the first electrical connector being configured with a first surface of the first contact plate; (B) providing a first printed circuit including a second electrical connector, the second electrical connector being configured with a first surface of the first printed circuit; (C) joining the contact plate and the printed circuit such that the first electrical connector and the second electrical connector are electrically mated to form a packaged electronic module; wherein the first printed circuit includes one or more electronic components, and the first electrical connector of the first printed circuit is electrically connected to at least one of the one or more electronic components; wherein the electrical mating of the first electrical connector with the second electrical connector in (C) forms a gap between the first surface of the first contact plate and the first surface of the first printed circuit, and wherein at least one of the one or more electronic components fits within the gap.

[0007b] According to a second aspect of the present invention, there is provided a method of assembling a packaged electronic module for use with a smart card, the

method comprising the steps: (A) providing a first contact plate including a first electrical connector, the first electrical connector configured with a first surface of the first contact plate; (B) providing a first printed circuit including a second electrical connector configured with a first surface of the first printed circuit, and a third electrical connector configured with a second surface of the printed circuit; (C) providing a second printed circuit including a first contact area configured with a first surface of the second printed circuit; (D) electrically mating the first electrical connector with the second electrical connector and the third electrical connector with the first contact area to form a packaged electronic module.

Brief Description of the Drawings

[0008] Various other objects, features and attendant advantages of the present invention will become fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views, and wherein:

[0009] FIG. 1 shows aspects of a packaged electronic module according to exemplary embodiments hereof;