What is claimed is:

1. An embedded electronic device comprising:

a printed circuit board, having a top surface and a bottom surface;

a plurality of circuit components attached to the top surface of the printed circuit board such that the plurality of circuit components are in direct electrical contact with the top surface of the printed circuit board;

a bottom overlay directly and uniformly attached to the bottom surface of the printed circuit board over their entire common surfaces;

a top overlay positioned above the top surface of the printed circuit board; and

a core layer comprised of thermosetting polymeric material positioned between the top surface of the printed circuit board and the top overlay, which thermosetting polymeric material is in physical contact with the plurality of circuit components.

2. The embedded electronic device of claim 1, wherein the printed circuit board has a plurality of circuit traces on the top surface configured to operably connect to the plurality of circuit components and may have a plurality of circuit traces on the bottom surface configured to operably connect to a plurality of circuit components on the bottom surface of the printed circuit board.

3. The embedded electronic device of claim 1, wherein the plurality of circuit traces are formed with conductive ink.

4. The embedded electronic device of claim 1, wherein the plurality of circuit traces are etched onto the printed circuit board.

5. The embedded electronic device of claim 1, wherein the bottom overlay is attached to the bottom surface of the printed circuit board with a layer of pressure sensitive adhesive tape or a layer of spray-on adhesive.

6. The embedded electronic device of claim 1, wherein the printed circuit board is composed of a flame retardant laminate with woven glass reinforced epoxy resin (FR-4).

7. The embedded electronic device of claim 1, wherein the top and bottom overlay are both comprised of polyvinyl chloride.

8. The embedded electronic device of claim 1, wherein the core layer is comprised of thermosetting polyurea.

9. The embedded electronic device of claim 1, wherein one of the plurality of circuit components includes at least one push button.

10. The embedded electronic device of claim 1, wherein one of the plurality of circuit components includes at least one battery.

11. The embedded electronic device of claim 1, wherein one of the plurality of circuit components includes at least one microprocessor chip.

12. The embedded electronic device of claim 1, wherein one of the plurality of circuit components includes at least one speaker.

13. The embedded electronic device of claim 1, wherein the thermosetting polymeric material bonds the top overlay and the bottom overlay to the plurality of circuit components.

14. A method for manufacturing an embedded electronic device, comprising:

providing a printed circuit board having a top surface and a bottom surface;

affixing a plurality of circuit components onto the top surface of the printed circuit board such that the plurality of circuit components are in direct electrical contact with the top surface of the printed circuit board;

affixing the bottom surface of the printed circuit board to a bottom overlay using pressure sensitive adhesive tape or a spray-on adhesive so that the bottom surface of the printed circuit board is directly and uniformly attached to the bottom overlay over their entire common surfaces;

loading the printed circuit board and bottom overlay into an injection molding apparatus;

loading a top overlay positioned above a top surface of the printed circuit board into the injection molding apparatus; and

injecting the thermosetting polymeric material between the top surface of the printed circuit board, the plurality of circuit components, and the top overlay, which thermosetting polymeric material is in physical contact with the plurality of circuit components.

15. The method of claim **14**, wherein the thermosetting polymeric material is polyurea.

16. The method of claim **14**, wherein a plurality of embedded electronic devices are formed on one printed circuit board.

17. The method of claim **14**, further comprising:

removing the injected top and bottom overlay from the mold; and

cutting out the plurality embedded electronic devices.

18. The method of claim **14**, wherein the circuit traces are formed by etching traces into the printed circuit board.

19. The method of claim **14**, wherein the thermosetting polymeric material bonds the top overlay and the bottom overlay to the plurality of circuit components.