What is claimed is:

1. A method of manufacturing a radio frequency inlay, said method comprising:

providing a substrate defining a substrate plane, and an integrated circuit positioned on said substrate or in a recess formed on said substrate, and a pair of terminal areas associated with said integrated circuit;

affixing a wire to said substrate to form an antenna, said affixing step including:

(i) affixing a first portion of said wire to said substrate laterally offset and spaced from one of said terminal areas and forming a first wire loop from a portion of said first portion of wire with said first wire loop extending above said plane of said substrate;

(ii) affixing a second portion of the wire to the substrate to form the windings of an antenna;

(iii) affixing a third portion of said wire to said substrate laterally offset and spaced from the other of said terminal areas and forming a second wire loop from a portion of said second portion of wire with said second wire loop extending above said plane of said substrate.

2. A method, as claimed in claim 1, wherein:

affixing said wire to said substrate comprises embedding said wire partially or fully into said substrate.

3. A method, as claimed in claim 1, further including the step of:

displacing the first and second wire loops such that a portion of said first loop is positioned over at least some portion of one of said pair of said terminal areas and a portion of said second wire loop is positioned over at least some portion of the other of said pair of terminal areas.

4. A method, as claimed in claim 3, further including the step of:

electrically bonding portions of said first and second wire loops to the corresponding terminal areas.

5. A method, as claimed in claim 1, wherein said wire is insulated, further including the step of:

treating portions of said first and second wire loops to remove insulation thereon thereby exposing a conductor of the underlying wire.

6. A method, as claimed in claim 5, wherein:

said treating step comprises applying a laser beam to said treated portions.

7. The method of claim 6, further comprising:

positioning said wire loops, said laser and said terminal areas whereby operation of the laser removes insulation from said wire but said laser does not strike said terminal areas.

8. The method of claim 3, further wherein:

Said first and second wire loops are displaced by a mechanical device.

9. The method of claim 8, wherein:

Said mechanical device is a brush or comb.

10. A method of manufacturing a radio frequency inlay, comprising:

placing a chip or chip module on the surface of a substrate or in a recess formed in a substrate, said chip or chip module including a terminal area;

forming a first loop of wire extending above the surface of the substrate, said first loop of wire formed at a location offset from but not directly over or in contact with said chip or chip module;

embedding a length of wire partially or completely in said substrate, said length of wire electrically connected to said first loop of wire;

moving said first loop of wire to a position directly over or in contact with said terminal area;

electrically connecting said first loop of wire to said terminal area.

11. The method of claim 10, further comprising:

removing insulation from said first loop of wire prior to electrically connecting said first loop of wire to said terminal area.

12. The method of claim 11, further comprising:

using a laser to remove said insulation.

13. The method of claim 12, further comprising:

positioning said laser so that the laser light strikes a portion of said first loop of wire but does not strike said terminal area.

14. The method of claim 10, further comprising:

forming a second loop of wire extending above the surface of the substrate, said second loop of wire formed at a location offset from but not directly over or in contact with a second terminal area associated with said chip or chip module.

15. The method of claim 14, further comprising:

moving said second loop of wire to a position directly over or in contact with said second terminal area; and

electrically connecting said second loop of wire to said second terminal area.

16. The method of claim 14, further comprising:

removing insulation from said second loop of wire prior to electrically connecting said second loop of wire to said second terminal area.

17. The method of claim 10, further comprising:

forming said first loop of wire and said length of wire from a continuous length of wire.

18. The method of claim 14, further comprising:

forming said first loop of wire, said second loop of wire and said length of wire from a continuous length of wire.

19. A radio frequency device comprising:

a substrate defining a substrate plane, and an integrated circuit positioned on said substrate or in a recess formed on said substrate;

a pair of terminal areas associated with said integrated circuit and positioned adjacent thereto;

a wire affixed to said substrate to form an antenna, said wire comprising a first portion laterally offset and spaced from one of said terminal areas and a first wire loop formed from said first portion, a second portion of the wire embedded in said substrate to form windings of the antenna, and a third portion of said wire laterally offset and spaced from the other of said terminal areas and a second wire loop formed from said second portion.

20. A radio frequency inlay, as claimed in claim 19, wherein:

said first and second wire loops are positioned above said substrate.

What is claimed is:

1. A method of manufacturing a radio frequency inlay, comprising:

placing a chip or chip module on the surface of a substrate or in a recess formed in a substrate, said chip or chip module including a terminal area;

forming a first loop of wire extending from and above the surface of the substrate, said first loop of wire attached to said substrate at a location on said substrate offset from but not directly over or in contact with said chip or chip module;

embedding a length of wire partially or completely in said substrate, said length of wire electrically connected to said first loop of wire;

repositioning said first loop of wire relative to the substrate to which the first loop of wire is attached to a position directly over or in contact with said terminal area;

electrically connecting said first loop of wire to said terminal area.

2. The method of claim 1, further comprising:

removing insulation from said first loop of wire prior to electrically connecting said first loop of wire to said terminal area.

3. The method of claim 2, further comprising:

using a laser to remove said insulation.

4. The method of claim 3, further comprising:

positioning said laser so that the laser light strikes a portion of said first loop of wire but does not strike said terminal area.

5. The method of claim 1, further comprising:

forming a second loop of wire extending from and above the surface of the substrate, said second loop of wire formed on said substrate at a location offset from but not directly over or in contact with a second terminal area associated with said chip or chip module.

6. The method of claim 5, further comprising:

repositioning said second loop of wire relative to the substrate to which the second loop of wire is attached to a position directly over or in contact with said second terminal area; and electrically connecting said second loop of wire to said second terminal area.

7. The method of claim 5, further comprising:
removing insulation from said second loop of wire prior to electrically connecting said second loop of wire to said second terminal area.

8. The method of claim 1, further comprising:
forming said first loop of wire and said length of wire from a continuous length of wire.

9. The method of claim 5, further comprising:
forming said first loop of wire, said second loop of wire and said length of wire from a continuous length of wire.

10. The method of claim 1, wherein repositioning said first loop of wire to a position directly over or in contact with said terminal area comprises engaging said first loop of wire with a movable arm.

11. The method of claim 10, wherein the movable arm comprises a jaw assembly which engages said first loop of wire.

12. The method of claim 11, wherein said jaw assembly comprises at least one notch and the first loop of wire is engaged by said at least one notch.

13. The method of claim 12, wherein said jaw assembly comprises two notches spaced from each other such that the two notches do not contact the chip or chip module when moving said first loop of wire to a position directly over or in contact with said terminal area.

14. The method of claim 11, wherein said jaw assembly contacts said surface of said substrate in moving said first loop of wire to a position directly over or in contact with said terminal area.

15. The method of claim 14, wherein said jaw assembly pivots when engaging or moving said

first loop of wire.

16. The method of claim 6, wherein repositioning said first and second loops of wire to a position directly over or in contact with said first and second terminal areas comprises engaging said first and second loops of wire with separate opposed arms and moving said arms towards each other.

17. The method of claim 16, further comprising limiting the movement of the opposed arms with a stop apparatus.

18. The method of claim 1, wherein embedding said length of wire partially or completely in said substrate comprises forming an antenna.

19. The method of claim 5, further comprising electrically connecting said first loop of wire, said second loop of wire and said length of wire.

20. The method of claim 1, further comprising using a tool to move the first loop of wire and holding the tool in place while electrically connecting the first loop of wire to the first terminal area.

21. The method of claim 5, further comprising using a tool to move the second loop of wire and holding the tool in place while electrically connecting the second loop of wire to the second terminal area.

22. The method of claim 5, wherein the step of forming a second loop of wire extending above the surface of the substrate comprises forming said second loop of wire at a location offset from but not directly over or in contact with a second terminal area associated with said chip or chip module.

23. A method of manufacturing a radio frequency inlay, comprising: providing a single substrate with a location to receive a chip or chip module; forming a first loop of wire extending from and above the surface of the substrate, said first loop of wire attached to said substrate at a location proximate to the location to receive a chip or chip module; embedding a length of wire partially or completely in said substrate, said length of wire electrically connected to said

first loop of wire; placing a chip or chip module at the location for receiving a chip or chip module, said chip or chip module including a first terminal area; repositioning said first loop of wire relative to the substrate to which the first loop of wire is attached to a position directly over or in contact with said terminal area; electrically connecting said first loop of wire to said terminal area.

24. The method of claim 23, further comprising: removing insulation from said first loop of wire prior to electrically connecting said first loop of wire to said first terminal area.

25. The method of claim 24, further comprising: using a laser to remove said insulation.

26. The method of claim 23, wherein the chip or chip module comprises a second terminal area, the method further comprising: forming a second loop of wire extending above the surface of the substrate, said second loop of wire formed proximate the location to receive the chip or chip module.

27. The method of claim 26, further comprising: repositioning said second loop of wire to a position directly over or in contact with said second terminal area; and electrically connecting said second loop of wire to said second terminal area.

28. The method of claim 26, further comprising: removing insulation from said second loop of wire prior to electrically connecting said second loop of wire to said second terminal area.

29. The method of claim 23, further comprising: forming said first loop of wire and said length of wire from a continuous length of wire.

30. The method of claim 26, further comprising: forming said first loop of wire, said second loop of wire and said length of wire from a continuous length of wire.

31. The method of claim 1, wherein the substrate comprises a single layer.

32. The method of claim 23, wherein the substrate comprises a single layer.

33. The method of claim 23 wherein the location to receive a chip or chip module is a recess formed in the substrate.