CLAIMS

1. An electrical connector comprising:

a housing; and

a plurality of electrical contacts connected to the housing, where each of the contacts comprises:

a first portion comprising a plurality of cantilevered contact arms configured to receive a male contact of a mating electrical connector therebetween, and a retention feature assisting in locating the contact in a contact receiving area of the housing, and

a first surface mount solder tail, wherein the first surface mount solder tail is attached to the first portion at a 180 degree bend.

2. The electrical connector of claim 1 where the contact further comprises a bridging portion connected to the retention feature and opposite ends of the main body of the contact.

3. The electrical connector of claim 1 where the retention feature is the widest portion of the contact and extends past opposite sides of the contact proximate the at least one cantilevered contact arm.

4. The electrical connector of claim 1 where the retention feature is flat.

5. The electrical connector of claim 1 where the retention feature is wider than the cantilevered contact arms.

6. The electrical connector of claim 1 where the retention feature is orientated at a substantial right angle relative to the plurality of cantilevered contact arms.

7. The electrical connector of claim 1 where the retention feature has a substantially diamond shaped outline.

8. The electrical connector of claim 1 where the retention feature has a substantially hour-glass shaped outline.

9. The electrical connector of claim 1 where the retention feature has opposite lateral sides which engage the housing to retain the electrical contact in the housing, where the retention feature is the widest portion of the electrical contact.

10. The electrical connector of claim 1, wherein the plurality of the contact arms are parallel to the first surface mount solder tail such that upon receiving the male contact, the contact arms exert a force on the male contact which is parallel to the first surface mount solder tail.

11. The electrical connector of claim 1 wherein:

the first portion further comprises a main body of the contact; and

the plurality of cantilevered contact arms, retention feature and first surface mount solder tail extend in a same direction from the main body of the contact.

12. The electrical connector of claim 11 where the retention feature has a general cantilevered shape extending from the main body of the contact.

13. The electrical connector of claim 1 further comprising a second surface mount solder tail, where the first surface mount solder tail extends off of a main body of the contact at a first location and where the second surface mount solder tail extends from the contact at a second location.

14. The electrical connector of claim 13 where the second surface mount solder tail extends off of the main body.

15. The electrical connector of claim 13 where the second surface mount solder tail extends off of one of the plurality of cantilevered contact arms.

16. The electrical connector of claim 13 where the second surface mount solder tail extends off of the retention feature.

17. An electrical connector comprising:

a housing comprising a mating surface and a mounting surface, and plurality of openings in the mating surface forming contact receiving areas, wherein the plurality of contact receiving areas are disposed in a plurality of parallel rows; and

a plurality of electrical contacts disposed within respective openings of the plurality of openings, wherein each of the plurality of electrical contacts comprises:

a first portion comprising at least one cantilevered contact arm configured to contact a male contact of a mating electrical connector inserted in the respective contact receiving area, and a retention feature pressing against the housing at opposing sides of the respective opening so as to locate the contact in the respective contact receiving area of the housing, and

a first solder tail comprising a first end attached to the first portion and a second end extending through the mounting surface of the housing, wherein the at least one contact arm is aligned with the second end of the first solder tail;

wherein the first end of the first solder tail is attached to the first portion at a 180 degree bend.

18. The electrical connector of claim 17, wherein the at least one contact arm is two contact arms.

19. The electrical connector of claim 18 wherein the two contact arms are separated in a direction perpendicular to the plurality of parallel rows by a distance less than a width of the retention feature.

20. An electrical connector comprising:

a housing comprising a mounting face and a mating face offset from the mounting face in a first direction; and

a plurality of electrical contacts connected to the housing, wherein each of the contacts comprises:

a first portion comprising a body adjacent the mating face, a retention feature assisting in locating the contact in a contact receiving area of the housing and at least one cantilevered contact arm configured to contact a male contact of a mating electrical connector inserted in the contact receiving area, wherein the at least one cantilevered contact arm has a fixed end coupled to the body and a free end, separated from the fixed end in the first direction, and

a tail, wherein the tail has a first end attached to the body adjacent the mating face and a second end extending from the housing at the mounting face;

wherein the first end of the tail is attached to the body of the first portion at a 180 degree bend.

21. The electrical connector of claim 20, wherein the tail is a surface mount solder tail.

22. The electrical connector of claim 21, wherein the second end of the surface mount solder tail is bent at a 90 degree angle.

23. The electrical connector of claim 21, wherein the contact receiving areas extend from the mating face to the mounting face.