Claims

1. Contactor spring (57), configured to form part of an IC contactor socket (5; 50),
wherein
the contactor spring has a U shaped or C shaped or S shaped or Z shaped spring body (57a), wherein both of the first and second free ends of the spring body comprises an outwardly directed contactor protrusion (57b, 57c), and wherein the spring body comprises at least a first U shaped or C shaped or S shaped or Z shaped, respectively, recess which extends from close to the first free end to close of the second free end thereof,
characterized in that at one side of the base of the spring body (57a) a hook-shaped support protrusion (57e) is provided, and on the other side of the base a small straight support protrusion (57d) is provided, and that two longitudinal slits (57h, 57i) are formed in the base portion, defining legs (57j, 57k) beyond the slits (57h, 57i), configured to exert elastic pressure against an adjacent wall in the contactor socket (5; 50) which in cooperation with the straight support protrusion (57d) and the hook-shaped support protrusion (57e) results in a secure fixation of the contactor spring (57) within a recess (58) of the conductor socket (5; 50) and enables an easy removal of the spring (57) from the contactor socket (5; 50).

2. Contactor spring of claim 1, wherein at both the first and second free ends of the spring body (57a) a respective contactor protrusion (57b, 57c) is provided, wherein the contactor protrusions are collinear with each other and oppositely directed.

3. Contactor spring of claim 1 or 2, wherein the hook-shaped support protrusion (57e) extends basically parallel to the adjacent base portion of the spring body (57a), from where it protrudes.

4. Contactor spring (157; 257) of any of the preceding claims, wherein the spring body comprises at least a second recess (157g, 257g) which extends basically conform to the first recess (157f, 257f) along at least part of the U or C shape or S shape or Z shape of the spring body, respectively.

5. Contactor spring of claim 4, wherein in a U or C shaped spring body (257) the second recess (257g) extends from close to the first free end to close of the second free end.

6. Contactor spring of claim 4, wherein an S shaped or Z shaped spring body (157) comprises a second and third recess, the second recess extending from the first free end of the spring body to a central portion of the spring body and the third recess extending from the central portion to the second free end of the spring body.

7. Contactor socket (5;50) of an IC test handler (1), the contactor socket comprising a contactor socket body (51) having a first and second plane surface, the second plane surface being parallel and opposite to the first plane surface, and wherein a line or an array of test contacts (57) supported in at least one recess (54) is arranged within the contactor socket body, such test contacts extending normal to the and between the first and second plane surface and being adapted for providing elastic pressure contact with device contacts of at least one IC (9a) which is positioned above the first plane surface and with contacts of a loadboard positioned below the second plane surface and, thus, an electrical connection between the device contacts and loadboard contacts,
characterized in that
the test contacts are each formed integrally as a contactor spring (57; 157; 257) of one of the preceding claims, and that
the contactor socket (5; 50) comprises a recess (58) for accommodating and fixation of the contactor spring which has a wall which recess is adjacent and in pressure contact with the legs (57j, 57k) of the contactor spring (57).

8. Contactor socket of claim 7, comprising at least one internal cavity (586) having an L shaped cross section, adapted to receive at least one hook-shaped support protrusion (57e) which is formed on a contactor spring (57).

9. Contactor socket of claim 8, wherein the cavity (586) for receiving the at least one hook-shaped support protrusion (57e) is formed as a notch which receives a plurality of hook-shaped support protrusions of a plurality of spring contacts (57) which are arranged parallel to each other in a test contact line of the contactor socket (50).

10. Contactor socket of one of claims 7-9, comprising four lines of test contacts (57) which form a rectangle or square.

11. Contactor socket of claim 10, wherein the contactor socket body (51) comprises four basically triangular or trapezoidal contactor socket pieces (521), wherein each of the contactor socket pieces comprises one of the lines of test contacts and wherein the contactor socket pieces are connected to each other and are lockable and unlockable with/from each other.

12. Contactor socket of claim 11, wherein the contactor socket body (51) comprises a contactor socket support (52) and a contactor socket cover (53), wherein the contactor socket cover commonly covers the four contactor socket pieces (521) and defines a central recess (54) for receiving an IC (9a) to be tested, and wherein the contactor socket support and contactor socket cover cooperatively lock the contactor socket pieces with each other when put onto the pre-positioned contactor socket pieces.

13. Contactor socket of one of claims 8-12, wherein the or each contactor spring which is/are supported within the or each recess (54) within the contactor socket body or is bathed in a gas flow of a heating or cooling system when the contactor socket body is connected to the heating or cooling system.