Claims:

1. A method of processing a semiconductor substrate, comprising:

applying a polymer layer that is non-adhesive to a carrier plate formed of a dielectric material;

applying a second layer to the polymer layer;

forming one or more redistribution layers on the second layer; and

separating the second layer from the carrier plate via at least one of magnetic induction heating, infrared exposure, or electrostatic repulsion.

2. The method of claim 1, wherein the carrier plate is configured as a electrostatic chuck including electrodes embedded in the carrier plate and the polymer layer comprises a semi-electrically conductive polymer film, and further comprising inducing an electrostatic attraction force between the carrier plate and the second layer prior to forming the one or more redistribution layers.

3. The method of claim 2, wherein the second layer is a copper layer.

4. The method of claim 2, further comprising storing charges having opposite polarities in the electrodes to electrostatically clamp the second layer to the carrier plate prior to forming the one or more redistribution layers.

5. The method of claim 4, further comprising applying a charge having the same polarity to the electrodes and to the second layer to separate the second layer from the carrier plate.

6. The method of claim 1, wherein both the polymer layer and the second layer comprises poly-dimethylsiloxane (PDMS).

7. The method of claim 6, wherein the polymer layer comprises poly-dimethylsiloxane (PDMS) doped with nanoparticles configured to generate heat when the nanoparticles are exposed to magnetic induction heating or infrared exposure.

8. The method of claim 1, wherein the carrier plate comprises silicon.

9. The method of claim 1, wherein the polymer layer comprises poly-dimethylsiloxane (PDMS) doped with nanoparticles configured to generate heat when the nanoparticles are exposed to magnetic induction heating or infrared exposure, wherein the second layer is a substantially pure poly-dimethylsiloxane (PDMS) layer, and wherein the second layer is separated from the polymer layer and the carrier plate via at least one of magnetic induction heating or infrared exposure to heat the nanoparticles.

10. A method of forming a package comprising:

applying an interface layer that is non-adhesive to a carrier plate formed of a dielectric material;

forming one or more redistribution layers on the interface layer;

coupling an integrated circuit to the one or more redistribution layers; and

separating the one or more redistribution layers and the integrated circuit from the carrier plate via at least one of magnetic induction heating, infrared exposure, or electrostatic repulsion.

11. The method of claim 10, wherein applying the interface layer to the carrier plate comprises applying a first polymer layer to the carrier plate and applying a second layer to the first polymer layer.

12. The method of claim 11, wherein the second layer is a copper layer.

13. The method of claim 11, wherein both the first polymer layer and the second layer comprises poly-dimethylsiloxane (PDMS).

14. The method of claim 13, wherein the first polymer layer comprises poly-dimethylsiloxane (PDMS) doped with nanoparticles configured to generate heat

when the nanoparticles are exposed to magnetic induction heating or infrared exposure.

15. The method of claim 10, wherein the carrier plate is configured as a electrostatic chuck including electrodes embedded in the carrier plate and the interface layer comprises a semi-electrically conductive polymer film, and further comprising inducing an electrostatic attraction force between the carrier plate and the interface layer prior to forming the one or more redistribution layers.

16. The method of claim 15, further comprising storing charges having opposite polarities in the electrodes to electrostatically clamp the interface layer to the carrier plate prior to forming the one or more redistribution layers.

17. The method of claim 16, further comprising applying a charge having the same polarity to the electrodes and to the interface layer to separate the interface layer from the carrier plate.

18. A method of processing a semiconductor substrate, comprising:

applying an interface layer that is non-adhesive to a dielectric carrier plate, wherein the interface layer includes a first polymer layer and a second layer;

forming one or more redistribution layers on the second layer;

separating the second layer from the dielectric carrier plate via at least one of magnetic induction heating, infrared exposure, or electrostatic repulsion; and

removing at least one of the first polymer layer and the second layer from the one or more redistribution layers.

19. The method of claim 18, wherein the first polymer layer comprises poly-dimethylsiloxane (PDMS) doped with nanoparticles configured to generate heat when the nanoparticles are exposed to magnetic induction heating or infrared exposure.

20. The method of claim 18, wherein the dielectric carrier plate is configured as a electrostatic chuck including electrodes embedded in the dielectric carrier plate and the interface layer comprises a semi-electrically conductive polymer film, and further comprising inducing an electrostatic attraction force between the dielectric carrier plate and the second layer prior to forming the one or more redistribution layers.