CLAIMS

1. A system for forming a conformal electromagnetic interference shield on at least one singulated electronic package through a sputtering process, comprising;

a jig;

wherein the jig is configured to support a tray;

wherein the tray is a frame formed with a hole and is mounted with an electromagnetic interference tape, with singulated electronic packages placed within the frame on the electromagnetic interference tape;

wherein the electromagnetic interference tape includes one thermal conductor layer;

wherein each of the singulated electronic packages includes a pre-tape layer that includes one thermal conductor layer;

wherein the singulated electronic packages are placed on the electromagnetic interference tape such that the pre-tape layer of each singulated electronic package is adjacent to the electromagnetic interference tape;

wherein the jig comprises:

a body having an outwardly extending arcuate top surface on which the tray with the singulated electronic packages is received, wherein the top surface is a raised paraboloid; and

a plurality of magnets;

wherein the magnets of the jig are each located adjacently with respect to sides of the jig but absent underneath the arcuate surface of the jig; and

wherein the frame of the tray is attracted to the magnets of the jig in which the frame is secured to the magnets in a vertically adjacent manner, while doing so, the electromagnetic interference tape conforms to the arcuate surface of the jig in a taut manner, for continuous contact between the jig and the singulated electronic packages on the tray , so that heat is dissipated from the singulated electronic packages to the jig during the sputtering process through the thermal conductor layers of the

electromagnetic interference tape and the singulated electronic packages.

2. The system according to claim 1, wherein the arcuate surface is a raised paraboloid.

3. A system for forming a conformal electromagnetic interference shield on at least one singulated electronic package through a sputtering process, comprising:

a tray being a frame formed with a hole and is mounted with an electromagnetic interference tape, with singulated electronic packages placed within the frame on the electromagnetic interference tape; and

a jig for supporting the tray, the jig comprising:

a body having an outwardly extending arcuate top surface on which the tray with the singulated electronic packages is received. wherein the top surface is a raised paraboloid; and

a plurality of magnets;

wherein the conformal electromagnetic interference shield is formed onto the singulated electronic packages on the tray through the sputtering process;

wherein the electromagnetic interference tape includes one thermal conductor layer;

wherein each of the singulated electronic packages includes a pre-tape layer that includes one thermal conductor layer;

wherein the singulated electronic packages are placed on the electromagnetic interference tape such that the pre-tape layer of each singulated electronic package is adjacent to the electromagnetic interference tape;

wherein the magnets of the jig are each located adjacently with respect to sides of the jig but absent underneath the arcuate surface of the jig; and

wherein the frame of the tray is attracted to the magnets of the jig in which the frame is secured to the magnets in a vertically adjacent manner, while doing so, the electromagnetic interference tape conforms to the arcuate surface of the jig in a taut manner, for continuous contact between the jig and the singulated electronic packages

on the tray, so that heat is dissipated from the singulated electronic packages to the jig during the sputtering process through the thermal conductor layers of the electromagnetic interference tape and the singulated electronic packages.

4. The system according to claim 3, wherein a pre-tape covers the exposed contacts of a pre-singulated electronic package.

5. The system according to claim 4, wherein the singulated electronic packages are placed on the tray with the pre-tape of the singulated electronic packages in contact with the electromagnetic interference tape.

6. The system according to claim 3, wherein the singulated electronic packages are secured on the tray by applying pressure across an x-direction and a y-direction.

7. A method for forming a conformal electromagnetic interference shield on at least one singulated electronic package, comprising the steps of:

preparing a tray by mounting an electromagnetic interference tape onto a frame formed with a hole;

placing singulated electronic packages on the tray, in which the singulated electronic packages are placed within the frame on the electromagnetic interference tape;

supporting the tray using a jig, the jig having an outwardly extending arcuate top surface on which the tray with the singulated electronic packages is received, and a plurality of magnets, wherein the top surface is a raised paraboloid; and

forming the conformal electromagnetic interference shield onto the singulated electronic packages on the tray through a sputtering process;

wherein the electromagnetic interference tape includes one thermal conductor layer;

wherein each of the singulated electronic packages includes a pre-tape layer that

includes one thermal conductor layer;

wherein the singulated electronic packages are placed on the electromagnetic interference tape such that the pre-tape layer of each singulated electronic package is adjacent to the electromagnetic interference tape;

wherein the magnets of the jig are each located adjacently with respect to sides of the jig but absent underneath the arcuate surface of the jig; and

wherein the frame of the tray is attracted to the magnets of the jig in which the frame is secured to the magnets in a vertically adjacent manner, while doing so, the electromagnetic interference tape conforms to the arcuate surface of the jig in a taut manner, for continuous contact between the jig and the singulated electronic packages on the tray, so that heat is dissipated from the singulated electronic packages to the jig during the sputtering process through the thermal conductor layers of the electromagnetic interference tape and the singulated electronic packages.

8. The method according to claim 7, further comprising the step of securing the singulated electronic packages on the tray by applying pressure across the x-direction and the y-direction, using a pressure roller module.

9. The method according to claim 7, further comprising the step of detaching the singulated electronic packages from the tray after the completion of the sputtering process.