WHAT IS CLAIMED CLAIMS IS:

1. A packaging process comprising steps of:

(a) providing a semi-package unit comprising an electronic component, a thermal conduction structure, a first metal layer and a second metal layer embedded within an insulation structure, wherein the first metal layer is attached on the electronic component, the second metal layer is attached on the thermal conduction structure;

(b) removing a portion of the insulation structure to form at least one concave disposed on an edge of the semi-package unit, and removing a portion of insulation structure to form plural first openings on one side of the semi-package unit and expose the first metal layer and the second metal layer;

(c) forming a first metal re-distribution layer to connect the insulation structure, the first metal layer and the second metal layer; and

(d) forming plural second openings on the first metal re-distribution layer and forming a first mask on the second opening.

2. The packaging process according to claim 1, wherein before the step (a), the packaging process further comprises steps:

forming a first recess on an edge of the thermal conduction structure;

providing a first carrier and the electronic component, wherein one side of the electronic component comprises at least one first conducting terminal and at least one second conducting terminal, the thermal conduction structure and the other side of the electronic component are attached on the first carrier;

providing a first insulation layer on one side of the thermal conduction structure and one side of the electronic component;

removing the first carrier;

forming a second recess on the other edge of the thermal conduction structure;

forming the first metal layer on the other side of the electronic component and forming the second metal layer on the other side of the thermal conduction structure; and

forming a second insulation layer on the first metal layer and the second metal layer, wherein the first insulation layer and the second insulation layer are formed into the insulation structure.

3. The packaging process according to claim 2, wherein the step (a) further comprises steps:

forming plural third openings on one side of the semi-package unit to expose the thermal conduction structure, the first conducting terminal and the second conducting terminal;

forming a second metal re-distribution layer on the first insulation layer, wherein the second metal re-distribution layer is connected with the thermal conduction structure, the first conducting terminal and the second conducting terminal; and

providing a second carrier and attaching the second carrier on the second metal re-distribution layer.

4. The packaging process according to claim 3, wherein the step (b) further comprises steps of:

removing a portion of the insulation structure, a portion of the second metal layer and an edge of the thermal conduction structure to form the at least one concave disposed on an edge of the semi-package unit.

5. The packaging process according to claim 3, wherein the step (b) further comprises steps:

removing the second carrier to expose the second metal re-distribution layer;

forming a third metal layer on the second insulation layer; and

forming at least one first thin film on a portion of the third metal layer.

6. The packaging process according to claim 5, wherein in the step (c), the third metal layer is covered by the first metal re-distribution layer, wherein the first metal re-distribution layer is connected with the thermal conduction structure, the first metal layer and the second metal layer through the third metal layer.

7. The packaging process according to claim 5, wherein the step (c) further comprises step: removing the first thin film.

8. The packaging process according to claim 5, wherein the step (d) further comprises steps:

forming plural fourth openings on the second metal re-distribution layer;

forming a second mask on the second metal re-distribution layer, wherein plural fifth openings are formed on the second mask, wherein a portion of the second metal re-distribution layer is exposed through the plural fifth openings;

forming a third metal re-distribution layer on the second mask, wherein the third metal re-distribution layer is contacted with a portion of the second metal re-distribution layer; and

forming a third mask on the third metal re-distribution layer and forming plural sixth

openings to expose the third metal re-distribution layer.

9. The packaging process according to claim 2, wherein the step (a) further comprises step: forming plural third openings on one side of the semi-package unit to expose a portion of the thermal conduction structure, the first conducting terminal and the second conducting terminal.

10. The packaging process according to claim 9, wherein the step (b) further comprises steps:

forming a third metal layer on the second insulation layer to attach the thermal conduction structure, the first metal layer and the second metal layer;

forming a fourth metal layer on the first insulation layer to attach the thermal conduction structure, the first conducting terminal and the second conducting terminal;

forming at least one first thin film on a portion of the third metal layer; and

forming at least one second thin film on a portion of the fourth metal layer.

11. The packaging process according to claim 10, wherein in the step (c), the third metal layer is covered by the first metal re-distribution layer, wherein the first metal re-distribution layer is connected with the thermal conduction structure, a portion of the first metal layer and a portion of the second metal layer through the fourth metal layer.

12. The packaging process according to claim 10, wherein the step (c) further comprises steps:

forming a second metal re-distribution layer on the first insulation layer, wherein the second metal re-distribution layer is connected with the thermal conduction structure, the first conducting terminal and the second conducting terminal through the corresponding third openings; and

removing the first thin film to form plural fourth openings and removing the second thin film to form the plural second openings.

13. The packaging process according to claim 10, wherein in the step (c), the thermal conduction structure and the electronic component are disposed between the first metal re-distribution layer and the second metal re-distribution layer.

14. The packaging process according to claim 1, wherein in the step (b), the concave is formed by dicing saw process or laser cavity drilling process.

15. The packaging process according to claim 1, wherein a depth of the concave is 100μm.

16. A packaging structure comprising:

an electronic component;

a thermal conduction structure;

a first metal layer attached on the electronic component;

a second metal layer attached on the thermal conduction structure;

an insulation structure comprising a groove and plural first openings, wherein the electronic component, the thermal conduction structure, the first metal layer and the second metal layer are embedded within the insulation structure, wherein a side of the thermal conduction structure, the groove of the insulation structure and a first side of the second metal layer are defined as a concave;

a first metal re-distribution layer attached with the insulation structure and contacted with the thermal conduction structure and the first side of the second metal layer through the groove and contacted with the first metal layer and a second side of the second metal layer through the plural first openings, wherein the second side of the second metal layer is adjacent to the first side of the second metal layer, and the first metal re-distribution layer comprises plural second openings; and

a first mask disposed on the second opening.

17. The packaging structure according to claim 16, wherein an edge of the thermal conduction structure comprises a first recess and the other edge of the thermal conduction structure comprises a second recess.

18. The packaging structure according to claim 16, wherein the electronic component comprises a first conducting terminal and a second conducting terminal, the insulation structure comprises plural third openings corresponding to the thermal conduction structure, the first conducting terminal and the second conducting terminal.

19. The packaging structure according to claim 20, wherein the packaging structure further comprises:

a second metal re-distribution layer disposed on the insulation structure and connected with the thermal conduction structure, the first conducting terminal and the second conducting terminal through the corresponding third openings, wherein the second metal re-distribution layer comprises plural fourth openings;

a second mask disposed on the second metal re-distribution layer and connected with the insulation structure through the plural fourth openings, wherein the second mask comprises

plural fifth openings;

a third metal re-distribution layer disposed on the second mask and connected with the second metal re-distribution layer through the plural fifth openings, wherein the third metal re-distribution layer comprises plural sixth openings; and

a third mask disposed on the third metal re-distribution layer and connected with the second mask through the plural sixth openings.