CLAIMS

1. A method for producing a dicing/die bonding integrated tape, the method comprising:

a first step of preparing a tacky adhesive sheet precursor having a base material and a tacky adhesive layer provided on the base material;

a second step of executing a plasma treatment to a part or a whole of a surface of the tacky adhesive layer on the side opposite to the base material in the tacky adhesive sheet precursor, to obtain a tacky adhesive sheet; and

a third step of forming a bonding adhesive layer on the tacky adhesive sheet to cover a part or a whole of a treated surface on the surface of the tacky adhesive layer opposite to the base material, the treated surface being a surface subjected to the plasma treatment.

2. The method for producing a dicing/die bonding integrated tape according to claim 1, wherein the plasma treatment is a plasma treatment using atmospheric pressure plasma.

3. The method for producing a dicing/die bonding integrated tape according to claim 1 or 2, wherein a treatment temperature of the plasma treatment is lower than a lower temperature of a melting point of the base material and a melting point of the tacky adhesive layer.

4. The method for producing a dicing/die bonding integrated tape according to any one of claims 1 to 3, further comprising, between the second step and the third step, a step of pasting a protective material onto the surface of the tacky adhesive layer subjected to the plasma treatment on the side opposite to the base material, and a step of peeling the protective material from the tacky adhesive layer subjected to the plasma

treatment.

5. The method for producing a dicing/die bonding integrated tape according to claim 4, wherein in the protective material, a surface on the side which is pasted to the tacky adhesive layer subjected to the plasma treatment is a surface treated by the plasma treatment.

6. A method for producing a semiconductor device, the method comprising:

pasting the bonding adhesive layer of the dicing/die bonding integrated tape obtained by the method according to any one of claims 1 to 5 to a semiconductor wafer;

individuating the semiconductor wafer, the bonding adhesive layer, and the tacky adhesive layer subjected to the plasma treatment;

picking up a semiconductor element attached with the bonding adhesive layer from the tacky adhesive layer subjected to the plasma treatment; and

bonding the semiconductor element to a support substrate for mounting a semiconductor element via the bonding adhesive layer.