CLAIMS

What is claimed is:

1. A display device, comprising:

a display panel having a first end and a bottom surface;

a circuit connection module having a connecting end, a circuit bearing portion, and a bending section located between the connecting end and the circuit bearing portion, wherein the connecting end is connected to the display panel at the first end while the bending section bends to make the circuit bearing portion be at least partially connected to the portion of the bottom surface near the first end;

a supporting block arranged at a side of the circuit bearing portion in an extending direction of the first end, and at least partially connected to the portion of the bottom surface near the first end, wherein on a projection plane parallel to the bottom surface, the supporting block and the circuit bearing portion are not overlapped with each other; and

a frame having a first arm, the first arm having a first free end extending to the first arm, and the first free end including:

a wall; and

a frame roof plate disposed on top of the wall and protruding beyond the wall to connect with the supporting block.

2. The display device according to claim 1, further comprising a backlight module, the backlight module disposed toward the bottom surface; wherein

the circuit bearing portion and the supporting block respectively connect to a portion of the bottom surface protruding from the backlight module.

3. The display device according to claim 2, further comprising a tape, two ends of the tape are respectively attached to the display panel and a back surface of the backlight module; wherein

the tape covers the circuit connection module from outside.

4. The display device according to claim 3, wherein

the tape has a first wrapping portion and a second wrapping portion arranged along the extending direction of the first end, and the first wrapping portion and the second wrapping portion respectively correspond to the circuit bearing portion and the supporting block; and

a crack exists between the first wrapping portion and the second wrapping portion.

5. The display device according to claim 2, wherein the backlight module comprises:

a back plate having a bearing plate and a side wall at least partially arranged around the bearing plate, wherein the bottom surface of the display panel is supported by a top of the side wall;

a pad disposed between the top of the side wall and the bottom surface; and

a plurality of light sources arranged on the bearing plate.

6. The display device according to claim 1, wherein

the circuit bearing portion has a first lateral end away from the first end;

the supporting block has a second lateral end away from the first end; and

the first lateral end is flush with the second lateral end.

7. The display device according to claim 1, wherein

the circuit bearing portion has a first lateral end away from the first end;

the supporting block has a second lateral end away from the first end; and

the first lateral end protrudes outside the second lateral end.

8. The display device according to claim 1, wherein

the supporting block at least partially protrudes outside the first end.

9. The display device according to claim 1, wherein

the display panel has a second end;

the second end is in contact with the first end to form a corner; and

the supporting block at least partially protrudes from the corner.

10. The display device according to claim 9, further comprising:

a backlight module disposed toward the bottom surface, wherein

on one side of the second end, a side of the backlight module is flush with a side of the supporting block.

11. The display device according to claim 1, wherein

the circuit bearing portion has a first lateral end; and

the first lateral end has a recessed portion, and the bending section at least partially locates within the recessed portion and is connected to the circuit bearing portion.

12. The display device according to claim 1, wherein

the Young's modulus of the supporting block is not less than 2 GPa.

13. The display device according to claim 1, further comprising:

a first adhesive layer and a second adhesive layer respectively disposed between the circuit bearing portion and the bottom surface as well as between the supporting block and the bottom surface; wherein

the first adhesive layer and the second adhesive layer have different thickness.

14. The display device according to claim 1,

wherein the frame at least partially extends to the first end and connects to the supporting block.

15. A display device, comprising:

a display panel having a first end and a bottom surface;

a circuit connection module having a connecting end, a circuit bearing portion, and a bending section located between the connecting end and the circuit bearing portion, wherein the connecting end is connected to the display panel at the first end while the bending section bends to make the circuit bearing portion be at least partially connected to the portion of the bottom surface near the first end;

a supporting block arranged at a side of the circuit bearing portion in an extending direction of the first end, and at least partially connected to the portion of the bottom surface near the first end; and

a frame having a first border, the first border corresponds to and is parallel to the first end, and the first border includes:

a wall; and

a frame roof plate disposed on top of the wall and protruding beyond the wall to connect with the supporting block,

wherein on a projection plane parallel to the bottom surface, the supporting block and the circuit bearing portion are not overlapped with each other.

16. A display device, comprising:

a display panel having a first end and a bottom surface;

a circuit connection module having a connecting end, a circuit bearing portion, and a bending section located between the connecting end and the circuit bearing portion, wherein the connecting end is connected to the display panel at the first end while the bending section bends to make the circuit bearing portion be at least partially connected to the portion of the bottom surface near the first end;

a supporting block arranged at a side of the circuit bearing portion in an extending direction of the first end, and at least partially connected to the portion of the bottom surface near the first end; and

a tape covering the circuit connection module from outside, wherein the tape has a first wrapping portion and a second wrapping portion arranged along the extending direction of the first end, the first wrapping portion and the second wrapping portion respectively correspond to the circuit bearing portion and the supporting block, and a crack exists between the first wrapping portion and the second wrapping portion.