G00002

162162

FLIP-CHIP TYPE SEMICONDUTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

Abstract

In a flip-chip type semiconductor device, a pad electrode (2) and a passivation film (3) are formed on a semiconductor substrate (1). An insulating resin layer (4) is formed on the passivation film (3), and an opening (6) is formed above the electrode (2). A pad electrode adhesive metal film (7) is formed on the substrate (1) like a re-wiring pattern, and a plating feed layer metal film (8) and a Cu plating layer (11) are sequentially formed on the metal film to form a wiring layer. A metal post electrode (15) is formed on the wiring layer. A solder bump (16) is formed on the post electrodes (15), a support plate (17) in which holes each having a diameter larger than the diameter of the solder bump (16) are formed at positions adjusted to the solder bumps is arranged, and an insulating resin layer (20) is formed between the support plate (17) and the semiconductor substrate (1). Therefore, a stress acting on the solder bump (16) is moderated.

Fig 3