

ABSTRACT

The occurrence of partial chip detachment is reduced by improving wettability for increasing the bonding strength, and by enabling gradual melting of the solder. Solder
5 material, electronic components, and electronic circuit boards with higher performance and higher reliability are offered. The surface of a solder core, lead-frame surface and electrode surface of electronic components, and copper (Cu) land surface of electronic circuit boards are coated
10 with metal element, which is either indium (In) or bismuth (Bi).