PB-IN-SN TALL C-4 FOR FATIGUE ENHANCEMENT

ABSTRACT

A solder column structure (19) particularly useful for joining electronic components by C-4 interconnection is provided comprising a solder column (22) attached at one end to one of the substrates (10) being joined and having a layer of indium (18) at the other end. During reflow, to join the other substrate, the indium (18) melts with part of the solder column (22) forming a Pb-Sn-In ternary alloy joint (21) having enhanced fatigue resistance. A method for using the solder column (22) to make electronic component assemblies and electronic component assemblies made using the method and solder column (22) are also provided.

Fig. 1E