



Bridge Free Wave Soldering of 0.5mm Pitch 100 Pins QFP with SN100C

Bridge-free wave soldering of 0.5mm pitch 100 pins QFP is being consistently achieved with Nihon Superior's flagship lead-free solder, SN100C in mass production by a major manufacturer of hi-fi audio equipment. Bridge-free wave soldering of 0.65mm pitch QFP has been routinely achieved with SN100C for several years but this breakthrough to the next level is testimony to the capability of this unique alloy.

SN100C is the lead-free solder invented by Nihon Superior and, as of November 2005, patented in 24 countries and regions with further applications still being processed. SN100C is based on the economical and environmentally friendly silver-free Sn-0.7Cu eutectic with trace additions of Ni and Ge that result in higher fluidity and less oxidation than widely promoted alternative lead-free solders. It is these properties that have made it possible to solder successfully fine pitch components.

Since SN100C, like the "63/37" Sn-Pb alloy it replaces, freezes as a true eutectic the fillets are bright and smooth and free of the deep shrinkage cavities that are characteristic of some alternative lead-free solders.

Because of its high performance as a solder and the reliability of the joint made with it SN100C has found wide application in the manufacture of products ranging from simple cell phone battery chargers through consumer electronics such plasma display panels, DVD players and domestic appliances and air conditioners through to advanced industrial control equipment. An increasing number of manufacturers of high-end audio equipment are using SN100C because of the superior quality of sound produced by systems assembled with this alloy.

