Self-Adhesive Stencils Simplify BGA Rework

Flextac Stencils simplify BGA rework. These self-sticking laser cut, polymer solder paste stencils use a residue-free adhesive similar to Post-it&reg Notes to seal around BGA pads to ensure that solder paste will not bleed under the stencil when the paste is applied. Disposable Flextac Stencils are easy to use and will not leave any residue on the board surface. Currently, BGA rework stencils are fabricated from metal and require fixturing or taping to position them and hold them in place. They warp easily, and if the circuit board has undulations in the board surface, a metal stencil will not sit flat against the surface. Since there is no gasket-like seal, solder paste can easily bleed under metal stencils when paste is applied with a squeegee. Solder paste can also spill out over the sides of flat metal stencils contaminating the circuit board surface. Innovative Flextac Stencils are laser cut from a high quality, anti-static polymer film that is the same thickness as metal stencils. If the Flextac Stencil is not correctly positioned, it can simply be removed and repositioned. Side tabs serve as solder dams, preventing overspill. No external taping or fixturing is used to hold Flextac Stencils in place. Since the self-tack adhesive seals around each BGA pad, the operator can make as many passes as necessary with the squeegee to assure proper aperture filling with solder paste. The Flextac Stencil is then peeled up leaving a perfect deposit of solder on each pad. Although Flextac Stencils are disposable, they can be used several times. They eliminate tedious stencil cleaning and reduce operator exposure to solder paste.

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