Abstract Submitted
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Study of New Anisotropic Conductive Adhesive for Bump Bonding[1] RICHARD LANDER, ROBERT FIELDS, ANGELA GALVEZ, BRITT HOLBROOK, BENJAMIN MICHLIN, ALEXANDRA MOSKELEVA, CHRISTIAN NEHER, MANI TRIPATHI, MICHAEL WOODS, University of California, Davis — Anisotropic Conductive Adhesives (ACF) used in flip chip bump bonding allow for several pairs of aligned metal pads to be connected without placement of individual metal bumps on each pad. Typical ACFs use small spheres distributed in a bonding film. A new type of ACF described here uses vertically aligned nickel needles imbedded in thermoplastic film to make the connections. We have been investigating the suitability of this ACF for certain work in bonding chips for high energy physics detectors. Resistance of the bond has been measured under various conditions of bonding pressure, temperature, and pad size. Milliohm values of resistance have been obtained for certain condition. Procedures and results will be discussed

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