

Title: Syringe Dispense of Copper Paste with Formic Acid Cure

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Direct write additive manufacturing printing approaches provide an opportunity to explore a wide range of materials using a variety deposition modules to impact electronics industry among others. Particularly applications involving space constraints and demanding conformality are best suited to benefit from this direct write approach. Specifically, in this case the use of a syringe dispense print head in the printing of copper pastes for electronic interconnects is carried out. This presentation will cover ongoing work in the printing of copper paste, achieving robust adhesion to the substrate while maintaining a degree of flexibility, all the while, working towards achieving as low a resistivity as possible. The relatively unexplored approach of curing copper under a formic acid environment will be discussed.