

Application of package-level high-performance EMI shield material with a novel nozzle-less spray coating technology

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- EMI shielding is increasingly important
 - highly sensitive components more tightly packed in circuit assemblies
 - prevent EMI interference between components
 - minimizing thickness of EMI shield layer critically important
- Traditional methods to apply EMI shield layer
 - sputtering
 - plating
 - layer thickness 3 to 6 μm has proven effective
 - complex application process
 - substantial process cost
- New EMI shield coating materials
 - recently developed
 - applied by much simpler and cost effective ultra-thin Coating Application Technology (T-CAT)
- Coating Application Process
 - “nozzle-less” ultrasonic spray technology
 - precision coating system platform
 - same EMI shield performance as traditional methods
 - reduces process cost by up to 60%

Test Results – Thickness

- Cross section shows uniform coating on all surfaces of component
- Top surface thickness is 8 μm
- Side surface thickness is 5 μm

Cross section : SEM Image

