

Producing vias in photosensitive polyimide passivation layers for fan out PLP through the integration of an advanced lithography system with a novel nozzle-less spray coating technology

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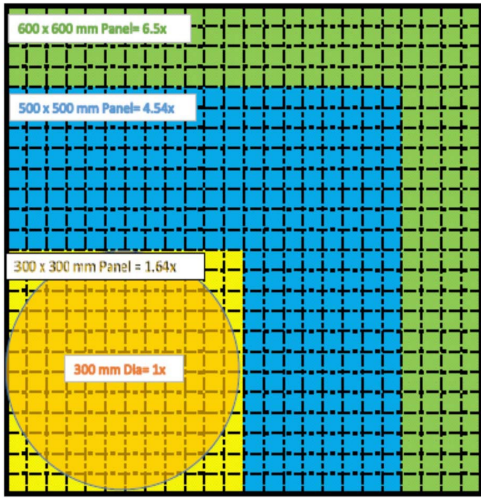
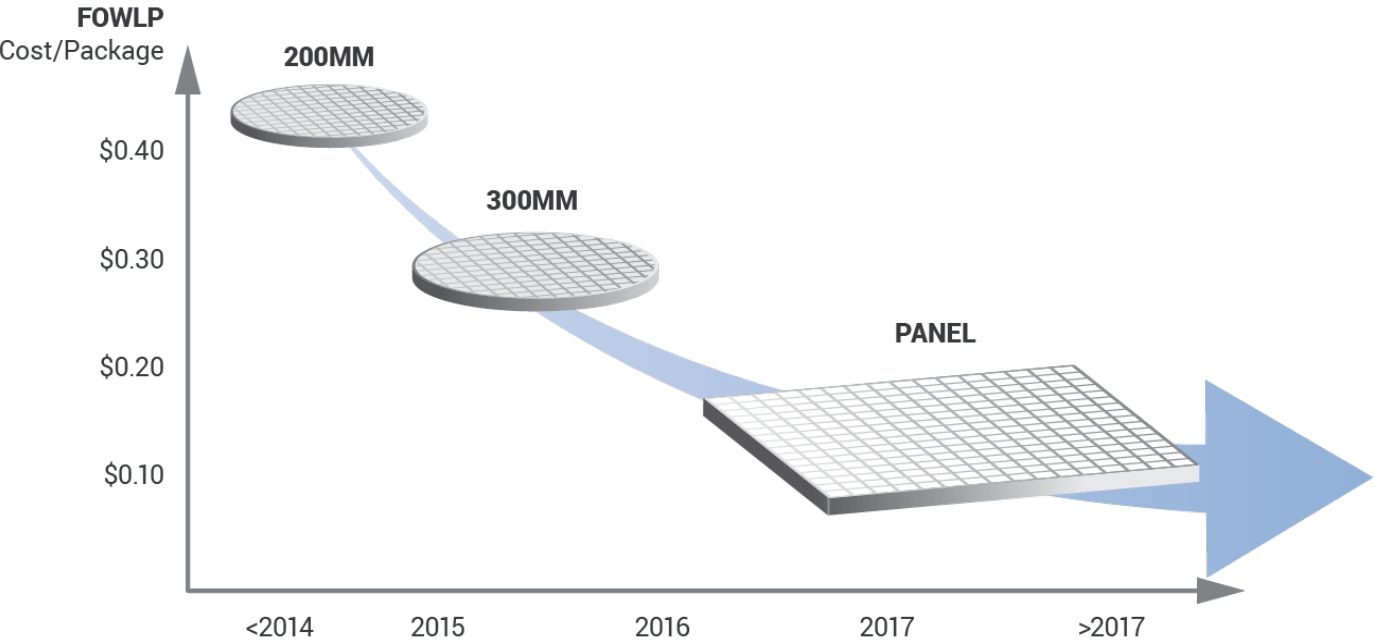
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Outline

- ▶ Introduction
- ▶ Participating Companies
- ▶ Advanced Packaging trends
- ▶ Systems used
- ▶ Experimental Overview
 - Polyimide preparation for spray coating
 - Spray coating process
 - Lithography
- ▶ Results
 - Uniformity
 - Imaging performance
- ▶ Conclusion

From FOWLP to FOPLP



▶ **Yole:** Future of advanced packaging 300mm → to Panels

Objective

- Demonstrate the feasibility of applying polyimide in a uniform layer at a specified thickness using a novel nozzle-less ultrasonic spray technology
- Demonstrate basic feasibility by producing 7.5 μm vias in a 9 μm layer of polyimide
- Utilize an “optimized” formulation of polyimide for this spray coating process.