60u Vertical Probing

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Outline

- Introduction
- Materials and Methods
- Results
- Conclusions

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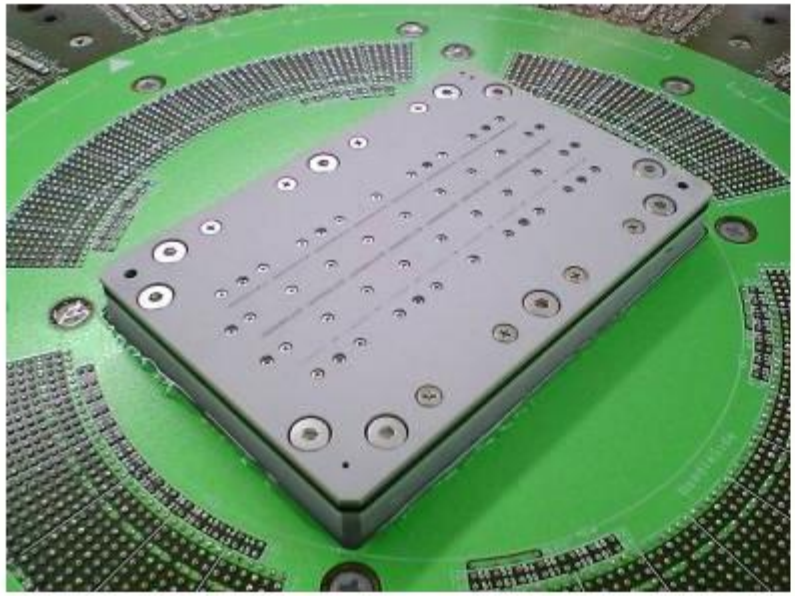
- Introduction
  - In this poster I will present the results of our development work which lead to 60u (bond pad pitch) vertical probing technology

V-PROBE

Needle TYPE



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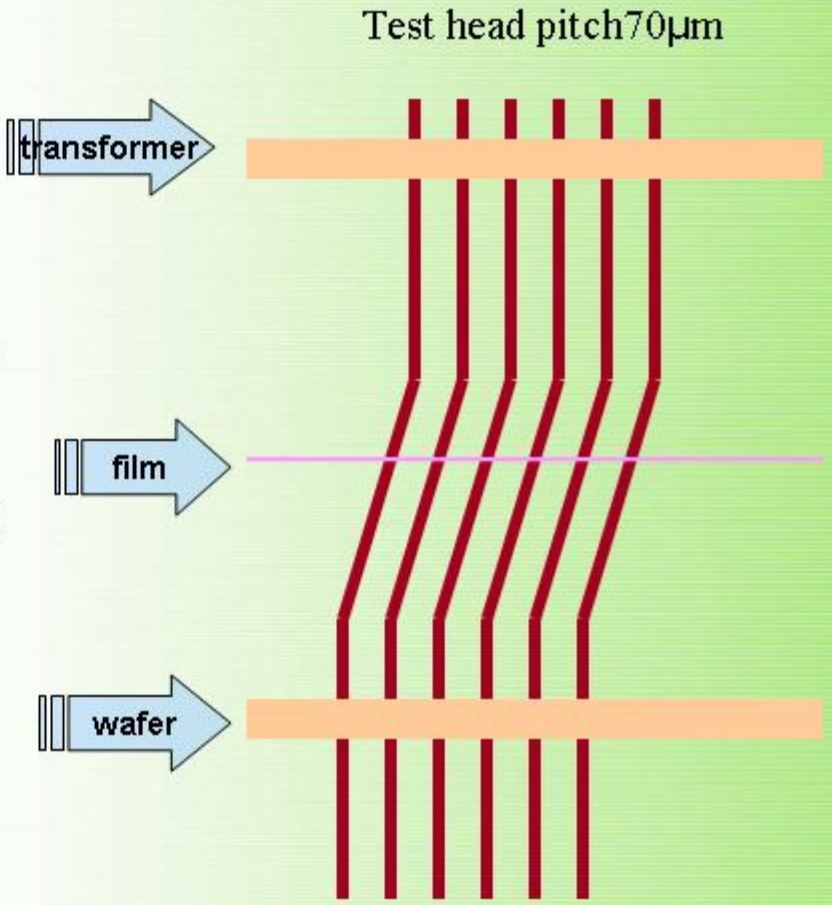
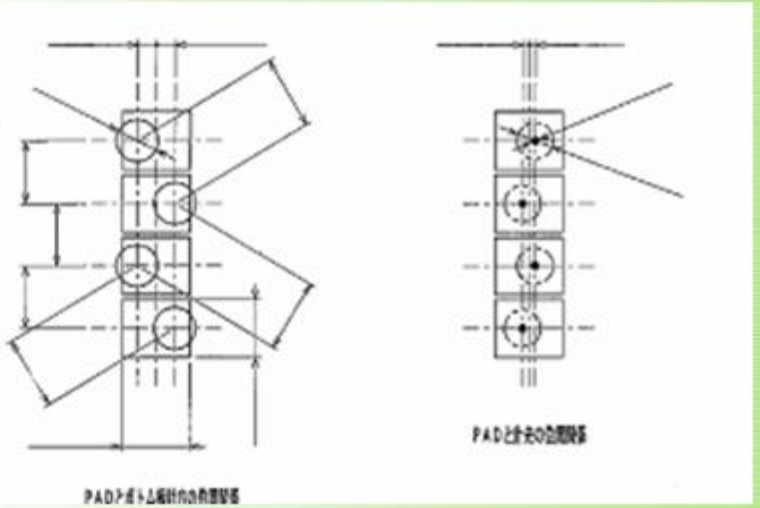
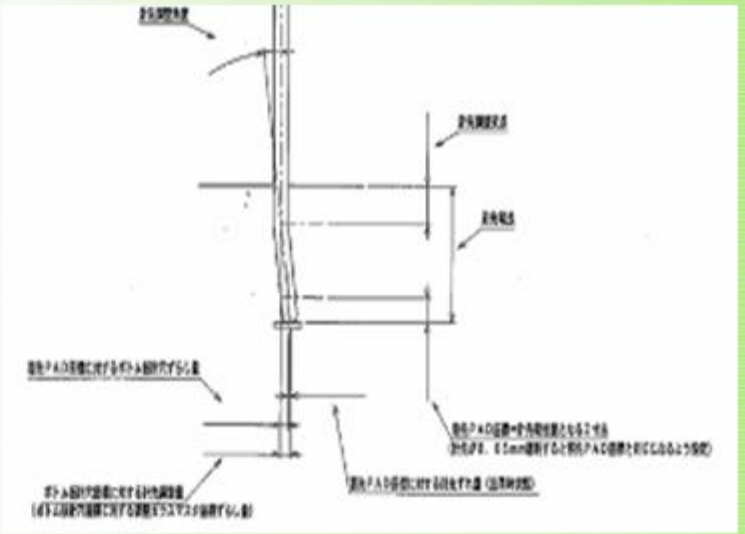
• Materials and Methods

- Wire diameter of 35um is used to form the probe needle.
- Experimental studies were executed on the ability to drill fine pitch holes in various guide plate materials.
- Once the minimum reliable hole pitch and material was determined, additional studies were executed to further minimize effective pad pitch.
- (2) methods were tried to reduce the effective pad pitch to 60um.
  - Straight probe with offset holes
  - Bent probe without offset holes



- Results
  - Results of bent probes and offset holes were both positive for 60u pad pitch probing.





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• Conclusion

– Some applications require consistent, low impact scrub mark on pad placement (such as KGD and Automotive)

– This required is to use both staggered holes and bent probes

	1 contact	3 contact	5 contact	8 contact	8 contact Cross Section
80um; RT	Depth : 0.28μm	Depth : 0.29μm	Depth : 0.34μm	Depth : 0.38μm	
80um; 125C	Depth 0.3 μm	Depth : 0.39μm	Depth : 0.38μm	Depth : 0.38μm