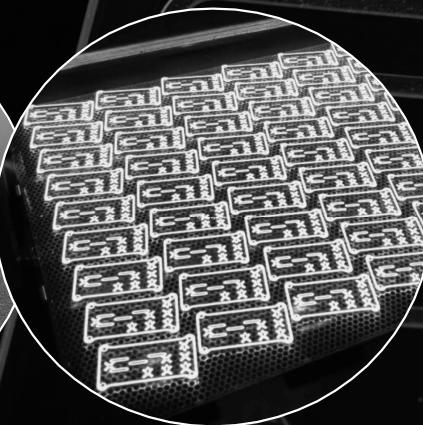
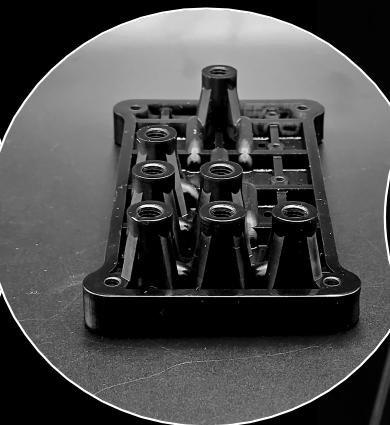
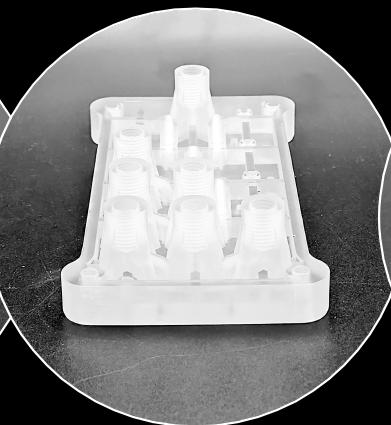
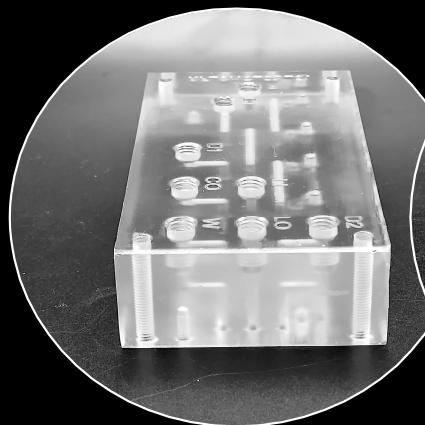


# Rapid Fluidics

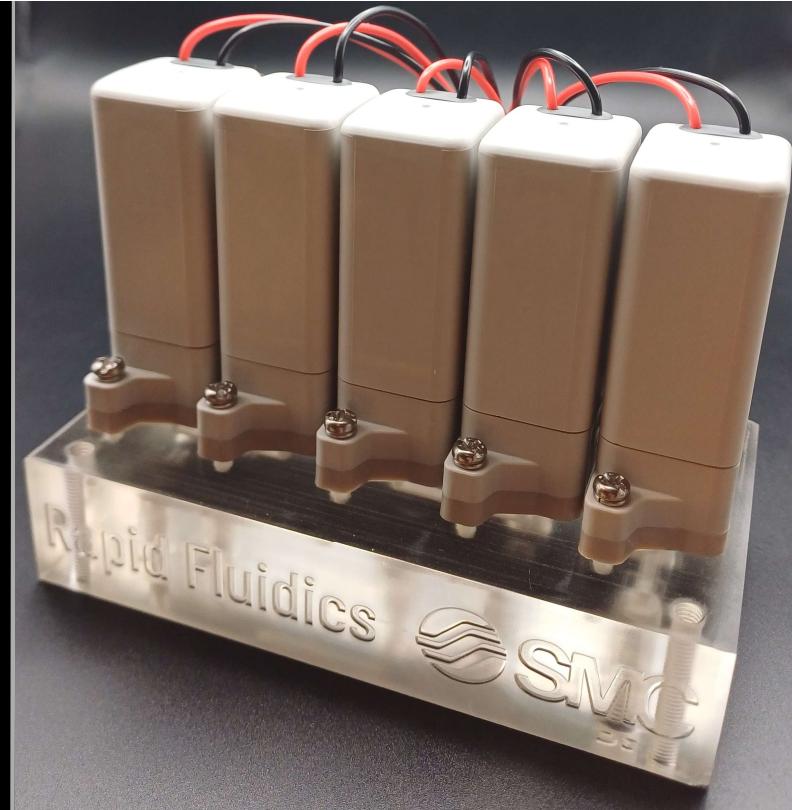
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## Designing Manifolds for Additive Manufacture Case Study



# Original Concept

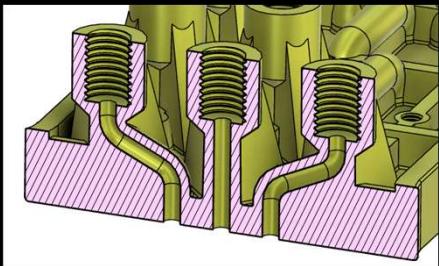
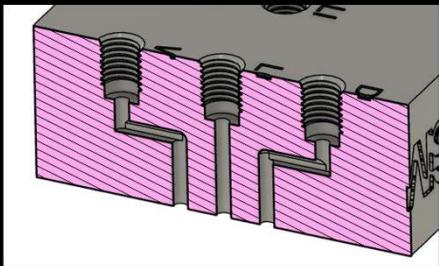
- 3-layer CNC Machined and Diffusion Bonded Manifold
- 3D-printed version print time: 11 hours



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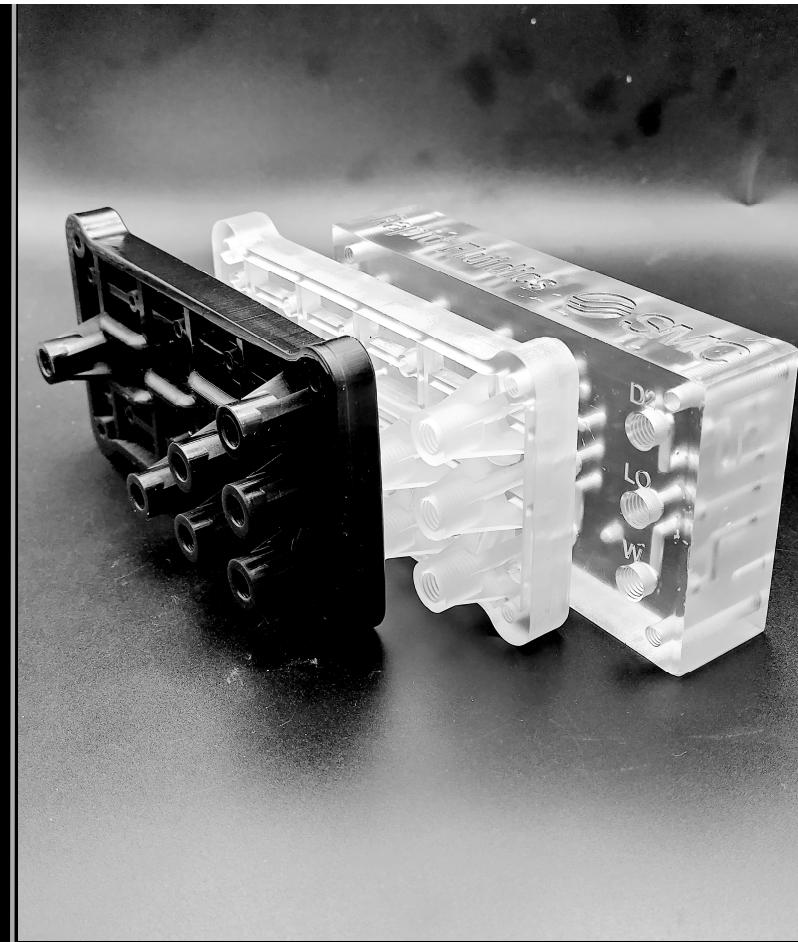
# Optimised for Additive

- Print Time: 2.5 Hours
- Mass: 33%
- Cost Reduction: ~80% \*
- Channel Routing optimised



- Opaque materials offer further improvements

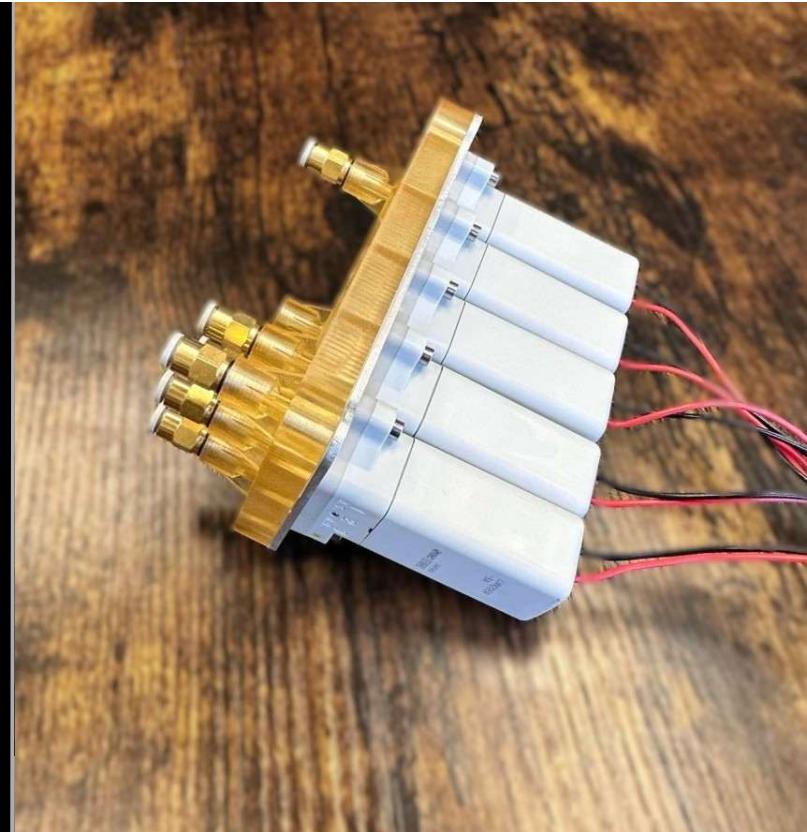
\*for typical qty ~200 units



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# Further Optimisation

- Integrated substrate
- Resin reduction: 18%
- Improved Strength
- Improved Flatness

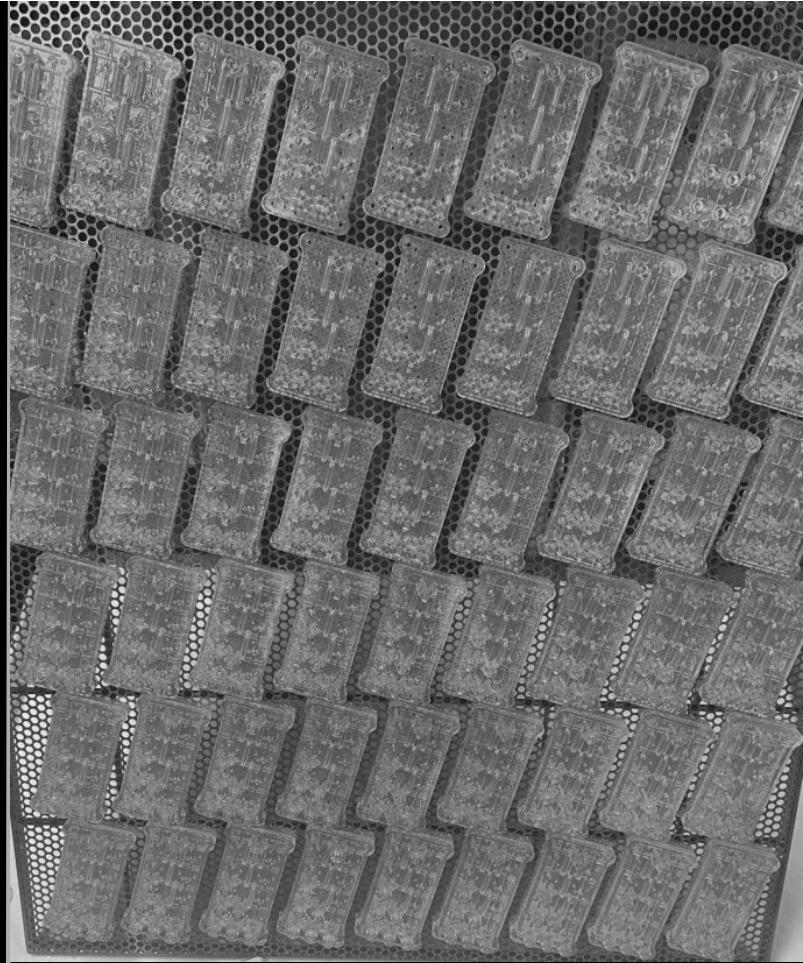


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# Scale Up Manufacturing

- 54 Parts per print
- Total Print time: 1.75 hours
- Equivalent Part Print time: 2 minutes



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# Get in touch

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