

**OPTIMIZATION OF MICROSTRUCTURED FINS IN MINICHANNELS**

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**SUMMARY:** Computational simulations of finned minichannels are modeled to study the effects microstructures have on the heat transfer dissipation through convection from a heated surface. Five pin fin shapes are attached to the heated bottom surface of a rectangular minichannel and analyzed. Also, using square-pin fins, different channel clearance over fins and fin material properties are investigated.