

Abstract

My senior project focuses on the design, testing, and manufacturing of pin fin extrusion heat sinks that are you used to cool simple electronic applications across a multitude of markets. Without the modern day heat sink, electronics that we have become familiar with throughout our everyday lives will cease to exist. I will design these heat sinks using Solid Works 3D CAD. I will then test the heat sinks using ICEPAK CFD software, where I will model the heat sink against a 5 watt application, inside of a cabinet that models the chassis of a computer. After receiving these results, the drawing files were sent off to a Chinese Manufacturer by the name of Paramount Technology, located in Dong Guan, Guan Dong China. The heat sinks were received, retested to prove the validity of the ICEPAK results, and then marketed through the company website, www.heatscape.com. All products are available for purchase.