Heat Exchanger Project

Lockheed Martin is an international company that have a variety of interests. From aircraft to missiles to energy to cybersecurity, they research and design many different things. One thing that is really important to all the things that Lockheed Martin does is computers. Computers run the world and day by day are becoming more important to it. One of the most important parts to all computers is the heat exchanger. The heat exchanger is the part of the computer that keeps the whole thing cool because if the computer starts to get too hot then it will stop working. These parts are really hard to make because of their small size and Lockheed Martin tasked us to come up with a design of the inner parts of the heat exchanger and a cost effective way to make it. We decided to do a shifted rectangular design and use the Direct Metal Laser Sintering method. Direct Metal Laser Sintering is an additive material process that is extremely fast and precise while also being very cost effective.

My team did not have to pick this project, we had many different options but we thought this one was the one with the biggest need.