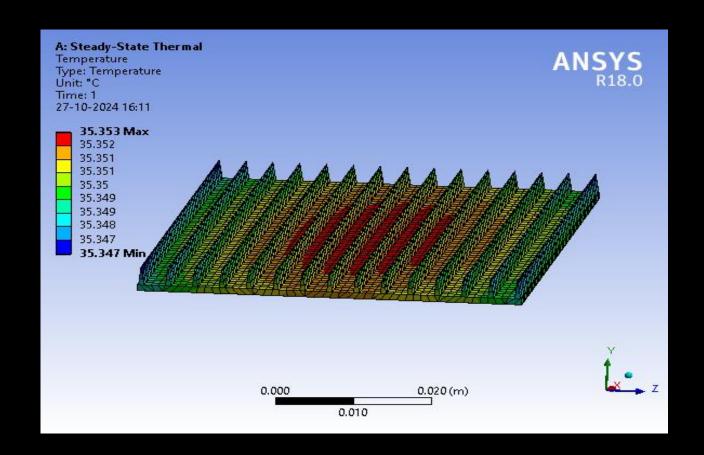
## Next-gen Lightweight Graphene Heat Sinks

次世代の軽量グラフェンヒートシンク



By M. Shiva

### PROJECT NEED AND ITS IMPORTANCE

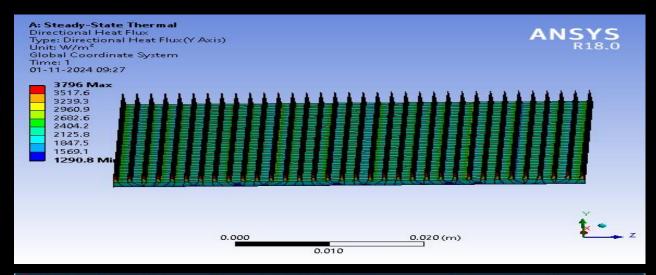
このプロジェクトの必要性と重要性

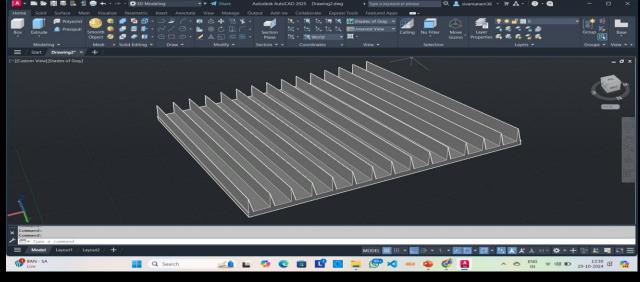
- ➤ Weight Reduction (重量削減)
- ➤ Increase Performance of Electronic Gadgets (電子機器の性能向上)
- ➤ Heat Dissipation (熱放散)
- ➤ Cost Reduction (コスト削減)

## SOFTWARE'S USED 使用したソフトウェア

CAE Software (CAEソフトウェア)

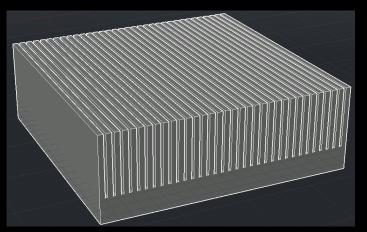
CAD Software (CADソフトウェア)

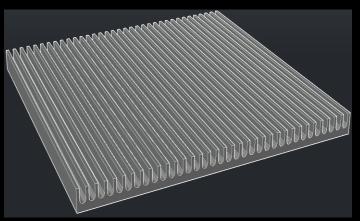


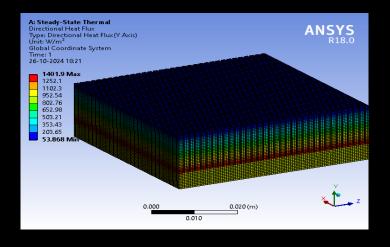


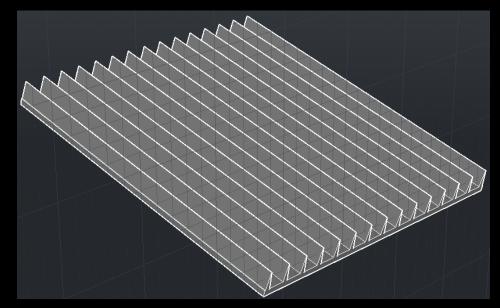
### **DESIGN & ANALYSIS**

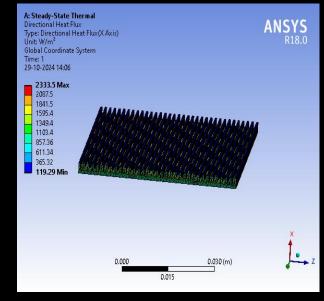
## 設計と分析

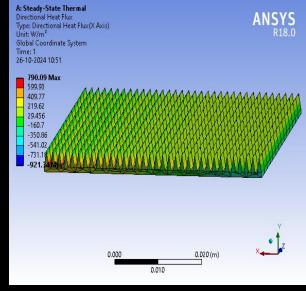












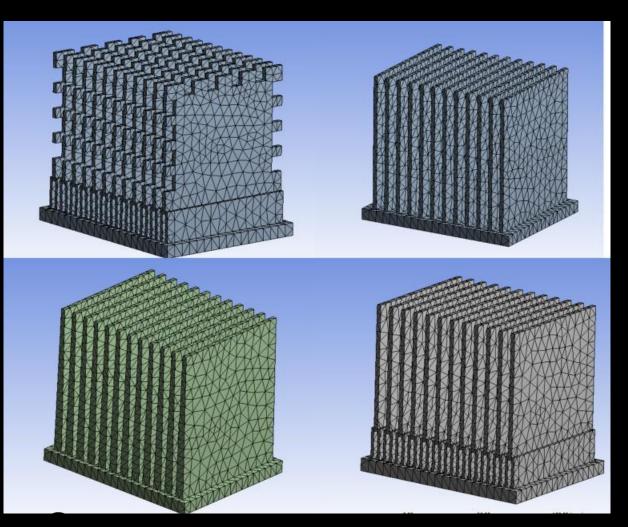
#### CHALLENGES FACED HEAT SINK DESIGN

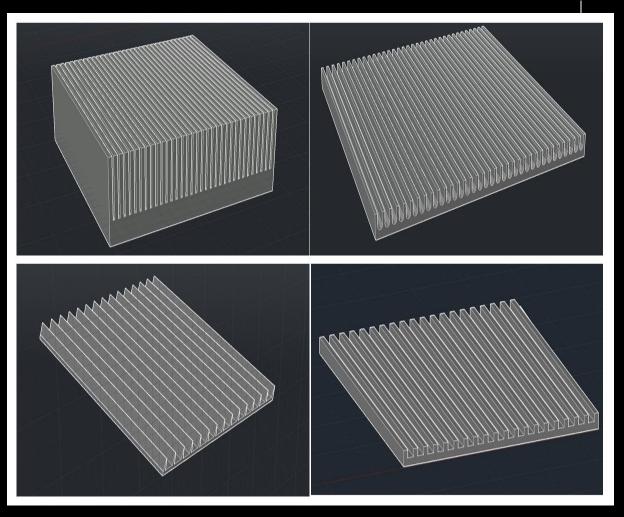
ヒートシンク設計における課題

- ➤ Material Selection (Graphene) (材料選択)
- ➤ Weight Reduction (重量削減)

### **RESULTS ANALYSIS**

# 結果分析



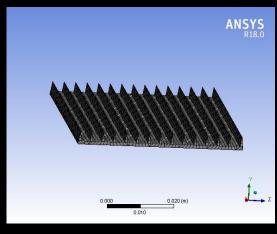


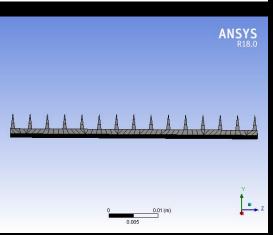
Before (前 (まえ))

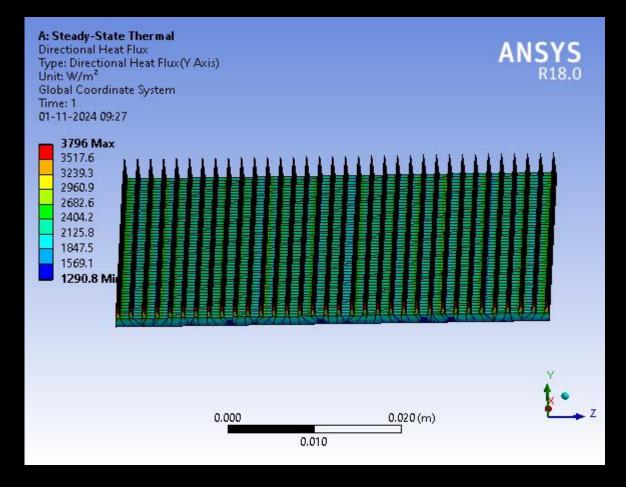
After (あと)

Final Model Identified Through Analysis with Dimensions: 0.5B - 2.5H (Gap 1(MM)

分析を通じて特定された最終モデル(寸法: 0.5B - 2.5H、 ギャップ1 (MM))

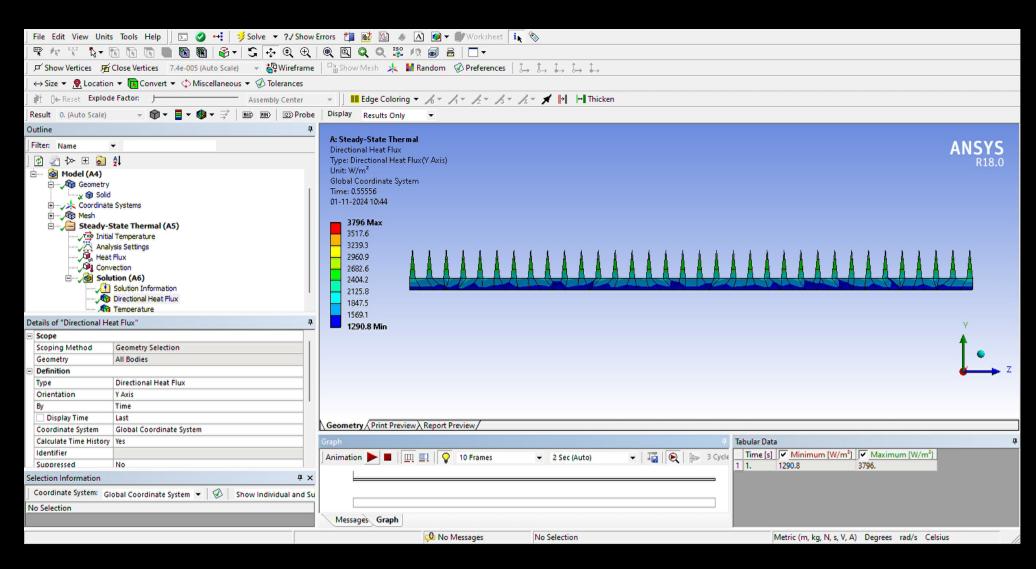






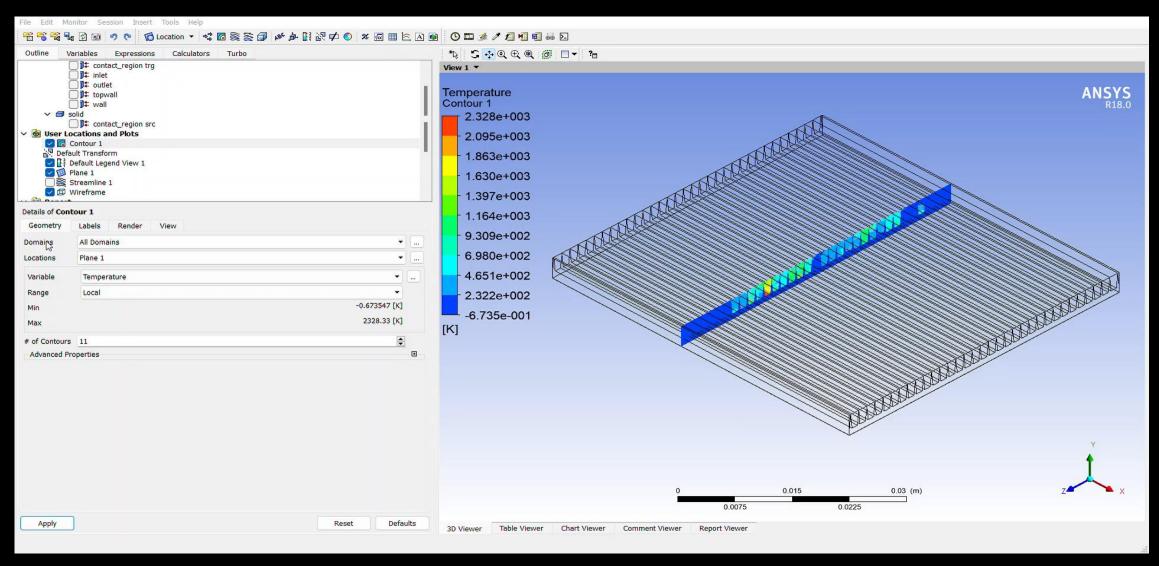
#### RESULTS DEMONSTRATION VIDEO

### 結果デモンストレーション動画



### FLUID FLOW ANALYSIS

### 流体の流れ解析



#### **FUTURE APPLICATIONS**

## 将来の応用

- ➤ Automobiles (自動車 (じどうしゃ))
- Renewable Energy System (再生可能エネルギーシステム)
- ► Electronic Gadgets (電子機器)
- Smart Home Devices (スマートホームデバイス)

# THANK YOU