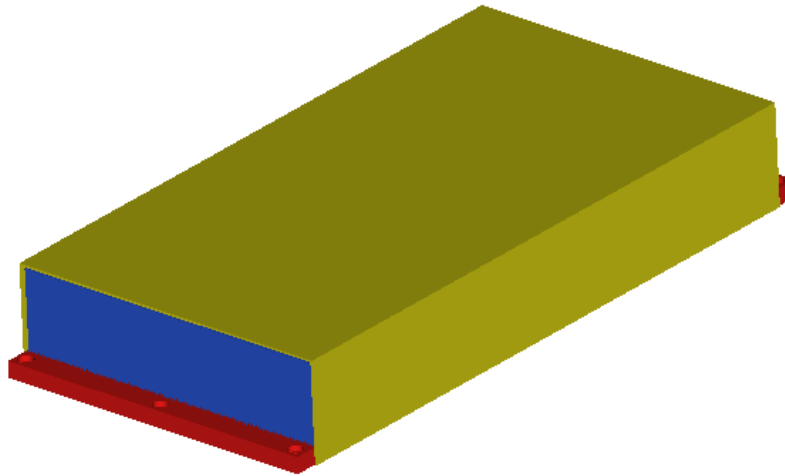
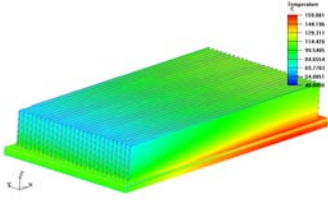
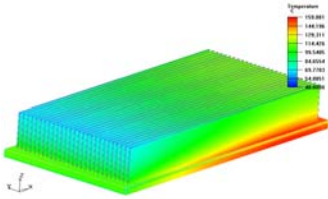
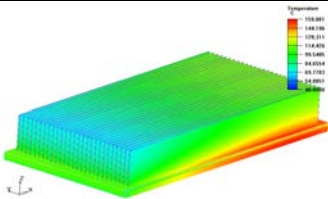
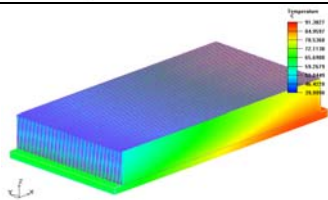


# Thermal Modeling Report – IGBT Modules Cooling - Converter



Material: Base – Aluminum or Copper, Fins – Graphite, Shroud - Aluminum  
 Dimensions: 610x300x88 mm  
 Fin Thickness: 1 mm, Number of Fins: 83  
 Base Thickness: 15 mm

Option	$T_{max}$ (°C)	$\Theta_{ca}$ (°C/KW)	Temperature Distribution	Weight (kg)
Original Design All Aluminum # of Fins: 27 Thickness: 2.6 mm	159.1	14.9		19.93
Aluminum Base Graphite Fins # of Fins: 83 Thickness: 1 mm	99.9	7.4		16.18
Copper Base Graphite Fins # of Fins: 83 Thickness: 1 mm	95.7	6.9		31.74
Copper Base Copper Fins # of Fins: 83 Thickness: 1 mm	91.4	6.4		54.35

Source Power: 8000 W  
 Ambient Temperature: 40°C