



**MATRIX**

**With Great Power Comes Great Ability**

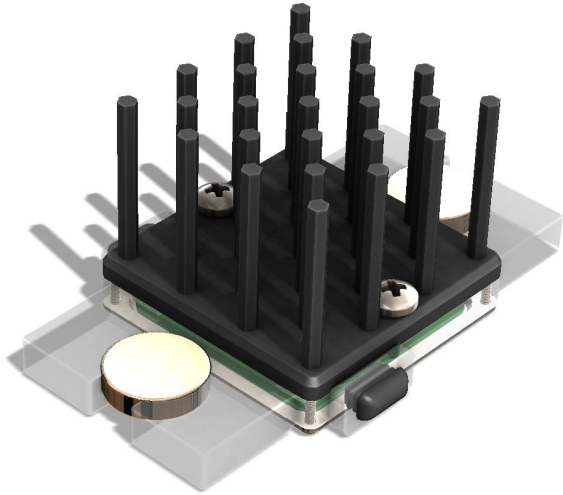


## Assembly Notes

- In most applications, thermal energy will be harvested from a surface that is hotter than ambient. When used for this purpose, Prometheus should be assembled with its cold side (larger face) attached to the ambient heat sink, and its hot side (smaller face) attached to the heat source.
- A thin layer of thermal interface material (TIM) should be applied to the clean mating surfaces before attachment. Suitable TIMs include thermal conductive grease, epoxy, foil or other fillers.
- These can achieve good thermal contact as long as the TIM thickness is thin and no debris is present at the interface. Consult the manufacturer's recommendations and instructions for application of these TIM materials.
- The module should be mounted to the heat source and heat sink under compression. Screws, springs and clamps can be used to apply adequate compressive force to maintain good thermal contact between the mating surfaces. Again, consult the TIM manufacturer's instructions for best results.
- At no point must tensile force be applied to the opposing faces of the module, as it may separate under tension.

## Tips and Tricks

- When rapid prototyping an idea, we have found that it is often advantageous to skip the thermal grease application whilst experimenting with different heat sinks or Prometheus modules. On the parts provided with this EVK, omitting grease only reduces performance by about 10-20%. After the configuration is finalized, grease can be applied between the mating surfaces to obtain the highest possible performance.
- The BLINK board provided with this EVK blinks when there is sufficient energy and the blink rate can be used to estimate the power output. Each blink consumes approximately 7  $\mu\text{C}$  of charge at 2.9V, so a blink rate of 1 Hz implies an output current of 7  $\mu\text{A}$  or 20  $\mu\text{W}$ .
- The CABLE assembly can be used to connect BREAKOUT to PROTOBOARD boards, or to daisy chain Prometheus units using BREAKOUT boards for increased power.



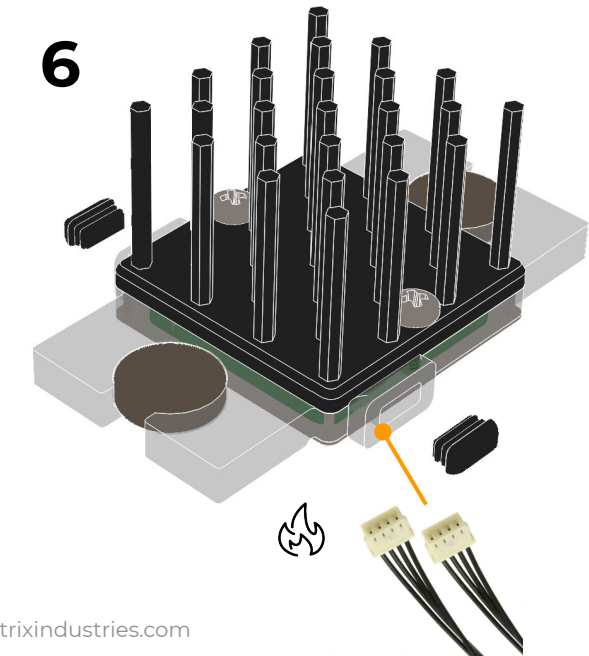
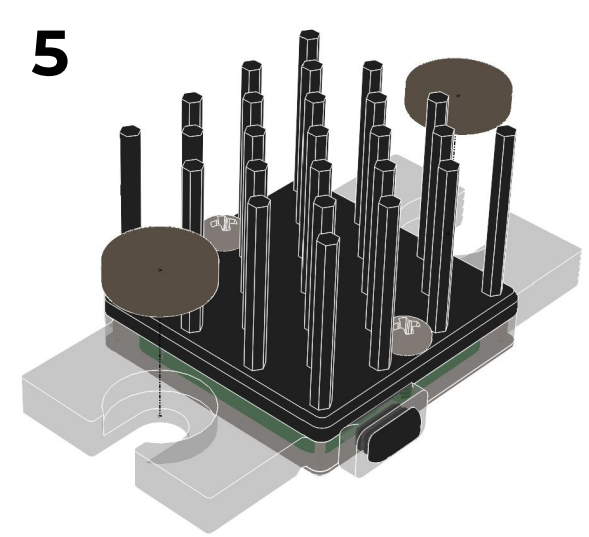
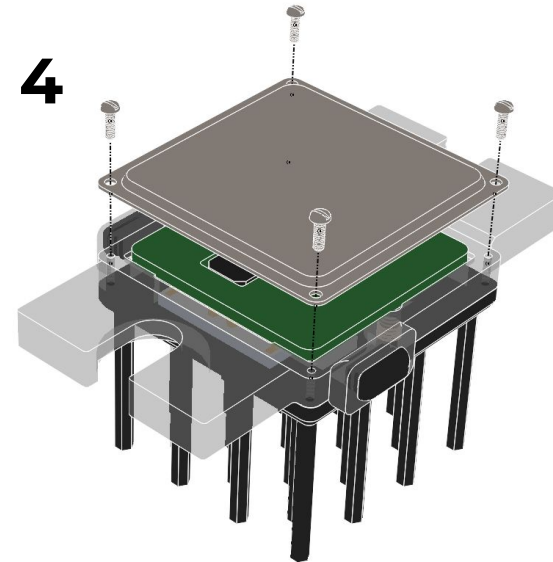
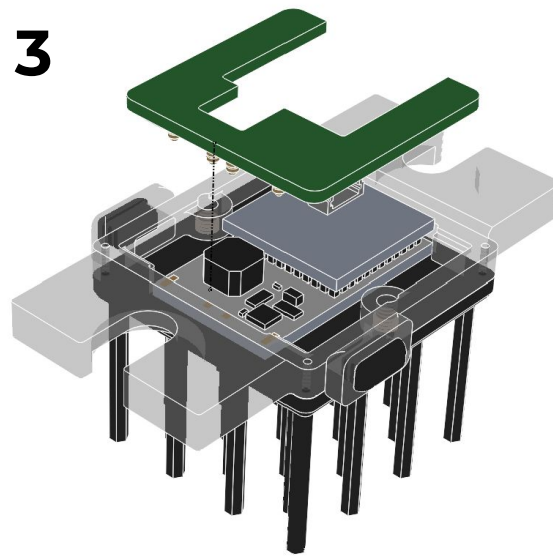
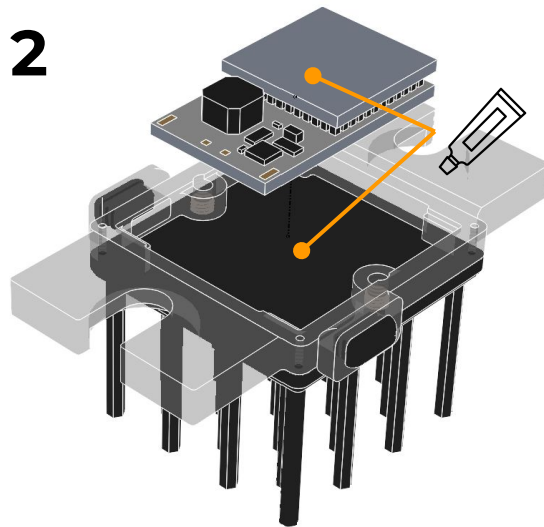
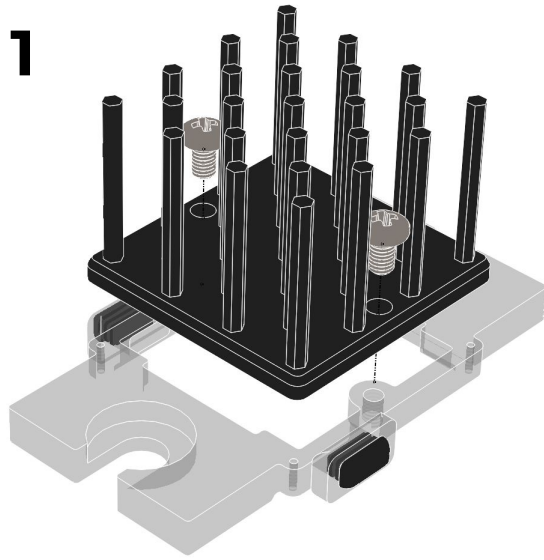
Prometheus EVK  
Flat Surface Kit for  
PRMT07-18305-\*\*\*

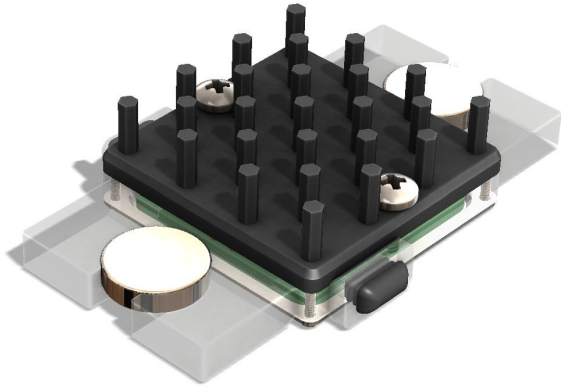


[Installation  
video with  
grease](#)



[Installation  
video with  
no grease](#)





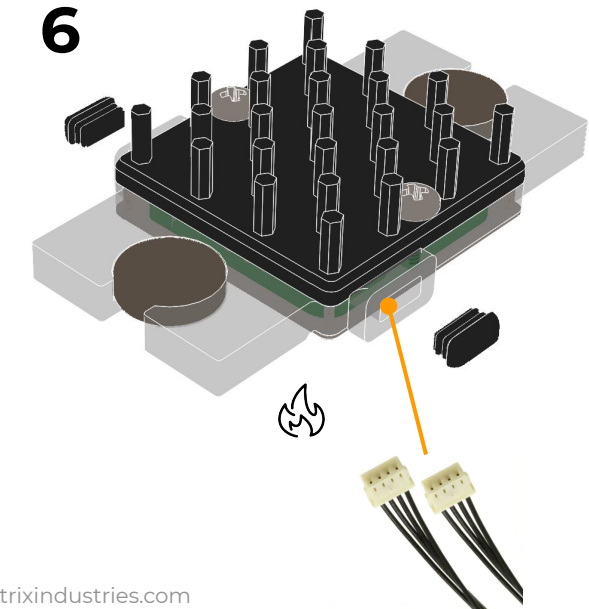
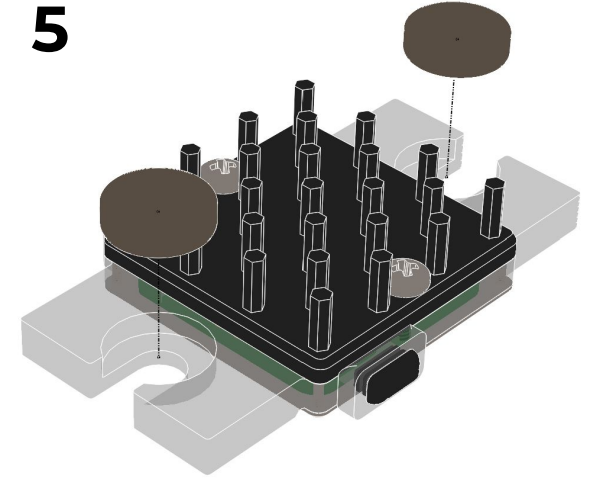
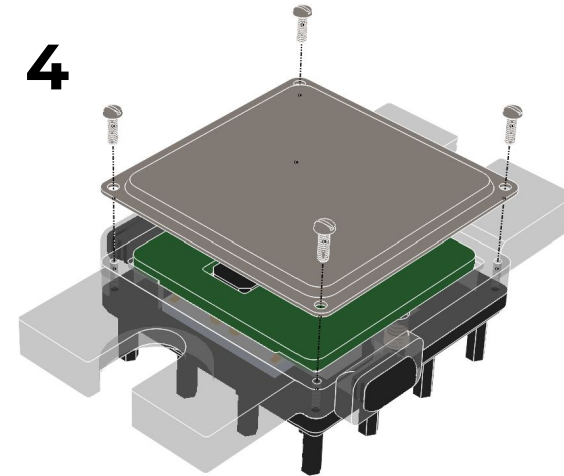
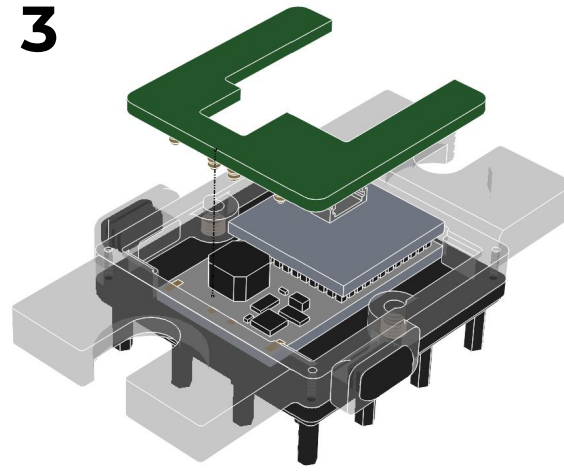
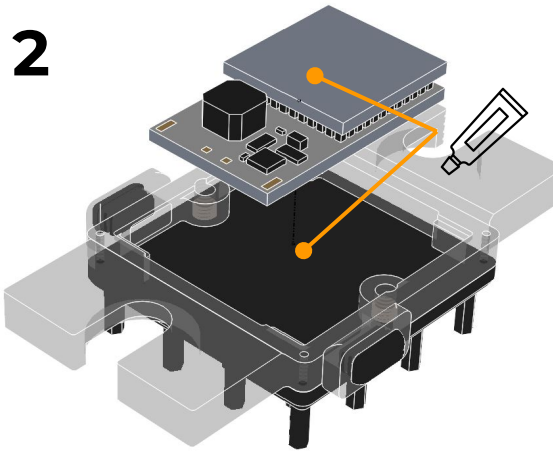
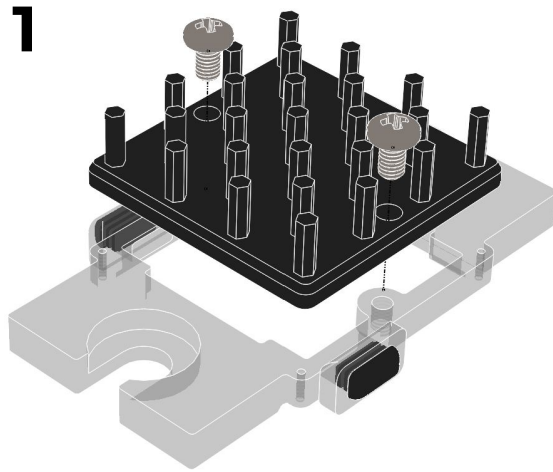
Prometheus EVK  
Flat Surface Kit for  
PRMT11-18305-\*\*\*

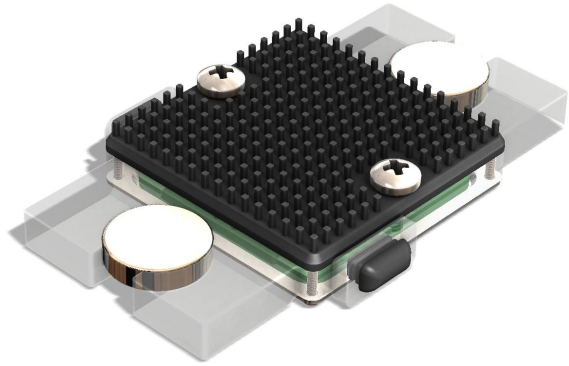


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video with  
grease](#)



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video with  
no grease](#)





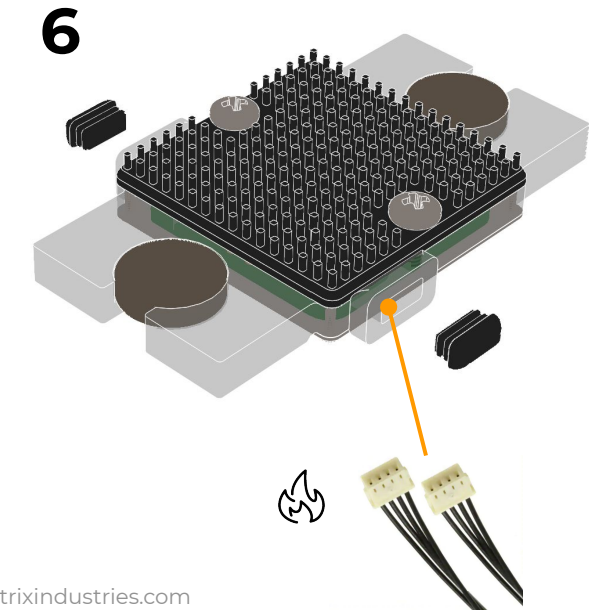
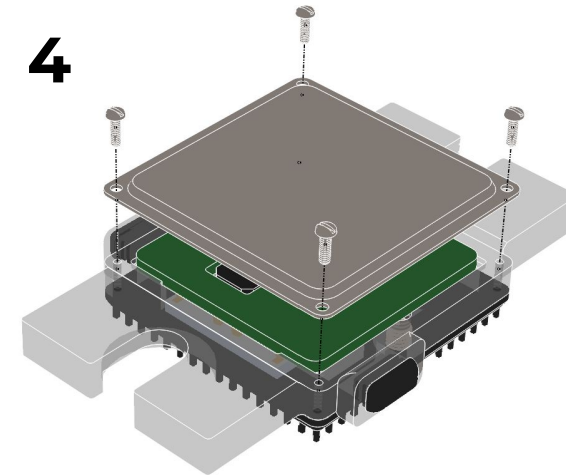
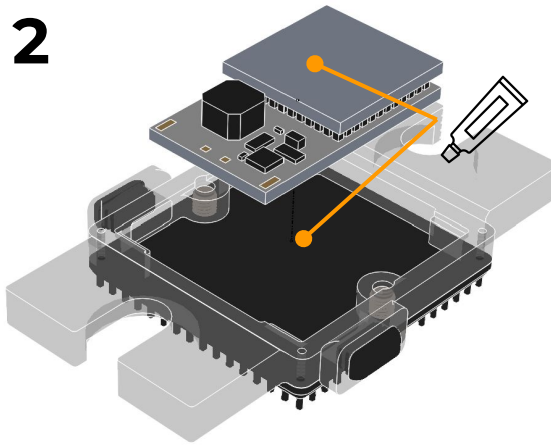
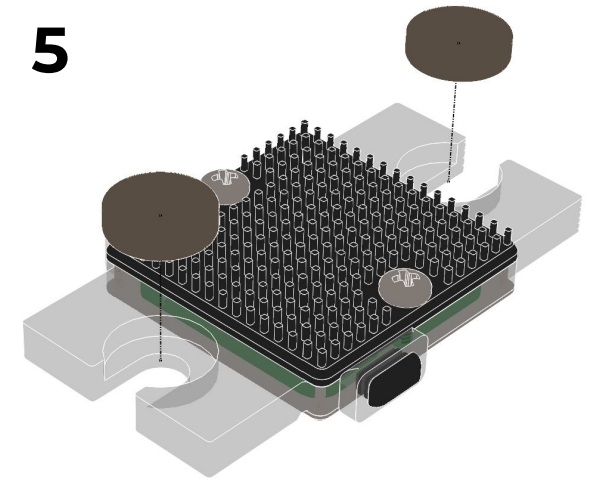
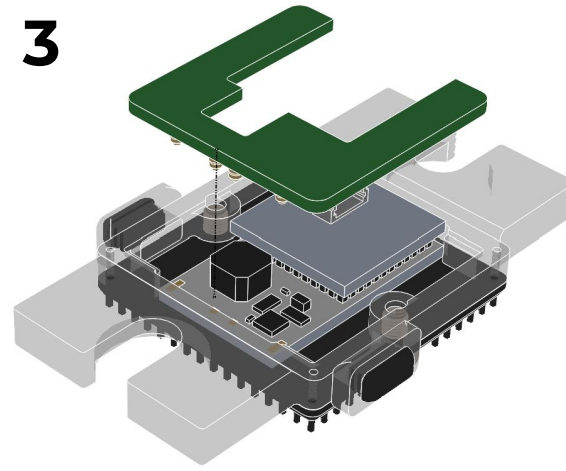
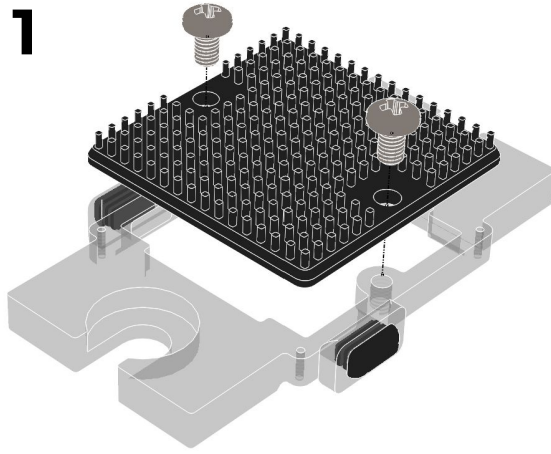
Prometheus EVK  
Flat Surface Kit for  
PRMT21-18305-\*\*\*

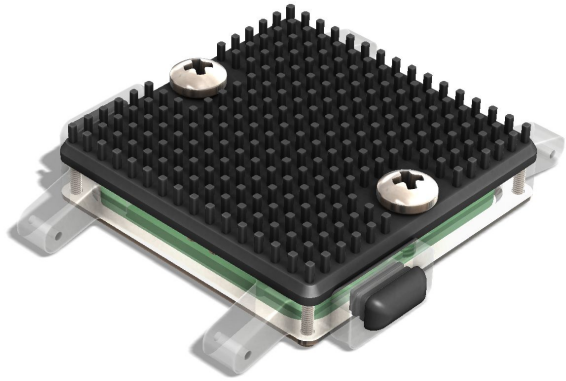


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video with  
grease](#)



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video with  
no grease](#)





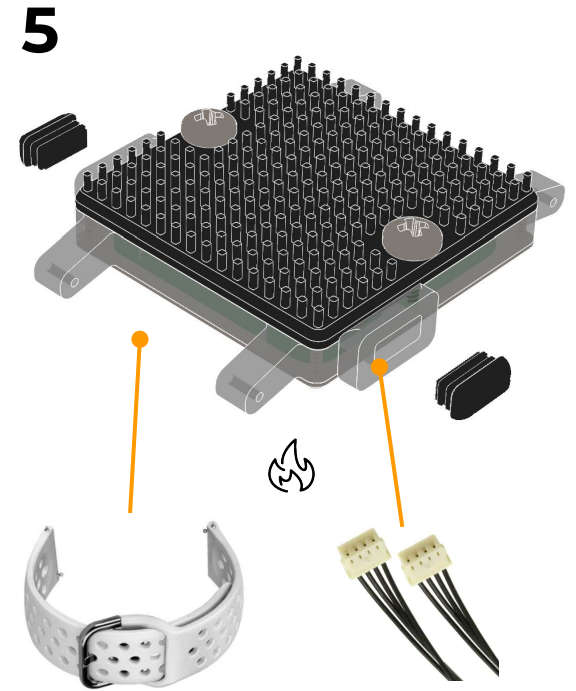
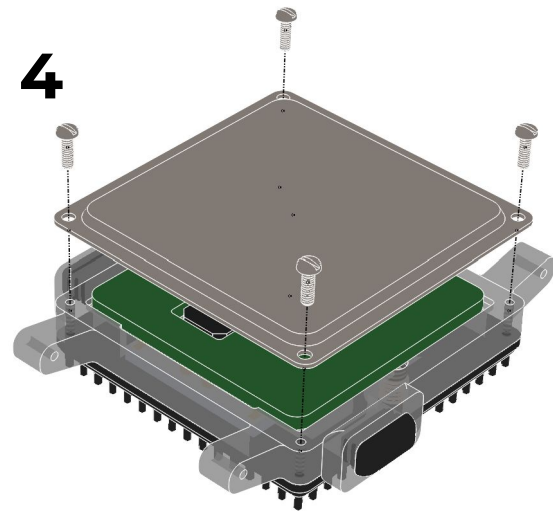
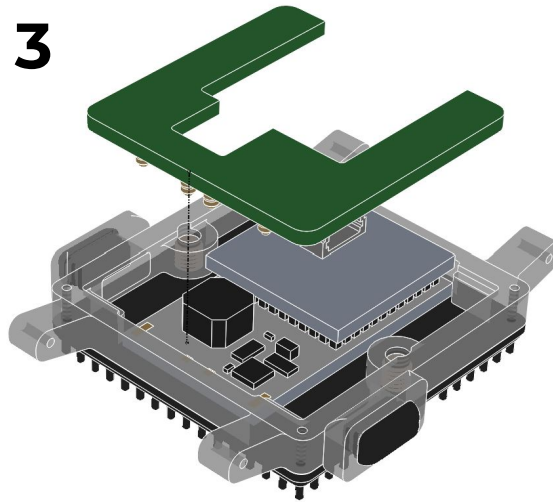
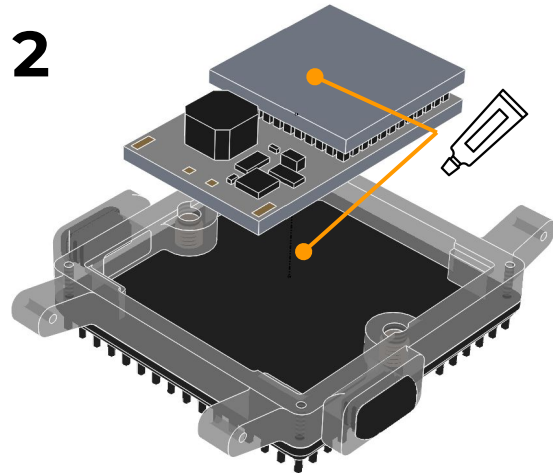
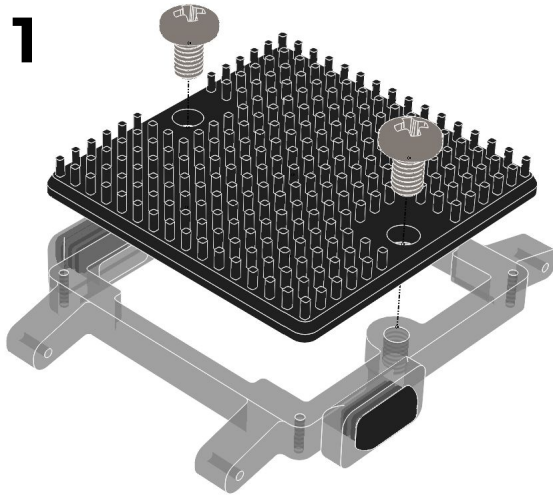
Prometheus EVK  
Watch Kit for  
PRMT37-18305-\*\*\*

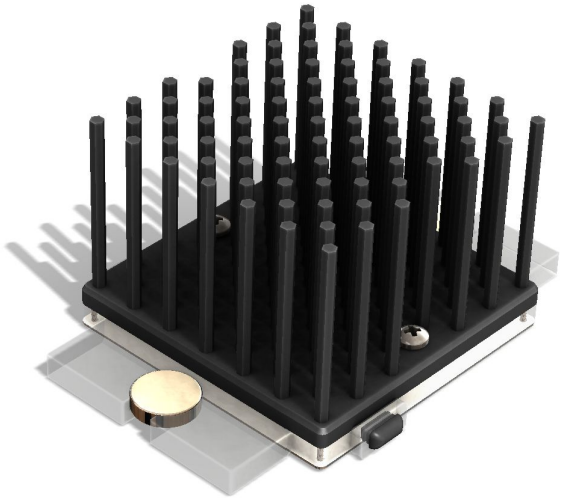


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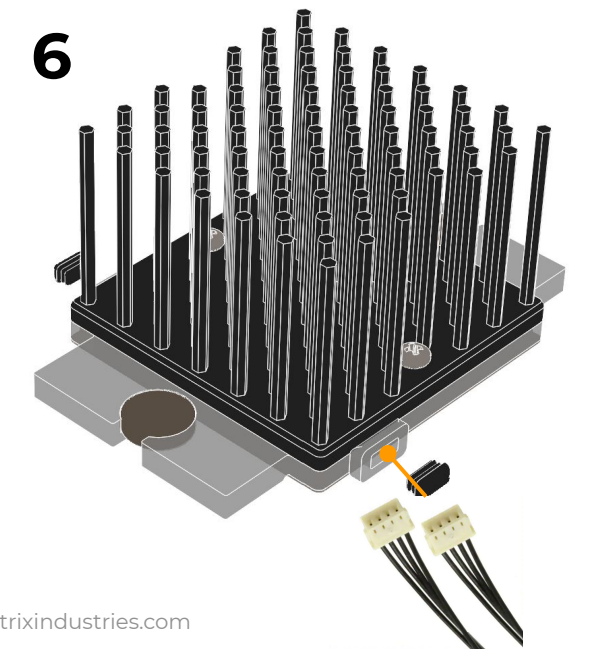
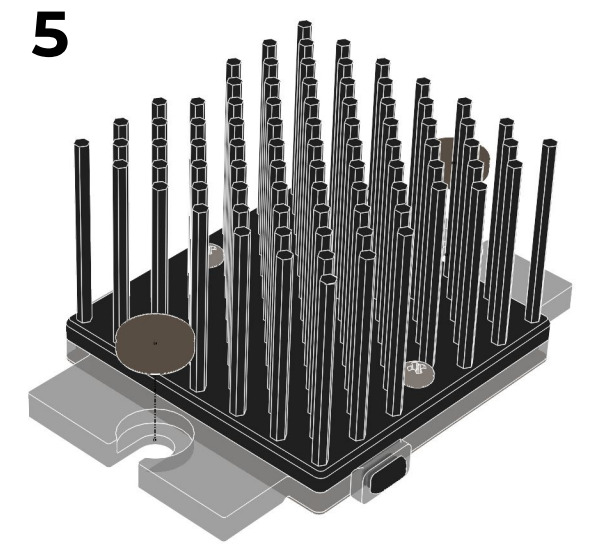
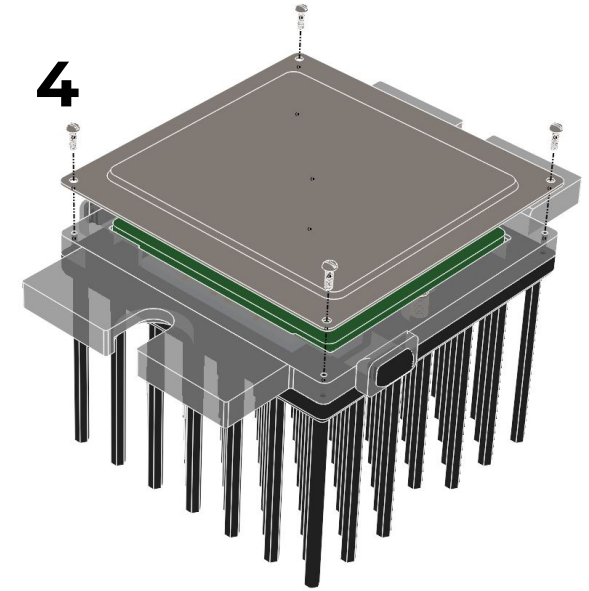
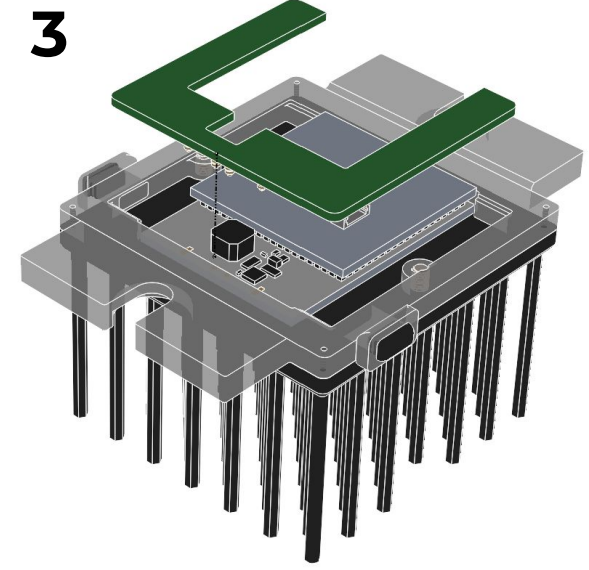
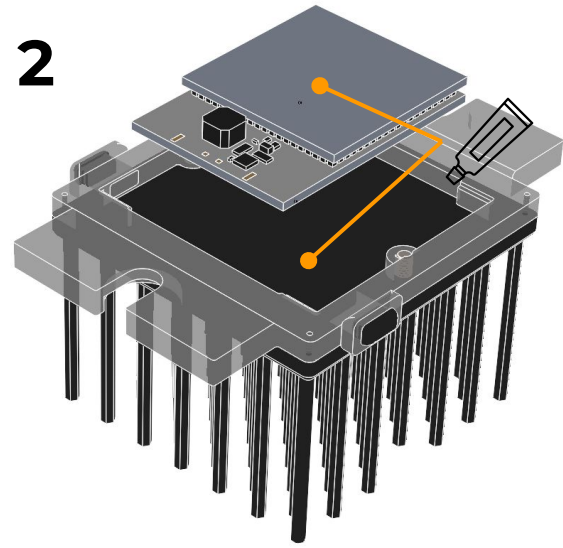
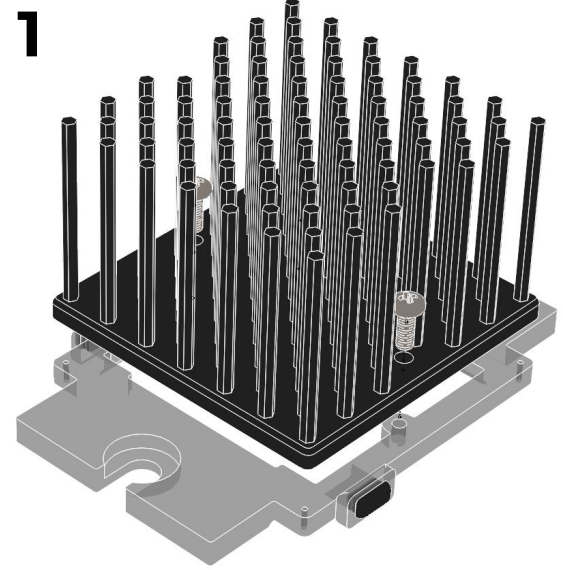


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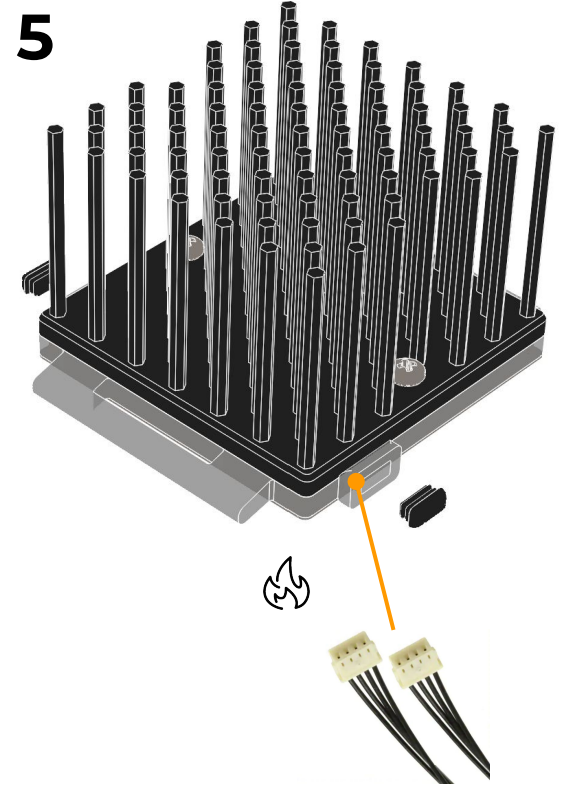
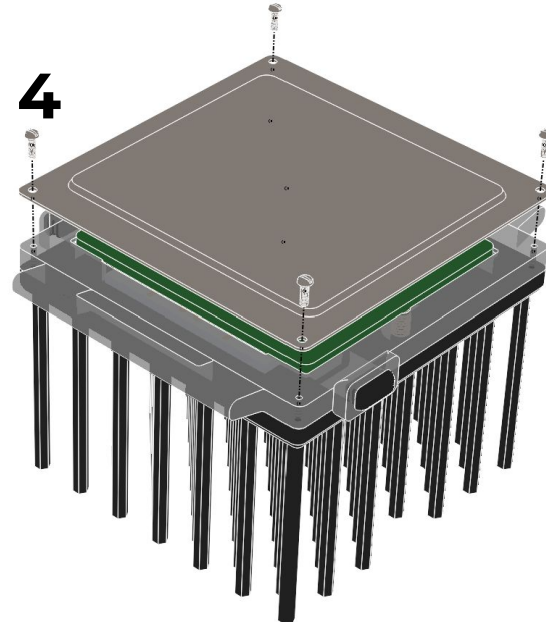
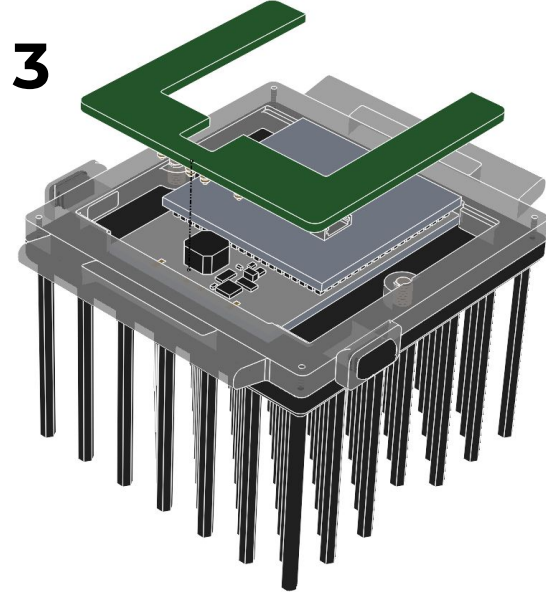
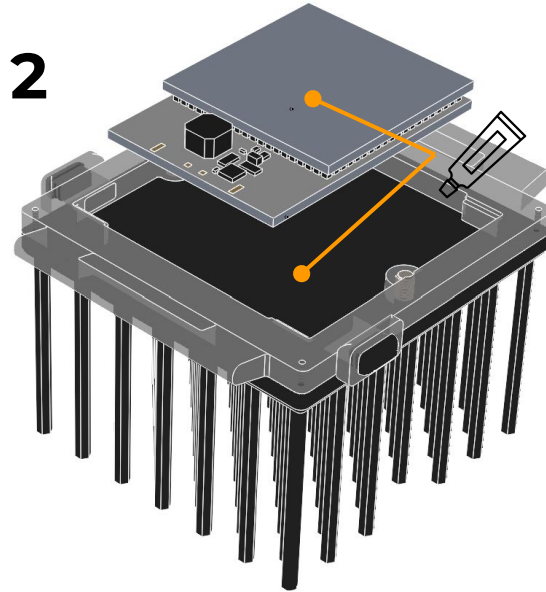
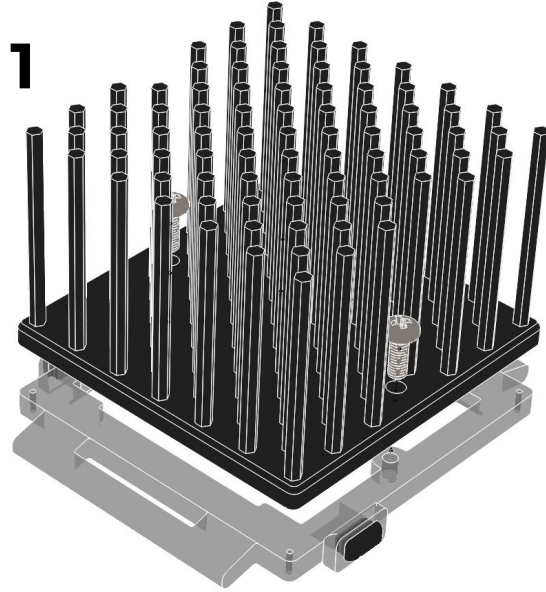


Prometheus EVK  
Flat Surface Kit for  
PRMT02-34465-\*\*\*

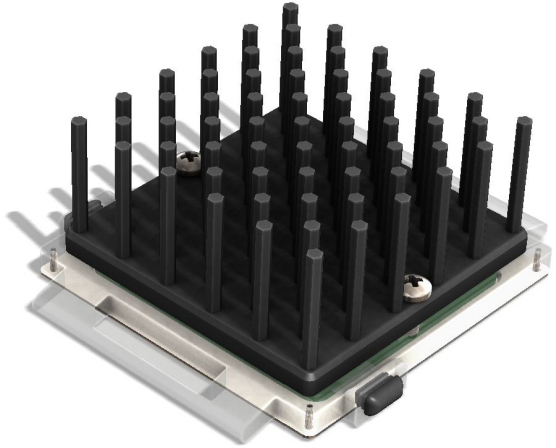




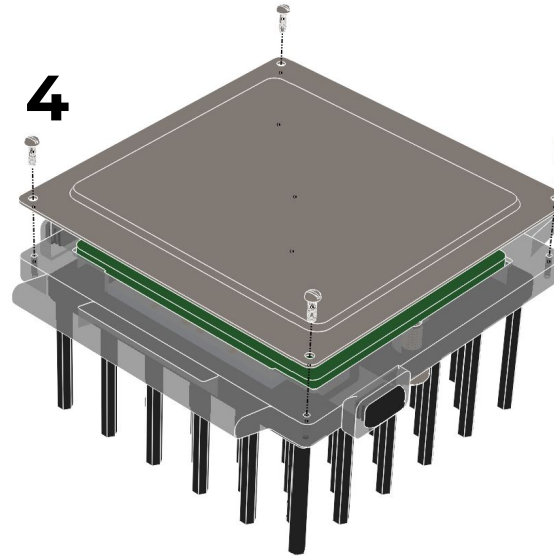
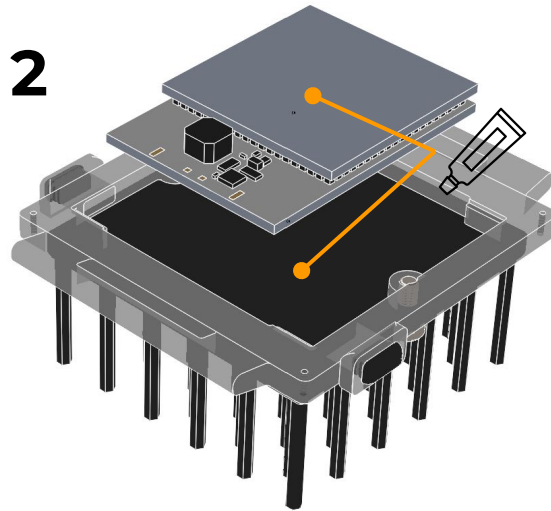
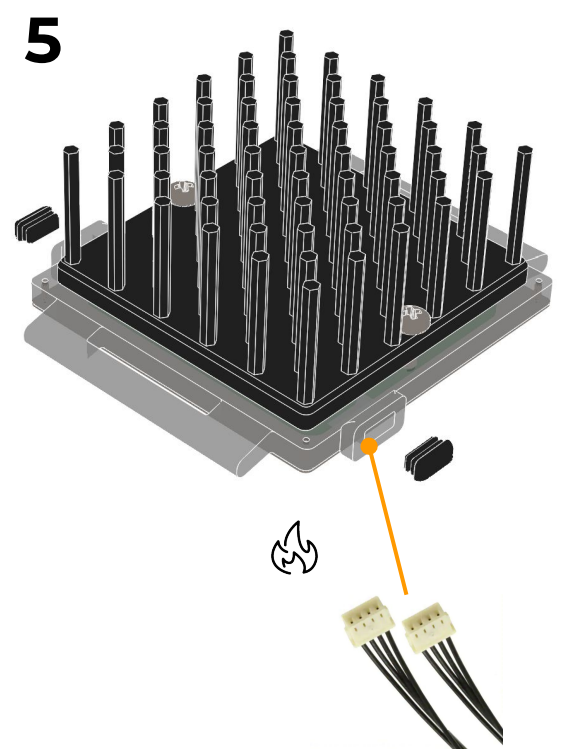
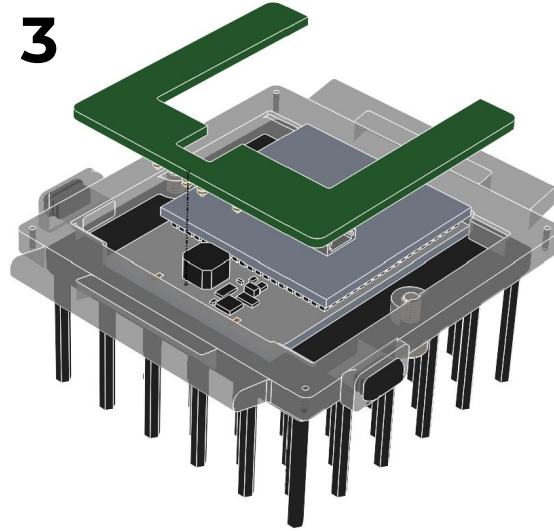
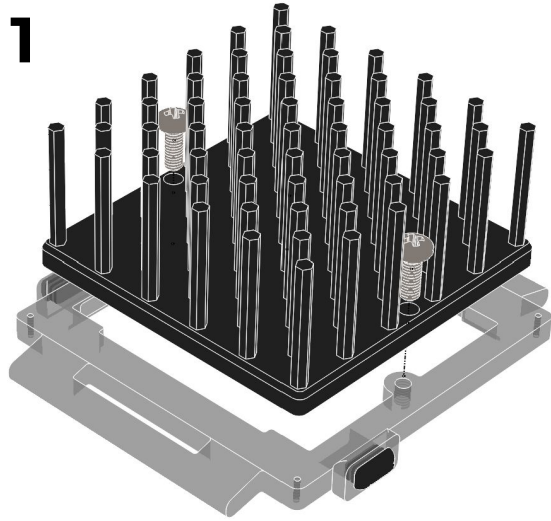
Prometheus EVK  
60mm Livestock Kit  
for PRMT02-34465-\*\*\*





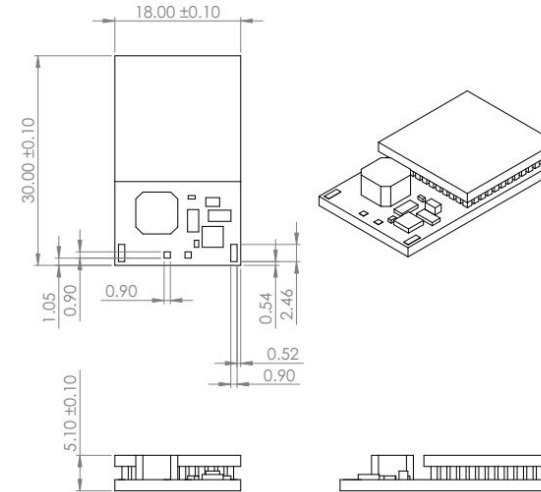
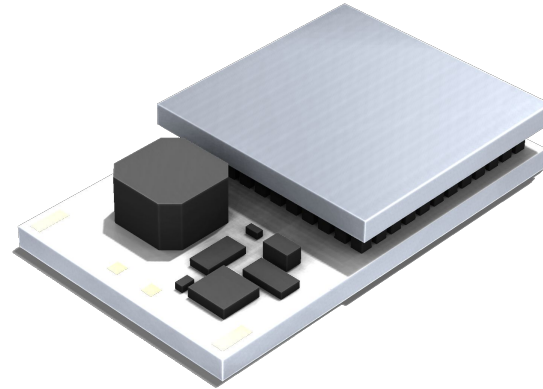


Prometheus EVK  
54mm Livestock Kit  
for PRMT02-34465-\*\*\*



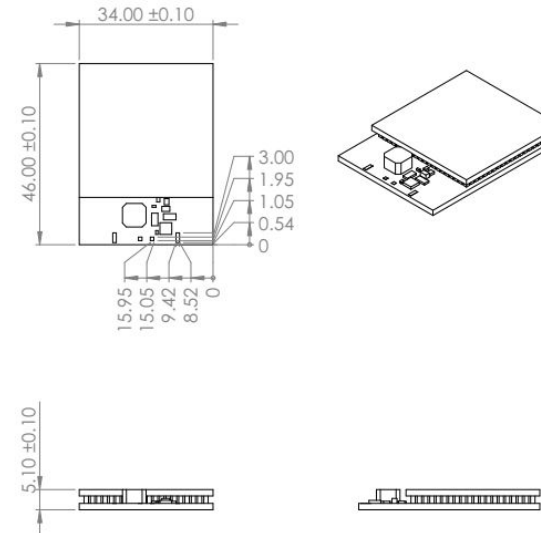
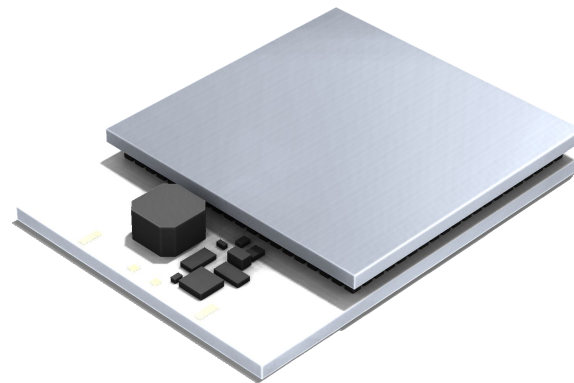


# PRMT\*\*-18305-\*\*\*



Prometheus  
Standard Models  
(custom shapes by request)

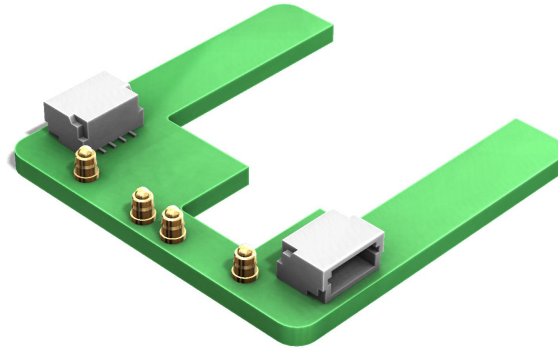
# PRMT\*\*-34465-\*\*\*



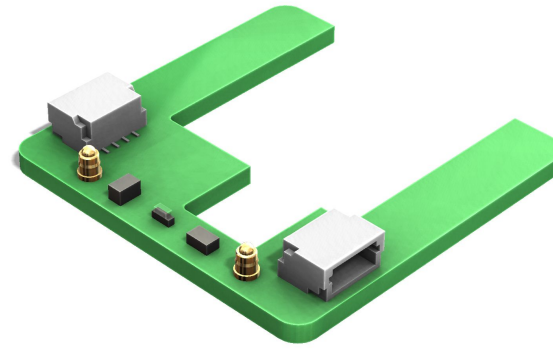


## PRMT\*\*-18305-\*\*\*

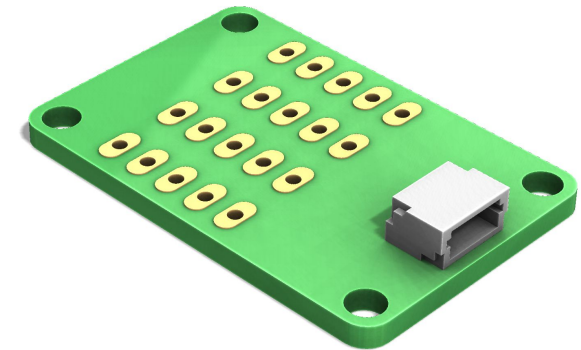
## All models



BREAKOUT\_18305



BLINK\_18305

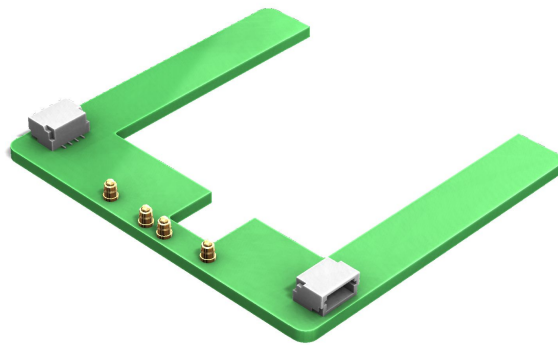


PROTOBOARD

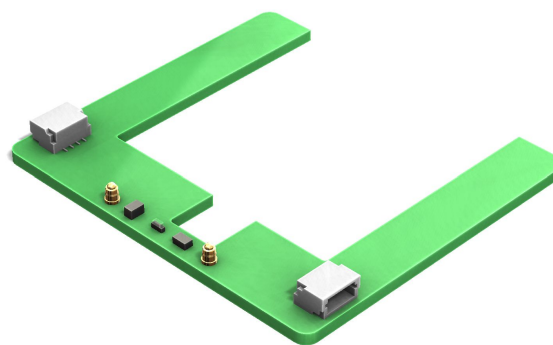
Prometheus EVK  
PCBs & Accessories

## PRMT\*\*-34465-\*\*\*

## Cables



BREAKOUT\_34465



BLINK\_34465



CABLE - 2"  
([A04SR04SR30K51A](#))