



VARISCITE LTD

VAR-SOM-MX8/X HEAT SINK KIT

Variscite PN:

VHP-MX8: for VAR-SOM-MX8 and VAR-SOM-MX8X



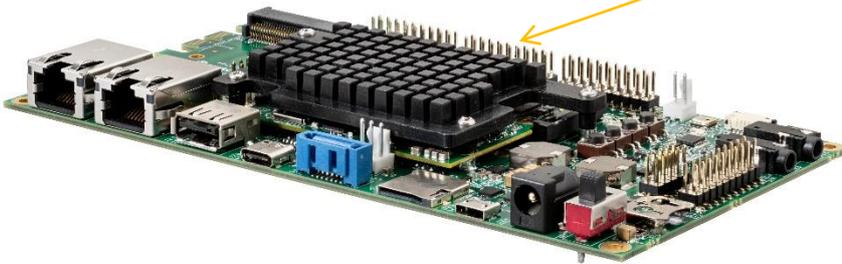
1. Heat sink kit content

- 1 x heat sink
- 1 x thermal pad (fits both VAR-SOM-MX8 and VAR-SOM-MX8X)
- 4 x M2/10mm screws (different screw drive types can be supplied)

2. Heat sink assembly

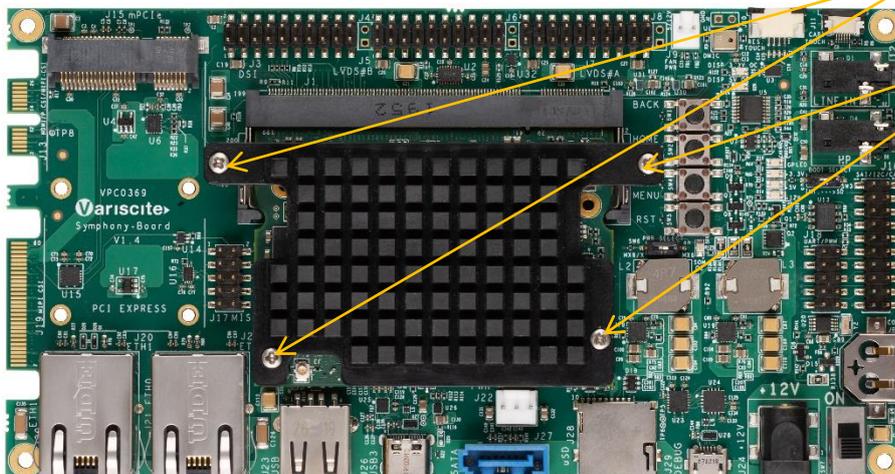
2.1 Attach the thermal pad on top of the i.MX8/X processor in the VAR-SOM-MX8/X. Make sure that the two plastic covers, on both sides of thermal pads are removed before attaching the pad (**Please see note under section 2.4 for thermal paste option**).

Place for thermal pad on the i.MX8 processor



2.2 Assemble the heat spreader on top side of the VAR-SOM-MX8/X. Use the mechanical holes in order to align the heat spreader to VAR-SOM-MX8/X PCB.

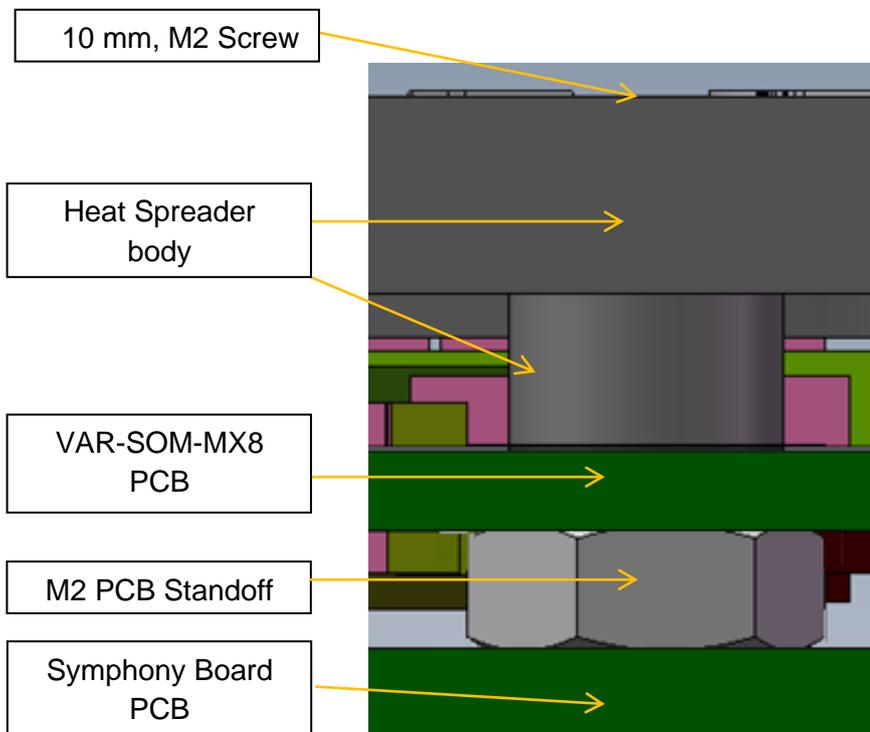
Heat Spreader alignment holes & screws



2.3 Insert the M2 screws from the heat spreader top direction.

2.4 Tight the head spreader to the VAR-SOM-MX8 using the supplied nuts.
Recommended torque for tightening the screws and nuts is ~1in-lb (~0.113N-m).

NOTE: due to tolerances of the related components (heat sink, thermal pad, PCB, i.MX8 processor) there might be some small gap between the heat sink's stands to the PCB itself. It is highly recommended before tightening all 4 nuts/screws to push the heat sink on top of the thermal pad so it will be squeezed on the processor. Only afterwards tighten the top two screws/nuts, then the bottom ones close to the SO-DIMM connector while paying attention when tightening the last screw/nut that there is no extra pressure on the PCB that might cause it to deform. It is better not to tighten the fourth screw/nut all the way if you see extra pressure is created on the PCB and use Loctite or similar glue to lock the screws/nuts. Another alternative is to use a thermal paste (grease) instead of thermal pad which will bridge the gap between the processor and the heat sink in different tolerances of the related components. The thermal paste should have similar thermal conductivity as the thermal pad of 6.0 watt/m-k (by JIS R2618 / ASTM D2326 standard).



Heat sink assembly sketch