

VARISCITE LTD

VHP-VS-SP Heat Sink Kit For: VAR-SOM-MX93, VAR-SOM-MX8M-PLUS, VAR-SOM-MX8M-MINI, VAR-SOM-MX8M-NANO



VHP-VS-SP Data Sheet Rev 1.01, 05/2024

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VHP-VS-SP Heat Sink

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1. Revision History

Revision	Date	Notes
1.00	Jun 06 2023	Initial – Preliminary
		Removed VAR-SOM-AM62 from document, separate
1.01	May 30, 2024	Kit/Document available for VAR-SOM-AM62 VHP-AM62

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3. Heat Sink Kit Content

- 1 x Heat sink.
- 1 x Thermal pad TG-A6200, precut to 20x20, 1.5mm thick.
 Fits VAR-SOM-MX93 and VAR-SOM-MX8M-PLUS/MINI/NANO.

the pad (Please see note under section 4.4 for thermal paste option).

4 x Flat Head Phillips M2x10mm DIN965 SS screws (different screw types may be supplied).

4. Heat Sink Assembly

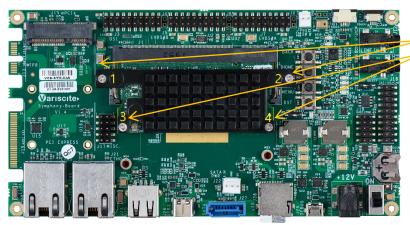
4.1 Attach the thermal pad on top of the i.MX93 and i.MX8M-PLUS/MINI/NANO processors located on the VAR-SOM-MX93, VAR-SOM-MX8M-PLUS/MINI/NANO.
Make sure that the two plastic covers, on both sides of thermal pads are removed before attaching





Place for thermal pad on the i.MX93, i.MX8M-PLUS/MINI/NANO processors (Do not stretch the pad)

Assemble the heat sink on top side of the VAR-SOM-MX93 and VAR-SOM-MX8M-PLUS/MINI/NANO. Use the mechanical holes in order to align the heat sink to the VAR-SOM-MX93 and VAR-SOM-MX8M-PLUS/MINI/NANO.



Heat sink alignment holes & screws

- 4.2 Insert the M2 screws to the heat sink holes.
- 4.3 Tight the heat sink to the VAR-SOM-MX93 and VAR-SOM-MX8M-PLUS/MINI/NANO using the supplied screws. Recommended torque for tightening the screws is ~1in-lb (~0.113N-m).

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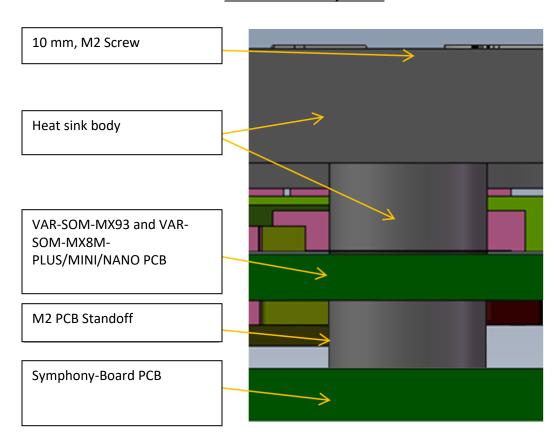
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Note:

Due to tolerances of the related components (heat sink, thermal pad, PCB, i.MX8M processor) there might be a small gap between the heat sink and the PCB itself. It is highly recommended to do the following:

- 1. Press slightly the heat sink on top of the thermal pad in order to squeeze the thermal pad on the processor.
- 2. Tighten screws 1, 2.
- 3. Tighten screws 3, 4. Pay attention when tightening the last screw that there is no extra pressure on the PCB, which might cause it to deform.
- 4. If you see excessive pressure is applied, you should not tighten the screw all the way and use Loctite or similar glue to lock the screws.
- 5. Another alternative is to use thermal paste (grease) instead of thermal pad which bridges the gap between the processor and the heat sink. The thermal paste should have similar thermal conductivity as the thermal pad, 6.0 watt/m-k (by JIS R2618 / ASTM D2326 standard).

Heat Sink assembly sketch



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5. Contact Information

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