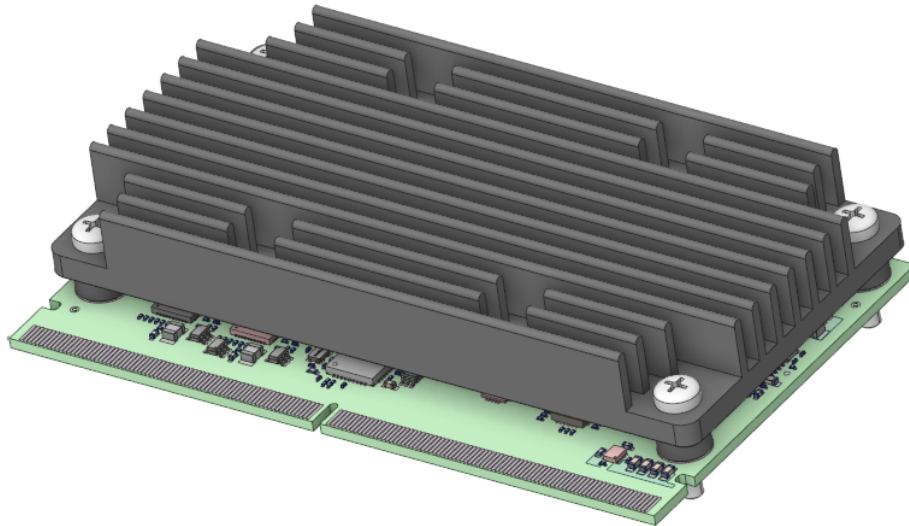


SMARC Heatsink

MHS.SMARC.1 Datasheet

Preliminary

Version 001
(2024-03-06)



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2 History

Version #	Changed Section	Author	Date	Change description
001		TM	26.02.2024	Initial Version

3 About This Document

This document describes the individual components of article “MHS.SMARC.1” on a technical and thermal level for the SMARC Module.

4 Technical Specifications

The SMARC heatsink has four M3 holes for a standard 40x40mm fan.

4.1 Heatsink

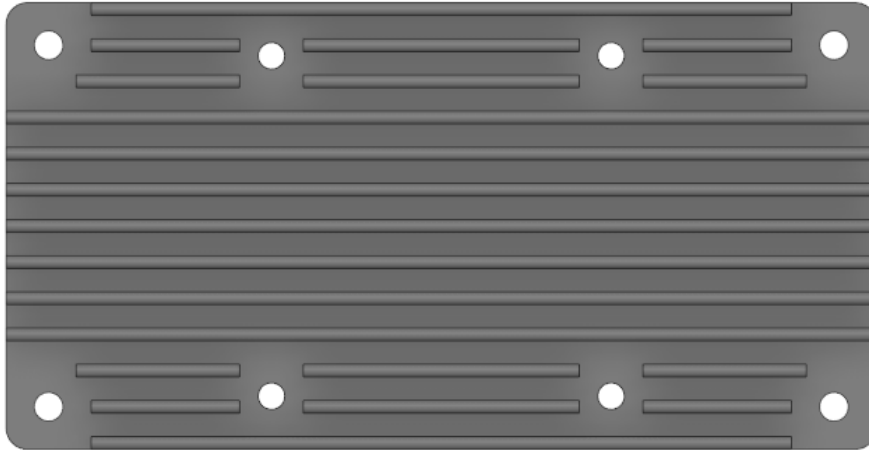


Figure 1: Heatsink TOP

Heatsink		Unit	Test Method	Remarks
Material	EN AW-6061	-		
Coating	Black anodized	-		
Thermal conductivity	170-200	W/mK		@ 20°C
Weight	TBD	Grams		Heatspreader only
Thermal resistance	TBD	W/mK		

5 Thermal Interface Material (TIM)



Figure 2: Thermal Interface Material

Thermal Interface Material (TIM)		Unit	Test Method	Remarks
Color	Grey	-	Visual	
Thermal conductivity	8	W/mK	ASTM D5470	
Dielectric Breakdown Voltage	>9.0	kV/mm	ASTM D 149	
Volume Resistivity	1.0×10^{13}	Ohm-cm	ASTM D 257	
Density	3.3	g / cm ³	ASTM D 792	
Tensile strength	<13.8	PSI	ASTM D 412	
Continuous Use Temperature	-60 - 200	°C	EN 344	
Hardness Bulk Rubber	45-70	Shore C	ASTM D 2240	
Flame Rating	UL 94V-0	-	UL 94	

6 Mechanical Dimensions

6.1 Mechanical Dimensions of Heatsink

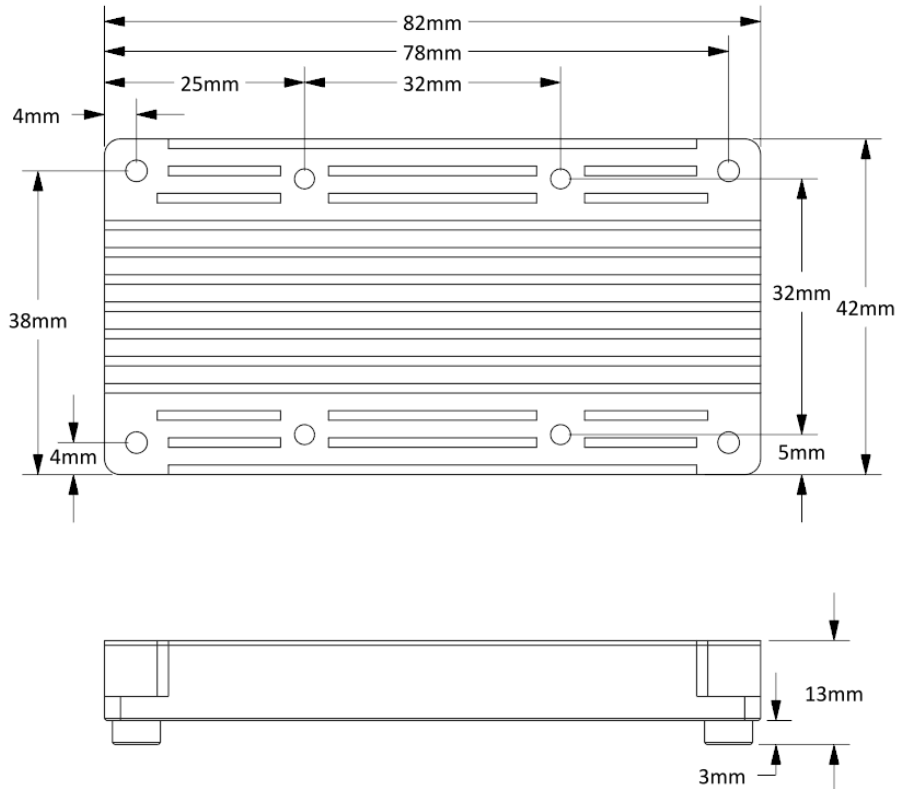


Figure 3: Mechanical dimensions of heatsink

6.2 Mechanical Dimensions of TIM

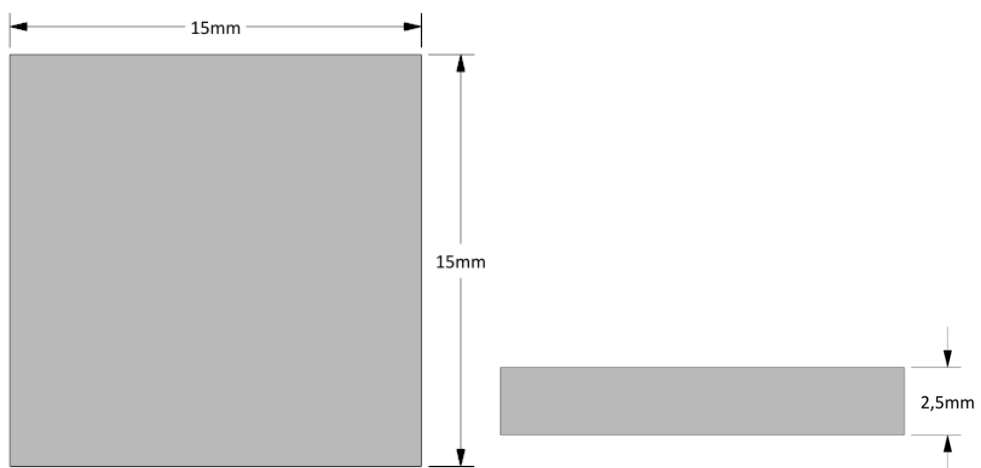


Figure 4: Mechanical dimensions TIM

7 Scope of delivery

MHS.SMARC.1:

Article	Quantity
Heatsink	1
TIM 15x15x2.5mm	1
M2.5x12mm pan head screw DIN 7985	4

8 Appendix

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