

Heat Sink for NVIDIA® Jetson Orin Nano™ / Jetson Orin™ NX



ATS Part#: **ATS-NVA-3281-C1-R1**

Description: 63 x 40 x 8 mm high-performance active heat sink with leaf spring attachment

Component: NVIDIA Jetson Orin Nano / Jetson Orin NX

Heat Sink Type: Active heat sink (fan not included)

Heat Sink Attachment: Leaf spring with screws

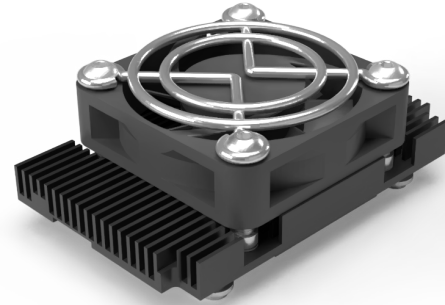


Image for illustration purposes only.

Features & Benefits

- » Designed to fit the NVIDIA® Jetson Orin Nano™ and Jetson Orin™ NX modules
- » Leaf spring with screws for mounting heat sink - see Fig. 1
- » Included mounting hardware kit: ATS-HK510-R1
(leaf spring with M2 x 9.2mm shoulder screws - drive: Torx T8)
- » Fan assembly hole pattern is 32.0mm C-C (center to center) - see Fig. 2
- » Included fan attachment kit: ATS-HK509-R1 (M3 x 18mm screws)
- » Fan not included - ATS recommended fans listed below
- » Provided with pre-assembled Thermal Interface Material (TIM) on base
- » Recommended through hole size in PCB is 3.20 mm (PCB thickness: 1.2 mm)

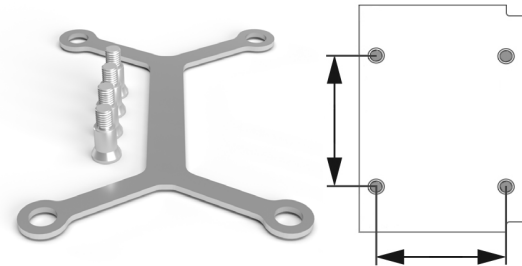


Fig. 1 - Leaf spring with screws for mounting heat sink

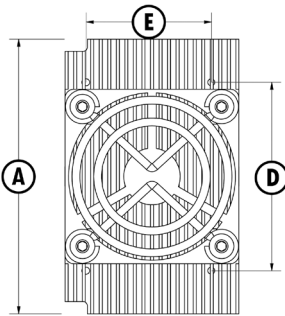
Fig. 2 - Measured dimensions of fan assembly hole pattern

Heat Sink Part Number	L (mm)	W (mm)	H (mm)	Thermal Resistance (°C/W)	Heat Sink Weight (g)	Thermal Interface Material
ATS-NVA-3281-C1-R1	63	40	8	1.6	38.3	Chomerics T766

Recommended Fans

Part Number	Manufacturer	L (mm)	W (mm)	H (mm)	Voltage (VDC)	Air Flow (CFM)	Static Pressure (Pa)	Lead Wire
AFB0405HHA-A	Delta	40	40	10	5	8.2 (0.230m³/min)	47.3	Black (-), Red (+)
109P0412H901	Sanyo Denki	40	40	10	12	5.3 (0.148m³/min)	41.1	B (-), R (+), Y (Sensor)

Product Details

SCHEMATIC IMAGE	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Material	Finish
	63 mm	40 mm	8 mm	43.2 mm	28.8 mm	Aluminum 6063	Black Anodized

NOTES:

- 1) Fan not included. Fan type is specific to individual customer requirements and needs to be independently sourced.
- 2) Dimensions A and B refer to heat sink size.
- 3) Dimension C is the heat sink height from the bottom of the base to the top of the fin field.
- 4) Dimensions D and E refer to the mounting hole pattern C-C (center to center)
- 5) Thermal performance data are provided for reference only. Actual performance may vary by application.
- 6) ATS reserves the right to update or change its products without notice to improve the design or performance.
- 7) ATS certifies that this heat sink assembly is RoHS-6 and REACH compliant.
- 8) Contact ATS to learn about custom options available.

*All Images are for illustration purposes only.

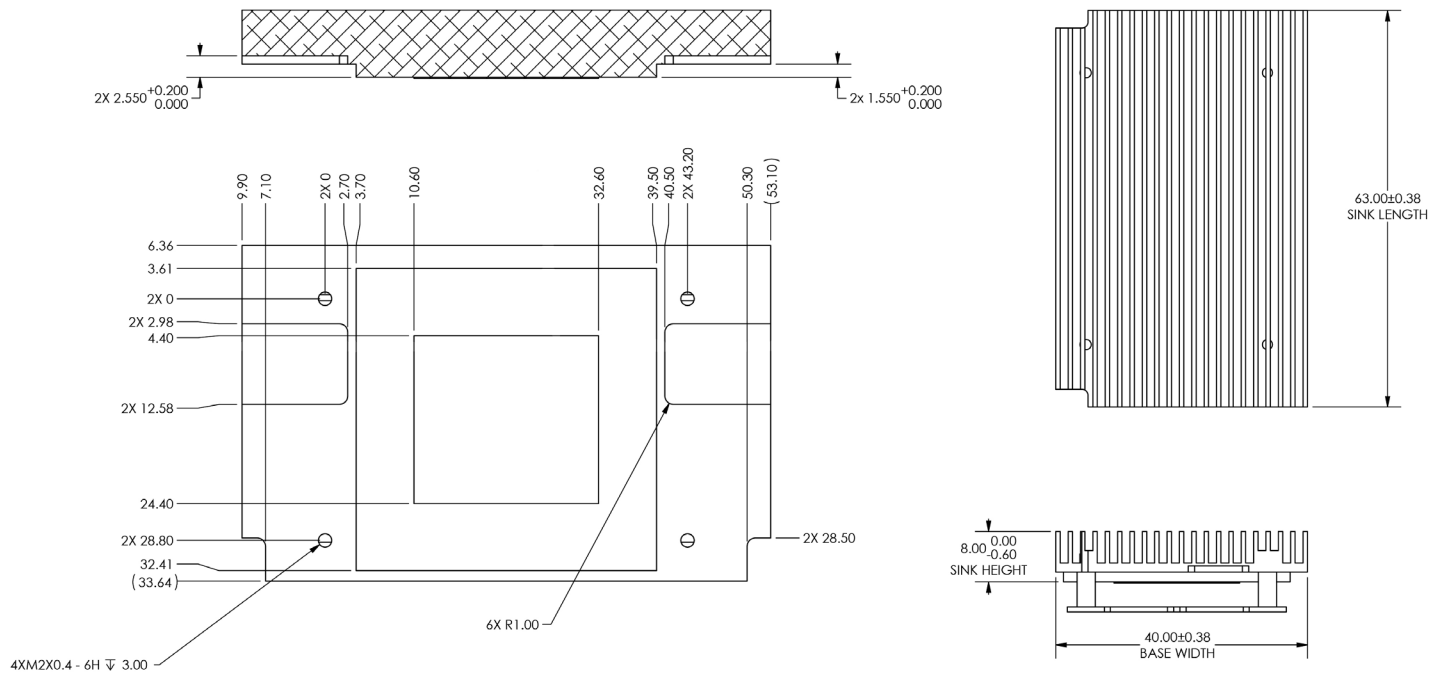


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Detailed Schematic



Heat Sinks for NVIDIA® Jetson™ Products

NVIDIA® Product	Heat Sink Part Number	L (mm)	W (mm)	H (mm)	Weight (g)	Thermal Resistance (°C/W at 200 LFM / 1 M/S)
Jetson Nano™	ATS-NVA-2780-C1-R0	60	40	8	35.5	2.2*
	ATS-NVP-2780-C2-R0	60	40	8	32.3	3.24
Jetson Xavier™ NX	ATS-NVA-2781-C1-R0	60	40	8	36.8	1.6*
	ATS-NVP-2781-C2-R0	60	40	8	34.2	2.55
Jetson AGX Xavier™	ATS-NVA-3275-C4-R0	100	87	16	164.3	0.21*
Jetson AGX Orin™	ATS-NVP-3275-C5-R0	100	87	16	167.7	0.53
Jetson Orin Nano™	ATS-NVA-3281-C1-R1	63	40	8	38.3	1.6*
Jetson Orin™ NX	ATS-NVP-3281-C2-R1	63	40	8	36.2	2.45
Jetson™ TX2 NX	ATS-NVA-3353-C1-R2	63	40	8	37.4	1.7*
	ATS-NVP-3353-C2-R2	63	40	8	34.3	2.57

* thermal resistance inclusive of thermal interface material

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