

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



**ATS Part#:** **ATS-NVA-3281-C1-R0**  
**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

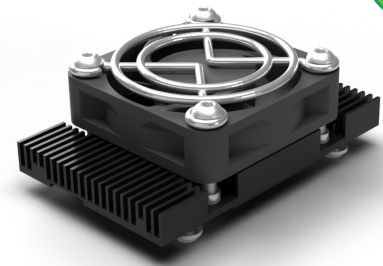


Image for illustration purposes only.

## 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-R0  
(leaf spring with M2 x 0.4mm 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-R0 (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)

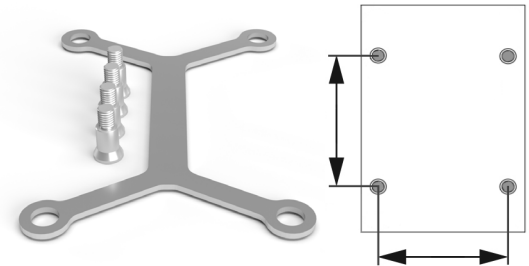


Fig. 1 - Leaf spring with screws for mounting heat sink

Fig. 2 - Measured dimensions of fan assembly hole pattern

| Heat Sink Part Number | L (mm) | W (mm) | H (mm) | Total Thermal Resistance (°C/W) | Heat Sink Weight (g) | Thermal Interface Material |
|-----------------------|--------|--------|--------|---------------------------------|----------------------|----------------------------|
| ATS-NVA-3281-C1-R0    | 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.



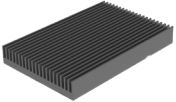
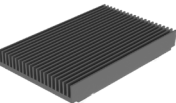
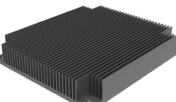
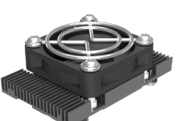
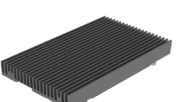
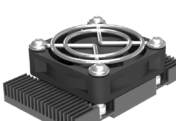
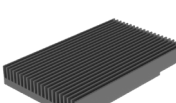
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# Heat Sinks for NVIDIA® Jetson™ Products



|                                                                                     | NVIDIA® Product    | Heat Sink Part Number | L (mm) | W (mm) | H (mm) | Weight (g) | Total Thermal Resistance |
|-------------------------------------------------------------------------------------|--------------------|-----------------------|--------|--------|--------|------------|--------------------------|
|    | Jetson Nano™       | ATS-NVA-2780-C1-R0    | 60     | 40     | 8      | 35.5       | 1.6 °C/W                 |
|    |                    | ATS-NVP-2780-C2-R0    | 60     | 40     | 8      | 32.3       | 1.6 °C/W                 |
|    | Jetson Xavier™ NX  | ATS-NVA-2781-C1-R0    | 63     | 40     | 8      | 36.8       | 1.6 °C/W                 |
|    |                    | ATS-NVP-2781-C2-R0    | 63     | 40     | 8      | 34.2       | 1.6 °C/W                 |
|   | Jetson AGX Xavier™ | ATS-NVA-3275-C1-R0    | 100    | 87     | 16     | 164.3      | 0.21 °C/W                |
|  | Jetson AGX Orin™   | ATS-NVP-3275-C3-R0    | 100    | 87     | 16     | 167.7      | 0.21 °C/W                |
|  | Jetson Orin Nano™  | ATS-NVA-3281-C1-R0    | 63     | 40     | 8      | 38.3       | 1.6 °C/W                 |
|  | Jetson Orin™ NX    | ATS-NVP-3281-C2-R0    | 63     | 40     | 8      | 36.2       | 1.6 °C/W                 |
|  | Jetson™ TX2 NX     | ATS-NVA-3353-C1-R0    | 63     | 40     | 8      | 37.4       | 1.6 °C/W                 |
|  |                    | ATS-NVP-3353-C2-R0    | 63     | 40     | 8      | 34.3       | 1.6 °C/W                 |

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