

Sige Active Cooling Kit

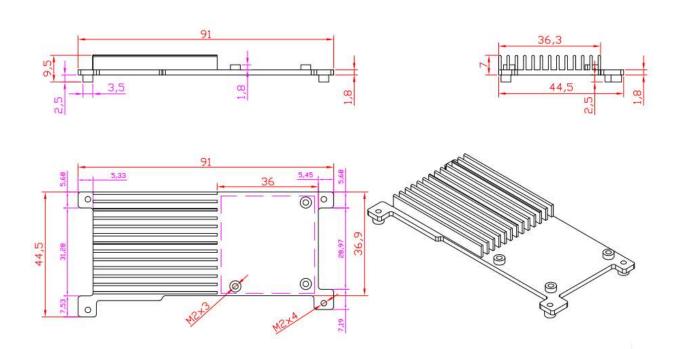
The Sige Active Cooling Kit is a dedicated active cooling solution designed for the ArmSoM-Sige. It combines an aluminum heatsink with a temperature-controlled fan to keep your ArmSoM-Sige operating at a comfortable temperature even under heavy loads.



Please note that the Sige DIY Case 1 and the Sige Active Cooling Kit cannot be used together.

Heatsink



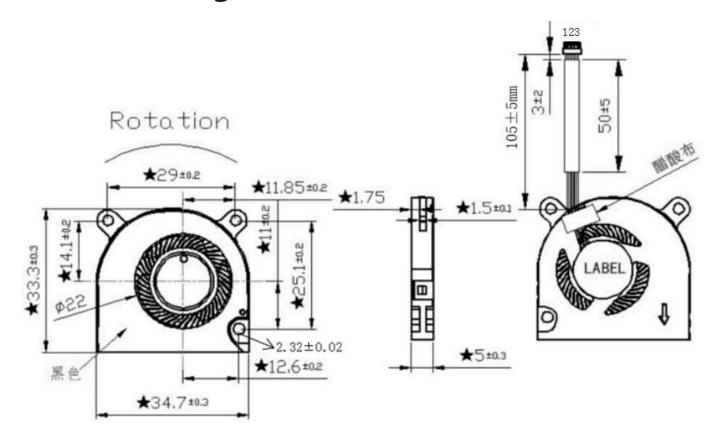


- Material: AL6063-T5
- Finish: Sandblasting + Oxidized Glossy Black

Compatibility

- Sige1 2mm Thermal Pad
- Sige3 2mm Thermal Pad
- Sige5 2mm Thermal Pad
- Sige7 1mm Thermal Pad

3505S Cooling Fan



Detailed Specifications

ITEM	SPECIFICATION/CONDITION		
Bearing Type	Hydraulic		
Rating Voltage	DC 5V		

ITEM	SPECIFICATION/CONDITION				
Rated Voltage	2.5~5.5 VDC				
Start-Up Voltage	2.5 VDC (Temp 25°C)				
Rated Current	310 mA (Max 340 mA)				
Rated Speed	10000 RPM ±10%				
Air Flow	2.0 CFM (Min 1.80 CFM)				
	0.056 m³/MIN (Min 0.051 m³/MIN)				
Static Pressure	26.75 mm-H2O (Min 21.67 mm-H2O)				
	1.05 inch-H2O (Min 0.85 inch-H2O)				
Noise Level	54 dB(A) (Max 56.5 dB(A))				
Protection Type	otection Type				
Resistance Protected	YES				
Reverse Connect Protection	YES				
Auto Start	NO				
Tachometer Output	NO				
Lock Rotor Alarm Output	NO				
Pulse Width Modulation	YES				
Signal Feedback	YES				

ITEM	SPECIFICATION/CONDITION			
Thermal Speed Controlled	NO			
Connection Lead Type	UL10064 AWG#32, 105±5mm outside the frame, Red (Positive), Black (Negative), Blue (PWM Speed Control)			
Housing	JST 04SUR-32S OR EQUIVALENT (Blue, Black, Red)			
Label	DC5V-0.45A			
Pin Terminal	NO			

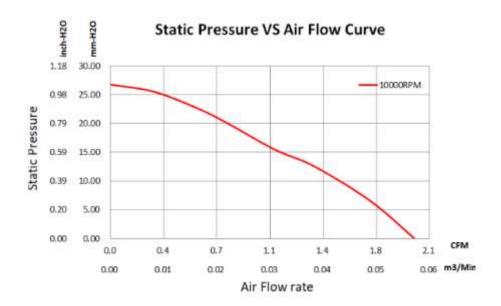
Average Lifespan

After continuous operation at a specified constant temperature, the average lifespan can be estimated if 90% of the units are still operational after testing.

Sleeve Bearing	Test Temperature	Test Time (hours)	
Hydraumatic	25°C	33,000	
Hydraumatic	40°C	25,000	
Hydraumatic	60°C	20,000	

Fan Static Pressure and Airflow Curves

NO	Duty	Speed	Current	Pressure	Air Flow	SPL (dB(A))
	Cycle	(RPM)	(mA)	(mm-H2O)	(CFM)	@ 0.1m
1	100%	10,000	310	26.75	2.0	54



Other Parameters

- Operating Temperature: Normal operation between -10°C to 50°C
- Storage Temperature: After storage at -20°C to 40°C for 500 hours, and a 24-hour recovery period at room temperature, all functions operate normally
- Humidity: 95% RH. After 96 hours of humidity testing at 40±2°C per MiL-STD-202F Standard 103B, insulation resistance and strength measurements meet 8.0 requirements.
- Wire Model LEAD WIRE: UL10064 AWG#32, external wire length 105±5mm
 - PIN 1: Blue Wire (BLUE WIRED) --- (PWM)
 - o PIN 2: Black Wire (BLACK WIRED) --- (-)
 - PIN 3: Red Wire (RED WIRED) --- (+)

Documents



Assembly Instructions

ArmSoM YouTube Channel

Purchase Samples

ArmSoM online shop: https://www.armsom.org/product-page/sige-active-cooling-kit

ArmSoM Aliexpress online shop: https://aliexpress.com/item/3256807357737339.html

ArmSoM Taobao shop: https://item.taobao.com/item.htm?id=824930133991

OEM&ODM, please contact: sales@armsom.org

