

研華股份有限公司 Advantech Co., Ltd.

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## **UNO Product Thermal Design Declaration**

Dear Valued Customers:

We hereby declare that the products described below are subject to necessary quality management measures. We assure you that all the functions are properly operational in normal working environments without any safety issues.

## **Product Part Numbers Affected by This Announcement**

**UNO-127** 

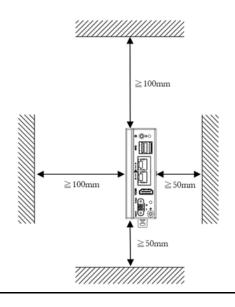
## **Key Statements**

UNO 127 is designed with ruggedized fanless thermal solution. The heat generated from the motherboard dissipates thru the heat conduction thorough metal chassis. It is normal that the metal chassis reaches to higher temperature during operation to keep internal heat dissipating outside the chassis. Fanless design is widely adopted in the entire UNO product series and its design quality is proven by reliability tests to ensure stable and reliable operation both in low and high operating temperature.

Advantech 127 is certified with UL safety regulation IEC 61010-1. All UNO products meet the assigned requirement of the safety regulations.

	Model	CPU Utilization	Ambient temperature	CPU temperature	Chassis surface temperature	Remark
ſ	UNO-127	100%	30'C	79C	77.9C (maximum) 65.6'C (Avg.)	without airflow
		100%	60'C	91'C	88'C above	with 0.7m/s airflow

**Installation Suggestion:** Avoid impact on UNO-127 due to heat from equipment around; recommend following distances for heat dissipation



- Up & Left: ≥ 100mm
- Down & Right: ≥ 50mm



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## **Thermal Considerations**

- The chassis surface temperature will go high when the system is operating, we suggest user wear gloves or touch the system while it cools down.
- If the external ambient temperature exceeds the maximum operating temperature shown on the UNO specification sheet, further thermal testing is required to ensure components will not exceed the maximum claimed operating temperature in such circumstance.
- All responsibility for determining the adequacy of any thermal or system design remains solely with the system integrator. Advantech makes no warranties or representations that merely following the instructions presented in this document will result in a system with adequate thermal performance.