

## Positive Temperature Coefficient (PTC) Heater : Xiaomi SU7 Teardown Report



**Xiaomi SU7 (from Web info)**

<https://hu.motor1.com/news/703064/xiaomi-su7-onallo-parkolas-video/>



**Overview of PTC Heater**



**PCB**

### Overview

Xiaomi, the Chinese electrical appliance maker announced its first battery electric vehicle (BEV) Xiaomi SU7 in March 2024.

In electric-powered vehicles, heating units such as PTC heaters and heat pump air conditioners are essential to prevent the freezing of the heating of the vehicle interior and batteries in cold weather. Because the exhaust heat from the engine cannot be used by. Collaboration of PTC heater as quick-warming and supplemental heat source and heat-pump-type air conditioning using compressors is hot today. Demand for EV PTC heaters is increasing together with the popularization of electric vehicles.

This is a teardown report of PTC heater in Xiaomi SU7 with grade Max.

### Product features

- Manufacturer: WOORY Industrial
- Heat source: Surface heating element (resistive printing method on heating plate)
- Control method: DUTY control (PWM)
- Communication: LIN communication, CAN communication
- Operating Voltage: DC200V ~ 900V (assuming operation with the on-board battery)
- Power capacity: 3000 ~ 10,000 W
- Protection function: Temperature, voltage, current protection function, cooling water flow rate, non-detection function
- Standard: ASPICE, ISO26262 ASIL-B

### Report Contents (25 pages)

- Product teardown, parts measurement (size & weight)
- Identification of key ICs on the PCB (including datasheet, if we found).

### Report price

**Delivery one week after order placement**

**Please contact us for report pricing**

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Identification of Key ICs Identification of Key ICs (manufacture, function, etc.) on PCB (Top View)

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