

Inverter UAES(mounted in Xiaomi SU7) Circuit Analysis report



Xiaomi SU7 (from web information)

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

Inverter Block



e-Axle



Inverter PCB

Overview

Xiaomi, Chinese consumer electronics manufacturer announced its first battery electric vehicle (BEV) Xiaomi SU7 in March 2024. Xiaomi SU7 is available in three grades: Standard (RWD), Pro (RWD) and Max (AWD)

This report is a circuit analysis report of the inverter block of the UAES e-Axle to be installed in the Xiaomi SU7 Pro.

Bote: UAES (United Automotive Electronic Systems Co., Ltd.)

Product features

- Pro (RWD) equipped, UAES unit (400V architecture) • Motor output (Max) : 220kW
- All transformers are planar, achieving low height
- Uses Infineon MCU and gate drive ICs
- Centralized power supply is used for gate drive ICs
- Some fuses are made with board wiring patterns
- Uses UAES SiC Power Module (Structure Analysis report is now available for sale)

Report Contents

Report 1: Driver circuit of one out of three phase (77 Pages)

Report 2: Driver circuit of one of three phase of driver circuit + Circuit of common area

Report 3: Circuit of entire area

- Product teardown
- Component list including value
- Detail component level schematic, Function block diagram
- Cross reference viewer software

Report price *The report will only include the analysis results for the analysis areas (1)-(3), respectively.

Please contact us for report pricing.

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