



# **LTEC Corporation**

Your most experienced partner in IP protection

# Advanced Driver-Assistance System (ADAS) Electronic Control Unit (ECU) : Xiaomi SU7 Teardown Report



Xiaomi SU7 (from Web info) https://hu.motor1.com/news/70306 4/xiaomi-su7-onallo-parkolas-video/



**Overview of ADAS ECU** 



<u>PCB</u>

## **Overview**

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

These vehicles are equipped with the most advanced ADAS(Advanced Driving Assistant System. Information from LiDAR, 11 high-resolution cameras, 3 millimeter-wave radars, and 12 ultrasound radars are integrated processed by ADAS ECU (NVIDIA DRIVE Orin platform-adopted) and feedback to driving support.

This is a teardown report of ADAS ECU installed in Xiaomi SU7 with grade Max.

#### **Product features**

- Capable for seamless integration with smartphones and home appliances by adopting advanced ADAS including urban areas and proprietary OS of Hyper OS
- NVIDIA's Orin (2-chip mounted) SoC for ADAS
- Aluminum casing, processor and peripheral memory are water cooled

# **Report Contents (16 pages)**

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

Ref.) Difference from Nvidia Jetson AGX Orin (evaluation board) commented

#### **Report price**

Delivery one week after order placement Please contact us for report pricing



LTEC Corporation US Representative Office <u>www.ltec-biz.com/en/</u> 2310 Homestead Rd, C1 #231 Los Altos, CA 94024 Phone: +1-(650) 382-1181 Contact2@ltec.biz

## **Table of Contents**

<u>Summary</u>		
Table 1	Product Information	 3
<u>Product Teardown</u>		
	Product Overview	 4
	Installation Status 【Rear Cover】	 5
	Installation Status 【ADAS ECU PCB】	 6
	Installation Status 【Housing】	 7
<u>Overview</u>		
Fig. 1	ADAS ECU PCB Overview	 8
Fig. 2-1	Identification of Key ICs (manufacture, function, etc.) on ADAS ECU PCB (Top View) 1	 9
Fig. 2-2	Identification of Key ICs (manufacture, function, etc.) on ADAS ECU PCB (Top View) 2	 10
Fig. 2-3	Identification of Key ICs (manufacture, function, etc.) on ADAS ECU PCB (Top View) 3	 11
Fig. 2-4	Identification of Key ICs (manufacture, function, etc.) on ADAS ECU PCB (Top View) 4	 12
Fig. 2-5	Identification of Key ICs (manufacture, function, etc.) on ADAS ECU PCB (Bottom View) 5	 13
Fig. 2-6	Identification of Key ICs (manufacture, function, etc.) on ADAS ECU PCB (Bottom View) 6	 14
Fig. 2-7	Identification of Key ICs (manufacture, function, etc.) on ADAS ECU PCB (Bottom View) 7	 15
Fig. 3	Moisture-Proofed Area of ADAS ECU PCB	 16

