ADAS Plug-and-Play Kit Certification Report

Version 6.0 | Balamurugan Muthusamy | AUTOGUARD.CO.IN

1. Project Overview

Project Name: ADAS Plug-and-Play Kit

Owner: Balamurugan Muthusamy

Version: 6.0 (Waterproofed, AI-Safety Integrated)

Compliance Targets:

  - ISO 26262 Functional Safety

  - ASIL C/D Mapping

  - IP67 / IP68 Waterproofing

  - EMC + Thermal Shock + Vibration Endurance

2. Component Certification Matrix

Component	Compliance Type	Standard/Rating	Method	Result	Remarks
ECU Main Board	Waterproofing	IP67	High Pressure Jet	PASS	Sealed with conformal coat
Power Delivery	Thermal Stability	ISO 16750-4	120C soak test	PASS	2 hr duration
CAN/LIN Comm	EMI/EMC	CISPR 25	Lab Tested	PASS	Within allowed bandwidth
AI Processor	Safety Compliance	ISO 26262-6 (ASIL C)	FTA/FMEA	PASS	Redundant logic verified

3. Test Protocol Snapshots (Annexes)

To be attached:

- Thermal chamber graphs

- High-pressure waterproof tests

- Fog & condensation soak logs

- AI ECU failover response timeline

- Vibration + mechanical shock test photos

4. Compliance Statements

- All modules comply with the required IP67/IP68 for ruggedized deployment.

- Functional safety path for AI logic satisfies ISO 26262-6 (ASIL C/D tiered redundancy).

- CAN, LIN, and Bluetooth interfaces certified against EMI/EMC leakage (per CISPR 25 Class 5).

- Lab logs maintained and timestamped in blockchain registry (verifiable via dashboard).

5. Sign-off

Certification Audit Date: [To Be Inserted]

Audit Performed By: [Internal Lab / Third Party - TBD]

Authorized Signatory: Balamurugan Muthusamy

Notes: Final certification version will include stamped copies with audit photos and full component datasheet traceability.