

Rapidise is an Original Design Manufacturer (ODM) that focuses on next-generation product engineering and electronics manufacturing, serving core industries including the automotive sector. Rapidise positions itself by transforming the ODM landscape through the seamless connection of design and manufacturing via a cutting-edge on-demand platform. The company brings 25+ years of manufacturing services delivery and 12+ years of design services delivery experience, offering ready products for white-labelling and instant quoting for custom product development.

In the automotive sector, Rapidise's core expertise includes Cameras & Computer Vision, IoT/Connected Vehicle solutions, and Telematics. Their ODM capabilities specifically cover Camera Modules & Products, Driver Monitoring Systems (DMS), Vision Algorithms, and AI Boxes.

Focus on Dashcam-Related Services

Rapidise offers several dashcam solutions, often utilizing Qualcomm processors and their proprietary RISE platforms, which integrate advanced connectivity and AI/Edge capabilities.

1. Dual Camera Dashcam (QCS5430 / RISE X1 Platform): Rapidise is engaged as an ODM to build this product, which features in-cabin and road-facing cameras. It includes connectivity (Wi-Fi, Bluetooth, LTE, GPS) and advanced algorithms for detecting events like sudden braking and rapid acceleration. This solution targets transport fleets in North America.
2. Dual DashCam (SM6225 / RISE Y1 Platform): This product supports both front-facing and in-cabin cameras and comes in three variants: WiFi only, WiFi + LTE, and WiFi + Ethernet. It integrates advanced DMS, ADAS, and IMU-based algorithms for safety and driver monitoring, targeting regions including MEA, North America, Africa, and India.
3. DashCam + LTE Edge AI Box (QCM6125): This project focuses on enhancing vehicle safety by developing an advanced emergency call system designed to automatically connect to an emergency call center upon accident detection, providing video data transmission. The device includes an integrated compact 2-camera unit (front and in-cabin), voice call functions, and a dedicated SOS button.

The AI portfolio supporting these devices includes ADAS and DMS applications such as Drowsiness Detection, Front Collision Alert, Lane Departure Warning, Mobile Distraction, and Accident Detection.

Key Engineering and Manufacturing Offerings (Concept to Production)

Rapidise provides comprehensive capabilities spanning the entire product lifecycle from concept design through mass production, inventory management, warehousing, and shipping.

- Product Engineering & Hardware Design:
 - Hardware Architecture.
 - Electrical Schematic Design and Multilayer PCB Layout Design.
 - BoM Optimization and High-Speed Board Design.
 - Analog & RF Design and Antenna Tuning.
 - Mechanical Design, including new ID concept generation, 3D engineering, and simulation.
 - Mold Development and Plastic/Metal Parts Manufacturing.
- Embedded Software & AI Development:
 - Embedded Software capabilities covering Bare Metal, RTOS, Linux, and AOSP.
 - BSP (Board Support Package), Device Driver, and Firmware development.

- FOTA (Firmware Over the Air).
- Computer Vision and Algorithm Development.
- Edge Computing & AI, including specialized services for ADAS & DMS.
- Cloud & Application Development (Web & Mobile Apps, Cloud Engineering using AWS, Azure, GCP, and IoT Dataflow Architecture).
- Manufacturing & Assembly:
 - Design for Manufacturing (DFM) Analysis.
 - PCB Assembly (SMD, DIP, TH) utilizing High Speed SMT Lines.
 - Camera Module Assembly performed in an ISO Class 6 Clean Room.
 - Box Build & Full Product Assembly and High Mix Low Volume Manufacturing.
 - Quality Control via tools like AOI, SPI, X-Ray, and 100% Traceability with MES integrated with SAP.
- Testing, Compliance, and Certification:
 - Access to a Pre-certification Lab and EDVT Test Lab.
 - Certification services.
 - Product Reliability Tests including Thermal Shock, Water Spray, Salt Spray Chamber, Temperature & Humidity Tests, and Vibration Test.
 - EMI/EMC Testing conducted using Semi Anechoic Chambers, and IP Rating testing.
 - Vehicle Testing capabilities, such as the Vehicle Cold Chamber and Chassis Dynamometer.