LEADWAVE

LEADAI®
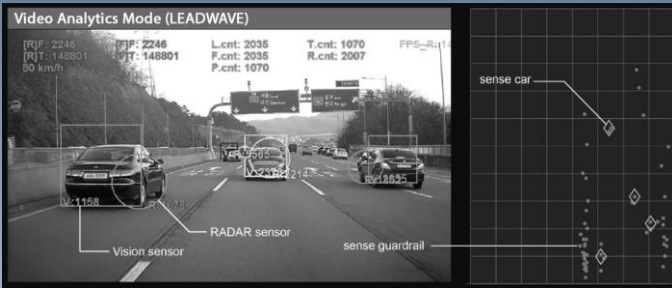AI-Based Collision Avoidance System

Fusion ADAS Solution
Video analytics + mmWave radar sensor built in one system. Optimized with matching algorithm.

Environment Agnostic
Works even in adverse environmental conditions such as darkness, extreme bright light, dust, rain, snow, and low temperature zones.

Fusion Technology

LEADAI fusion technology uses video analytics technology to identify the vehicles and detect lanes based on the given ROI.

Paired with 77GHz mmWave, the information from two sensors are optimized thus results to a more accurate distance, velocity and acceleration measurements.

Based on these information, TTC and possible collision situation are estimated and collision avoidance warnings are generated.

Hardware Specifications

CPU	Coretex A7 Quad Core
Vision Sensor	Camera: 1280 X 720 (HD) Size: 94 x 64 x 25.2mm
Radar Sensor	RF: 76~77GHz Size: 61 x 64 x 25.2mm
Power	DC 10~36V
Size	80 x 120 x 50mm
Input	Micro 5PIN USB Port Micro SD Card Slot GPS port
Connectivity	Vehicle CAN communication GPIO, RS-232, CVBS Video Out
Audio	Built in Speaker
Operating Temp.	-20°C ~ 70°C (-4°F ~ 158°F)
Storage Temp.	-30°C ~ 85°C (-22°F ~ 185°F)

ADAS Algorithm

PCW (Pedestrian Collision Warning)
Notifies driver of any pedestrians, bicycles or motorcycles ahead.

FCW (Forward Collision Warning)
Sends warning alerts if a crash is imminent to assist driver in maintaining a safe traveling distance.

LDW (Lane Departure Warning)
Helps to regain direction if the driver unintentionally departs lanes.

FVSA (Front Vehicle Start Alarm)
Notifies driver if the front vehicle started moving forward from stationary within 2 seconds.

FPW (Forward Proximity Warning)
Notifies driver if the vehicle moves forward while another vehicle is in the detection range.

DVR (Digital Video Recorder)
Records scenes as HD resolutions. Continuous / Event & User Triggering Record Mode

*All specifications are subject to change without prior notice.

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