

Mobileye have put their focus on creating technology to help even a distracted or inattentive driver. The Collision Prevention System accommodates multiple vision processing algorithms running simultaneously to provide various driver assistance functions. These include Lane departure Warning, Forward Collision Warning, Intelligent Headlamp Control, Pedestrian Detection, Traffic Sign Recognition and more.



The system camera takes 30 pictures per second of the road ahead, each of which is analysed by a miniature vision processor to determine the estimated time to contact with the lane marker, identify if there are any vehicles ahead and calculate their speeds by comparing the images of the vehicles in all 30 frames, and—most importantly—identifying if a leading vehicle has slowed or stopped. At the same time, the system triggers a change from high to low beam in response to an approaching vehicle with headlamps on, and identifies traffic signs to help with speed limit compliance. All of these DA systems are controlled by a single unit mounted on the windshield behind the rear view mirror.