

Improving Automotive Fuel Efficiency

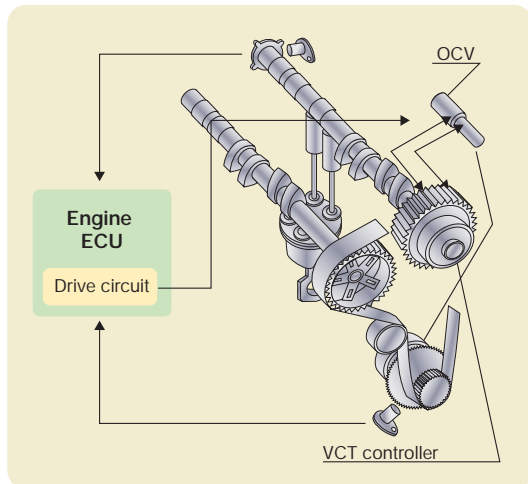
Contributing to the Improvement of Fuel Efficiency through New Technologies

As an automotive components manufacturer, DENSO cooperates with its customers, automobile manufacturers, to develop new technologies and supply components that create more efficient power trains and are necessary for the switch over to electric cars, hybrid cars, and cars running on alternative fuels.

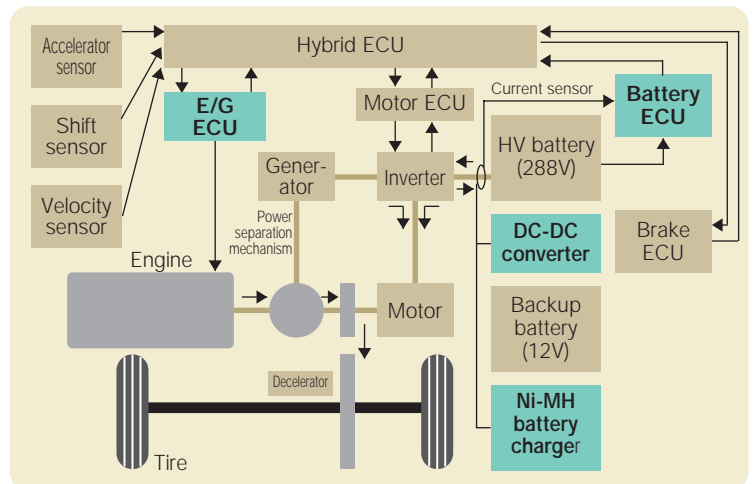
To cite just a few examples, for Toyota Motor Corp. in 1995 we developed the continuously variable valve timing mechanism, which optimizes the timing of the opening and closing of intake valves according to engine operating conditions. In 1996, Toyota adopted DENSO's high-pressure fuel pumps and high-pressure injectors for direct-injection gasoline engines. In 1997, DENSO's electronic

control units (ECUs) for batteries and DC-DC converters were adopted in Toyota's Prius, the world's first mass-produced hybrid vehicle. In 1998, our intake-exhaust continuously variable valve timing mechanism and other products were adopted in Toyota's Altessa.

Continuously Variable Valve Timing Mechanism



DENSO Products Used in Toyota Prius's Control System

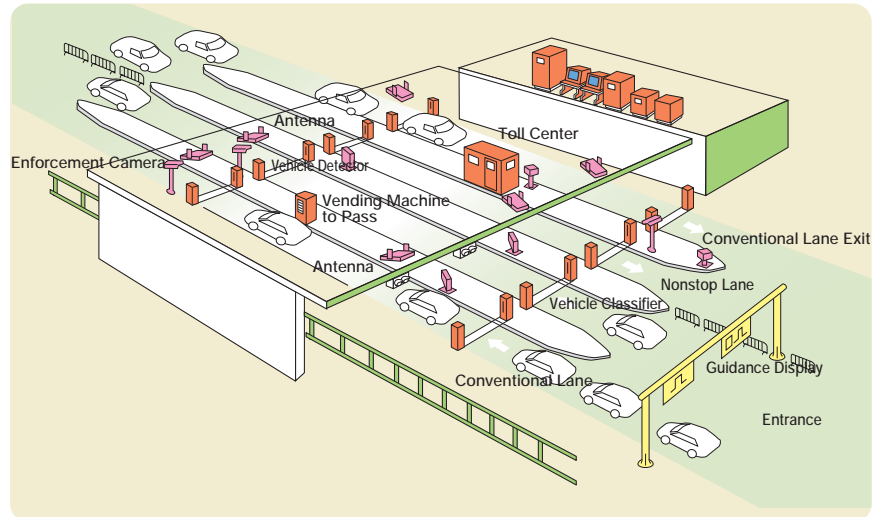


Improving Fuel Efficiency with ITS

Considering traffic flow as a whole, DENSO believes that promoting the advancement of ITS will help alleviate traffic congestion and smooth traffic flow, thereby improving fuel efficiency overall.

For the ITS field, DENSO is developing and marketing such products as the Electronic Toll Collection System (ETC) and navigation systems that support the Vehicle Information and Communication System (VICS) and the Advanced Vehicle Operation System (AVOS).

ETC System



(Based on images created by Japan Highway Public Corporation.)