

# General Description

The Easy Key PASE system consists of a CID (Customer Identification Device), an ECU (Electronic Control Unit), and 4 passive ferrite antennas. The ECU transmits information to the CID through a 125kHz ASK carrier and the CID transmits information to the ECU through a 315MHz ASK carrier. The passive antennas are used to transmit the 125kHz.

The system allows for PASE (Passive Start and Entry) and well as RKE (Remote Keyless Entry). Passive entry is initiated by lifting the door handle. The ECU will then generate a 125kHz field, which the CID will read and respond back to the ECU via 315MHz. The keypad on the CID can be used for RKE, where pushing a button transmits a command at 315MHz. Passive start is initiated by pressing the start button inside the vehicle. As with passive entry, the ECU generates a 125kHz signal and the CID responds back with a 315MHz signal.

A backup for instances where RF is not possible is through limphome mode with the CID. In this case, the CID is placed near a designated ferrite antenna and the ECU generates a 125kHz field. The CID will respond back by dampening the field through absorption modulation.