## General Description

The Easy Key Gen 2 PASE system consists of a CID (Customer Identification Device), an ECU (Electronic Control Unit), 5 passive ferrite antennas, and one Active Antenna. The ECU transmits information to the CID through a 125kHz ASK carrier and the CID transmits information to the ECU through an RF ASK carrier (315MHz for NA). 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 an RF response (315MHz for NA) The keypad on the CID can be used for RKE, where pushing a button transmits an RF command (315MHz for NA). 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 an RF signal (315MHz for NA). In addition to PASE and RKE, the system will also receive TPM signals.
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 Active Antenna which generates a 125kHz field. The CID will respond back by dampening the field through absorption modulation. The ECU provides power, ground, and data lines to the Active Antenna.

## Power Supply

The ECU is powered by the vehicle battery.