

April 16, 2012

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RE: Certification for Toyota MY08 150L 315MHz Inkey Transmitter Class II Recertification

Model #: 217653-105 and 217653-106  
FCC ID: GQ4-29T  
Canada IC: 1470A-10T

### **Description of Circuit Operation**

The Toyota IN-KEY transmitter is a Microchip PIC12F635 microcontroller based transmitter that utilizes a RF SAW resonator circuit which provides a carrier frequency of 315MHz. The Microchip PIC12F635 (U1) is used for encoding and control. The design uses special Toyota transmitter tooling for the top and bottom plastic housing, and seal. The PCB utilizes all lead-free SMD components located on the both sides of the PCB. The PCB utilizes 0.031" FR4 material and silver immersion over 2 oz. copper plating. The transmitter operates at 315 MHz using a VPWM bit format.