IPS GROUP
Parking & Telecommunications

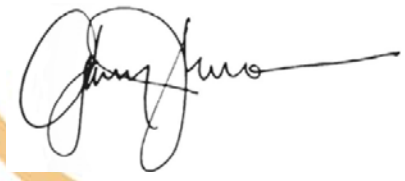
05/15/2015

The dual antenna board under test that has both our 13.56MHz RFID and 400MHz antennas co-habituating our 400MHz antenna functions as a receive only for the Texas Instrument CC1101RGPR 1.8V - 3.6V IN, RF Tranceiver when paired with our cash collection smart canister for coins which also houses the same transceiver function as a transmitter when coins are dropped through the mete's coin slot and then stored in the smart canister this is use so the city knows exactly what cash each meter has in it as it is real time monitored.

The dual board antenna communication antenna receives the coin packet date that is being sent from the coin collection canister. Packet data is sent from the coin canister only when a customer is paying for parking using cash.

The packed data is very small amounts of data and a very narrow pulse for a very short duration. To measure this we were required to supply three coin canisters each placed or forced to operate in CW mode and each broadcasting at different channel frequencies low, min, high (410MHz, 420MHz and 430MHz) respectively.

But our normal operation is FSK and the coin canister only sends packet data when coins are dropped into the canister which is the transmit side of the communication path and at the other end is our dual antenna board receive only antenna.



Sincerely,

Gary J. Thomas

Sr. RF Design Engineer