



1055 Tierra Del Rey
Chula Vista, CA91910

Operational Description

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DATE: 9/21/12

REVISIONS

REV	DESCRIPTION	CHECK	ENG	DATE
1.0	Release		Leon Gateno	9/21/12

REMARKS:



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1 INTRODUCTION

This document will describe the operation of the 2 Way LC remote. The remote operates mainly as a RF remote.

The document is divided into the following sections:

- a) Block Diagram
- b) Modulation
- c) Timing
- d) Networking
- e) Frequency of operation
- f) Output Power
- g) Antenna

Abbreviations

RF IC Radio frequency integrated circuit.

IC Integrated Circuit.

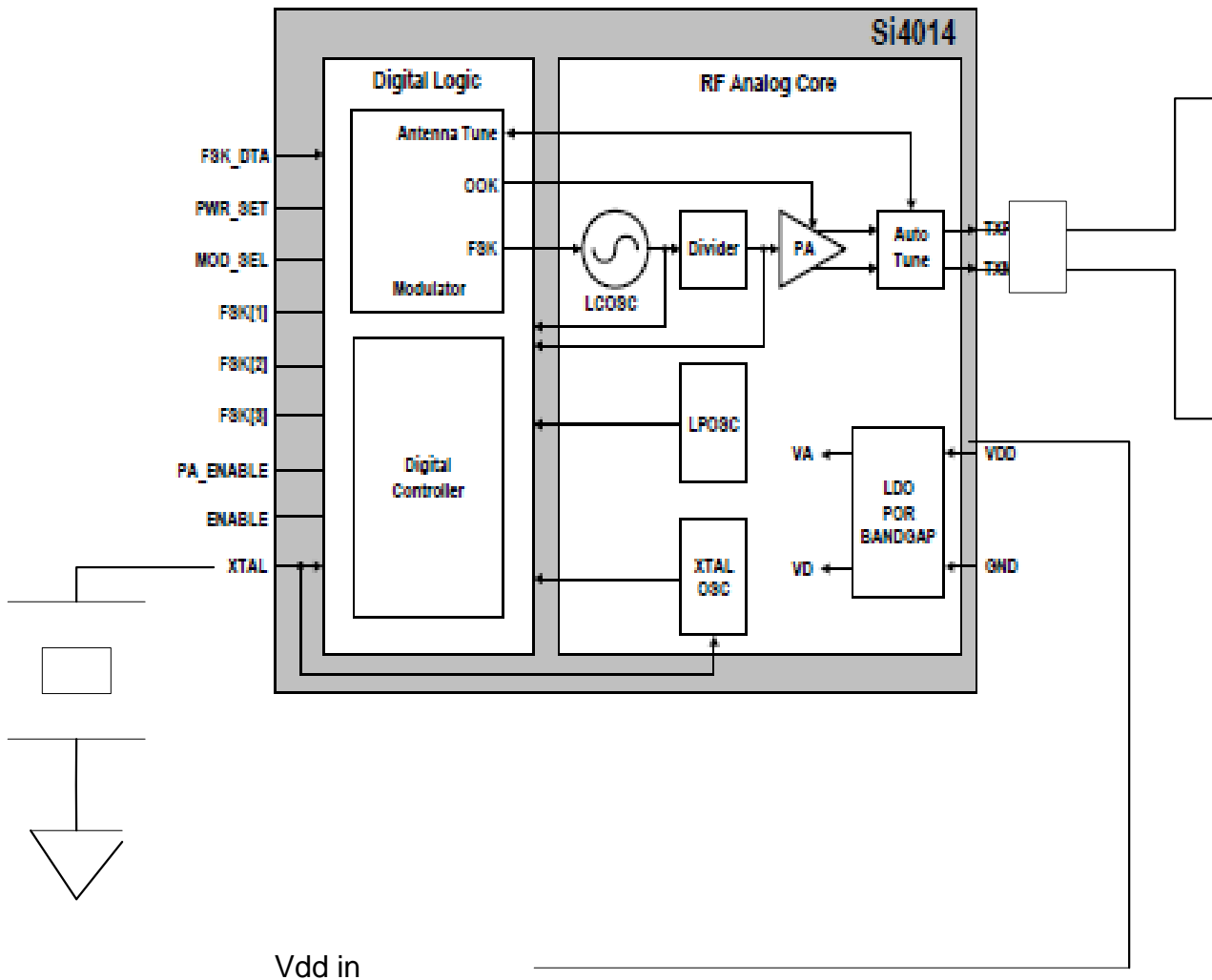
TX transmitter

RCVR receiver.



2 BLOCK DIAGRAM

The following is a Block Diagram for the remote:



The block diagram has two sections the BB and the RF.

The BB consists of a small ASIC that is used to set up registers and control words. These are used for timing purposes. The BB shares the same reference as the RF, which is a 10MHz crystal.

The RF section consists of the transmitter in the RFIC, the exception of the 10 MHz crystal, internal matching networks, external filter and antenna.

User does not have access to adjusting the frequency, power levels. This is done at the factory.



3 MODULATION

There is two modulation schemes used in these system is OOK, the other is Infrared.

4 FREQUENCY OF OPERATION

The frequency of operation is from 369.5, 375.3, 388.3, 394.3 MHz. It will operate at only one frequency at a time. It will never operate on two frequencies.

5 TIMING

The signal is a bursting signal. The duty cycle is 38 ms in 100 ms.

6 NETWORKING

For this specific application there is no networking. The unit will communicate with a specific setup box.

7 OUTPUT POWER

The max output power is 0 dBm.

8 ANTENNA

The antenna is a small loop antenna. The pattern of the antenna is omni directional / donut shape. This antenna is a trace antenna and cannot be removed. It does not have an RF connector.