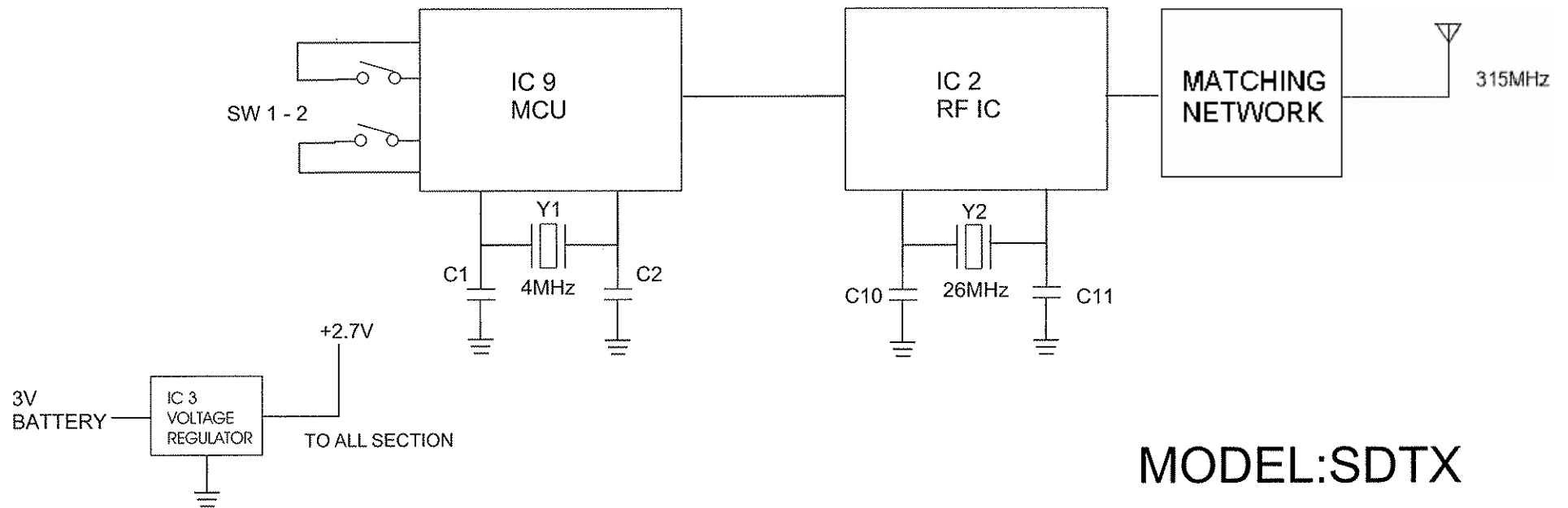


PROPRIETARY INFORMATION



MODEL:SDTX

CPL CAPITAL PROSPECT LTD

MODEL : SDTX
BLOCK DIAGRAM
DATE : 2 AUG, 2007
PAGE : 1 OF 1

Pin #	Pin name	Pin type	Description
1	SCLK	Digital Input	Serial configuration interface, clock input
2	SO (GDO1)	Digital Output	Serial configuration interface, data output. Optional general output pin when CSn is high
3	DVDD	Power (Digital)	1.8V-3.6V digital power supply for digital I/Os and for the digital core voltage regulator
4	DCOUP	Power (Digital)	1.6V-2.0V digital power supply output for decoupling. NOTE: This pin is intended for use with the CC1150 only. It can not be used to provide supply voltage to other devices.
5	XOSC_Q1	Analog I/O	Crystal oscillator pin 1, or external clock input
6	AVDD	Power (Analog)	1.8V-3.6V analog power supply connection
7	XOSC_Q2	Analog I/O	Crystal oscillator pin 2
8	GDO0 (ATEST)	Digital I/O	Digital output pin for general use: <ul style="list-style-type: none"> • Test signals • FIFO status signals • Clock output, down-divided from XOSC • Serial input TX data Also used as analog test I/O for prototype/production testing
9	CSn	Digital Input	Serial configuration interface, chip select
10	RF_P	RF I/O	Positive RF output signal from PA
11	RF_N	RF I/O	Negative RF output signal from PA
12	AVDD	Power (Analog)	1.8V-3.6V analog power supply connection
13	AVDD	Power (Analog)	1.8V-3.6V analog power supply connection
14	RBIAS	Analog I/O	External bias resistor for reference current
15	DGUARD	Power (Digital)	Power supply connection for digital noise isolation
16	SI	Digital Input	Serial configuration interface, data input

Table 11: Pinout overview

13 Circuit Description

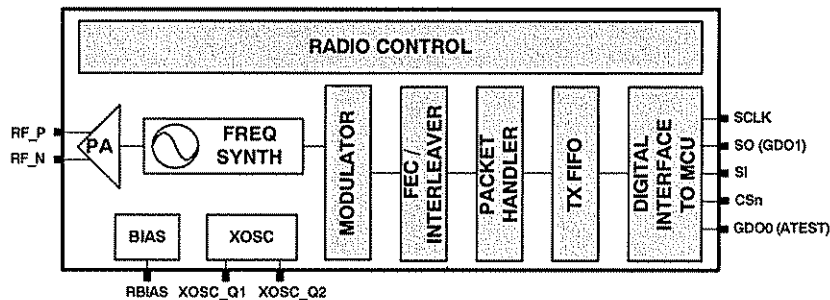


Figure 2: **CC1150** Simplified Block Diagram

A simplified block diagram of **CC1150** is shown in Figure 2.

The **CC1150** transmitter is based on direct synthesis of the RF frequency. The frequency

synthesizer includes a completely on-chip LC VCO.

A crystal is to be connected to XOSC_Q1 and XOSC_Q2. The crystal oscillator generates the