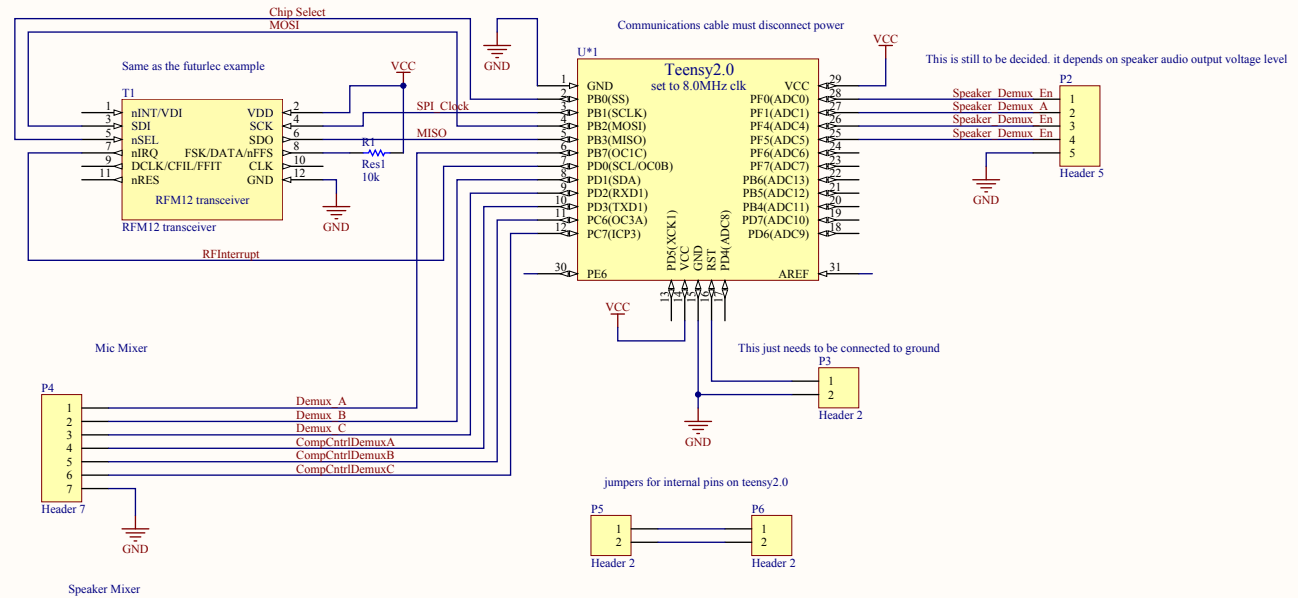
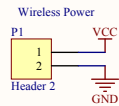


This Board is to communicate with other boards distributed throughout the house.

This board will also control the speaker mixer and mic mixer
Teensy 2.0 needs to be configured to run at 8MHz, this is the min PLL frequency for the RFM12 chip
Frequencies of the RFM12(using 8Mhz)

	Frequency	Antenna length(half/quarter)
315 MHz band, 2.5KHz step	248.19MHz	22.6/11.3
433 MHz band, 2.5KHz step	344.19MHz	16.31/8.158
868 MHz band, 5KHz step	703.61MHz	7.98/3.99
915MHz band, 7.5KHz step	720.57MHz	7.79/3.89

corner to corner of PCB is 8.48 in
perhaps it is best to use whip antenna it is said to reach +30M indoors with walls



Engineer: Levi Balling	Title: Wireless Communication Controller	U of U Computer Engineering	Smart Home
Drawn By: Levi Balling	Size: B Number: 1 Revision: 1 Project: Smart Home	50 S. Central Campus Dr.	
Checked By: *	Date: 8/17/2012	Rm. 3280 MEB	
Date: 8/17/2012	File: WirelessCommunications SchDoc	Salt Lake City, UT	
Time: 11:43:30 PM	Website: www.eng.utah.edu/~lbaling/SmartHome		
Sheet 11 of 13			

Wireless Communication Controller

Creation Date:	8/17/2012	11:43:33 PM
Print Date:	17-Aug-12	11:43:36 PM

Approved		Notes