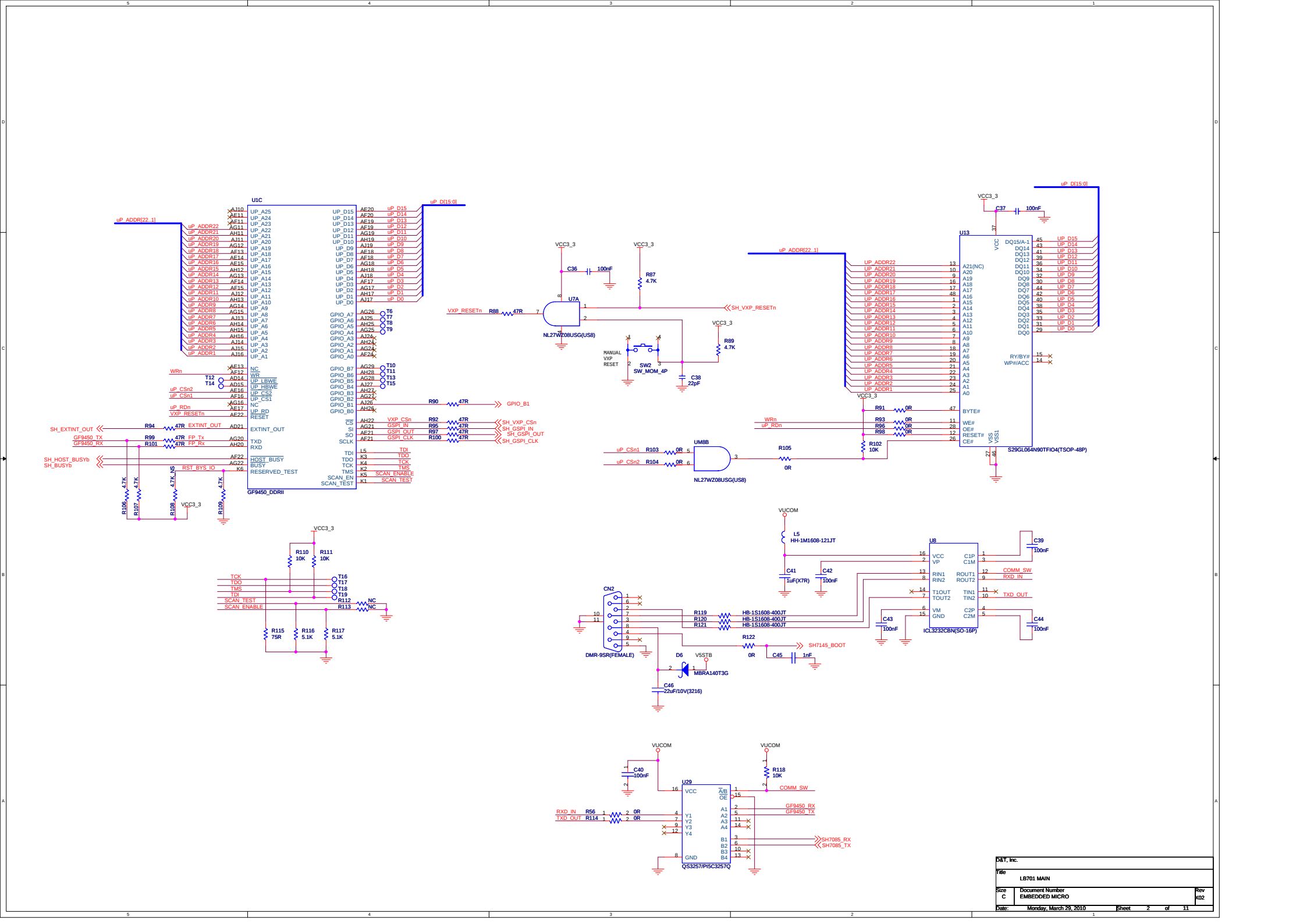


MODEL : LB701 MAIN BOARD

Revision : X02

REVISION	DATE	HISTORY
X01	2010/01/20	Initiative
X02	2010/03/29	1) Add serial port switch in order to use single wire for both of GF9452 and MCU

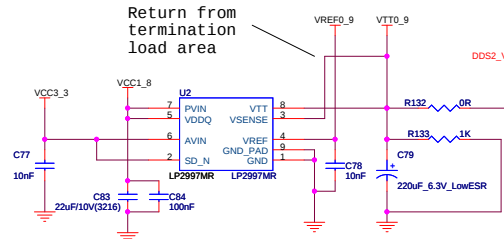
APPROVAL		
Design	Manager	Director



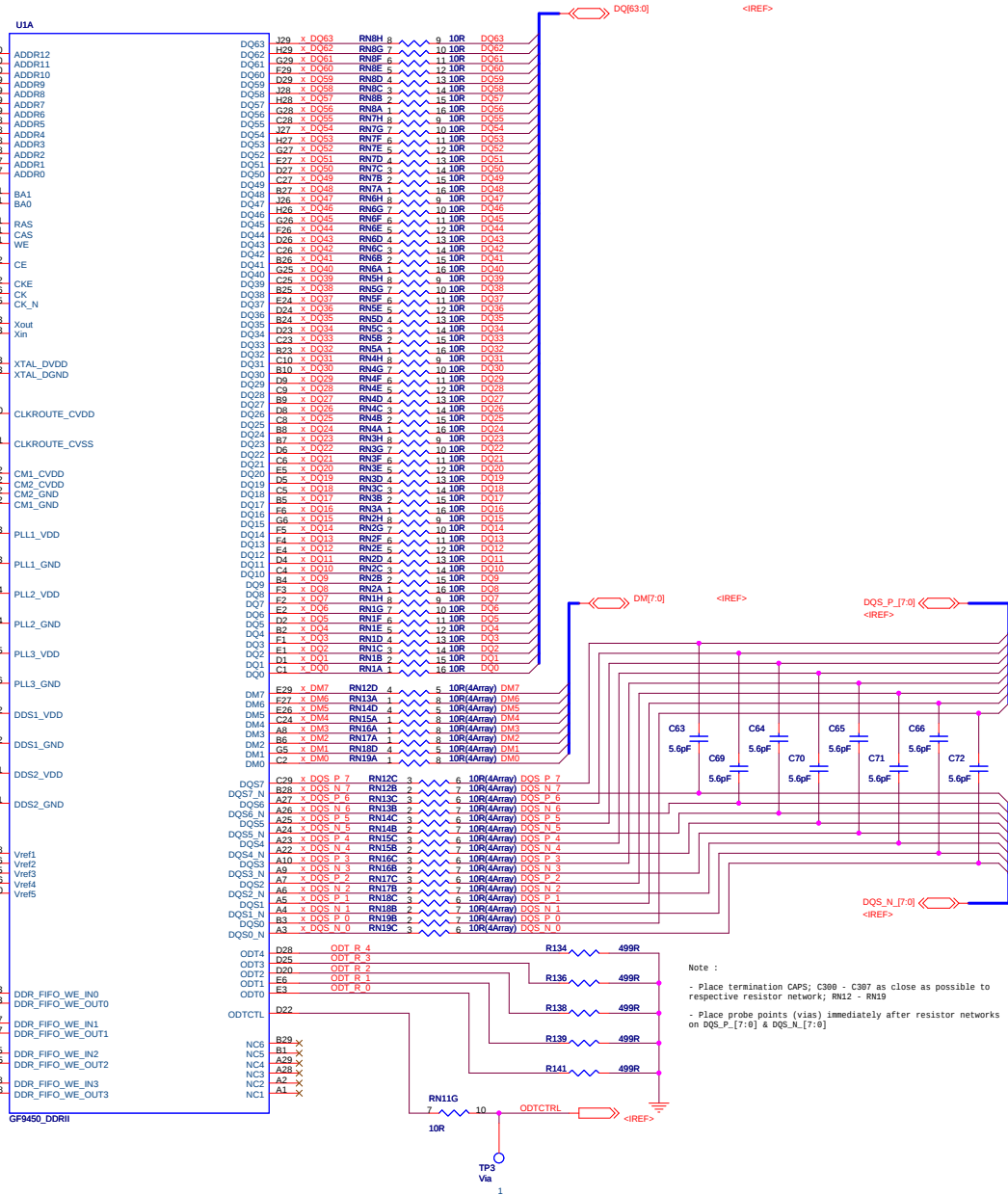
☒ Crystal
☐ Oscillator

Optional DC
feedback
resistor

Return from
termination
load area

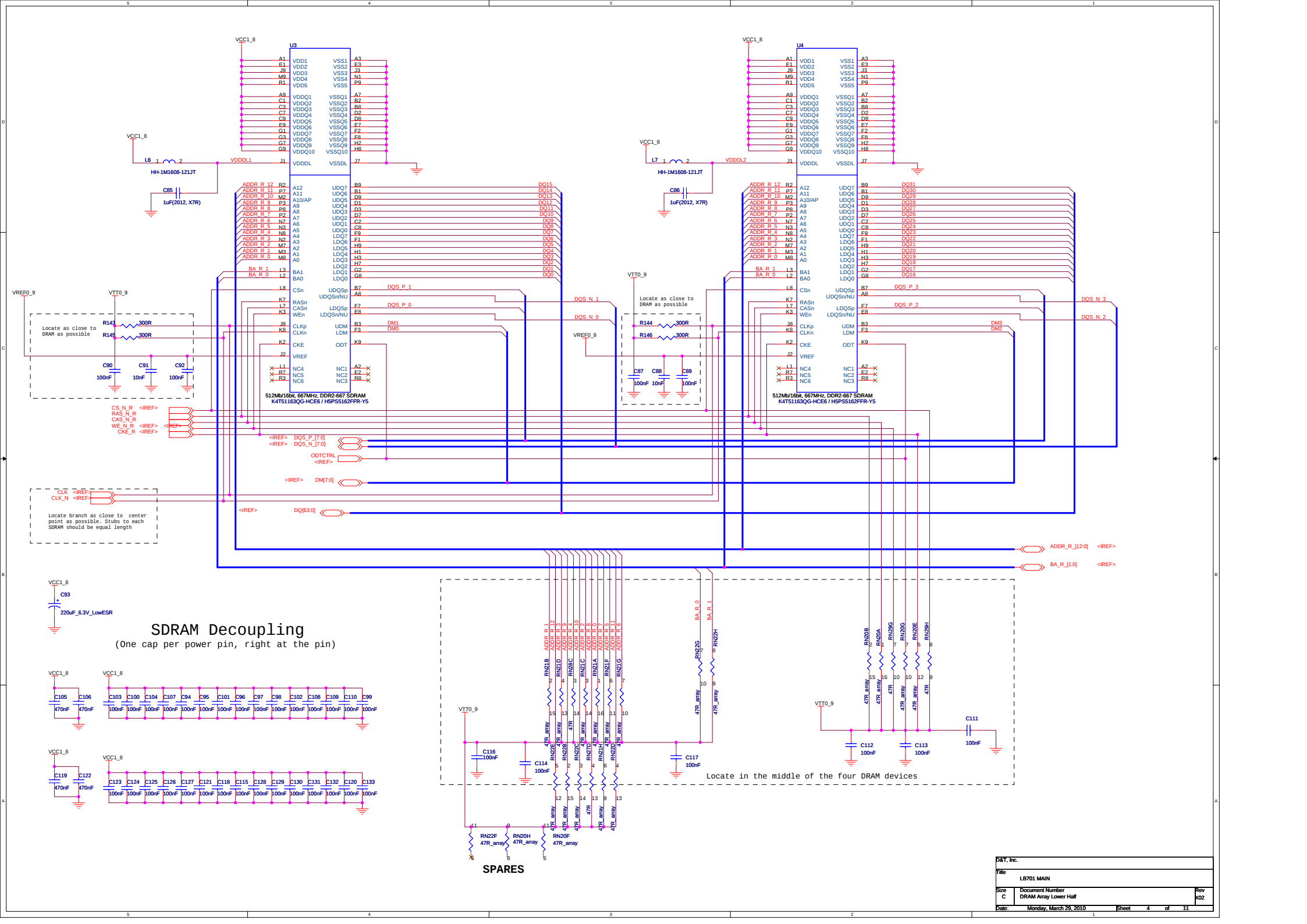


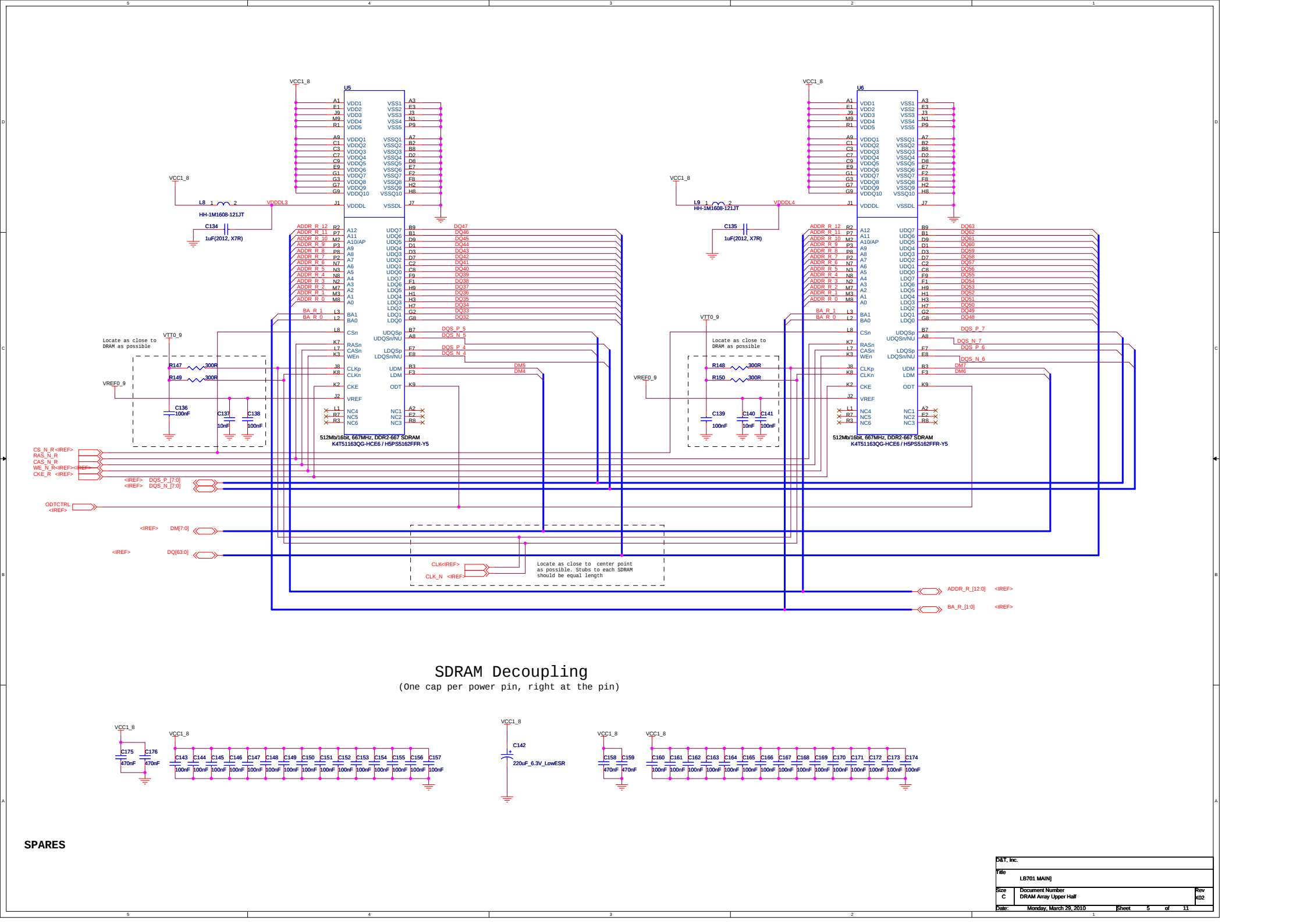
The diagram illustrates the timing requirements for a DDR4 read data path. It shows two main signal paths: one for the clock (CLK) and one for the data strobe (DQS). The CLK path is represented by a blue line with a delay of R135 and a setup time of R137. The DQS path is represented by a blue line with a delay of R136 and a setup time of R137. The data path is represented by a blue line with a delay of R140 and a setup time of R142. The diagram includes annotations for loop length matching and signal names (FIFO in0, FIFO out0, FIFO in1, FIFO out1, FIFO in2, FIFO out2, FIFO in3, FIFO out3). The signals are connected to the DDR4 read data path, with the data path being labeled as DQ[0:31]. The diagram also shows the relationship between the clock and data strobe signals, with the clock being the reference signal for the data strobe.

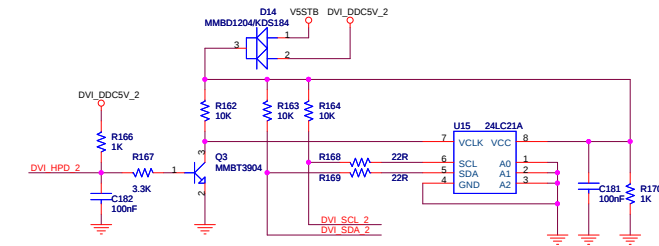
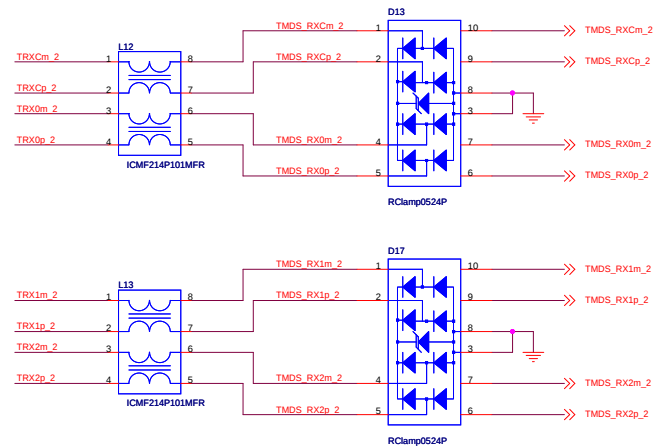
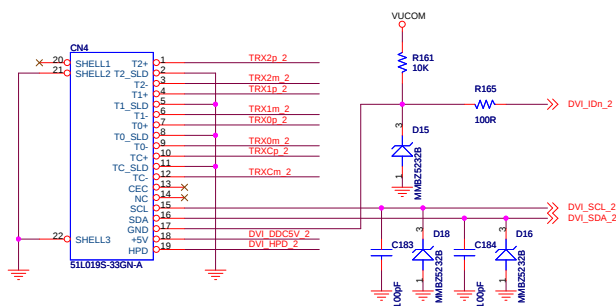
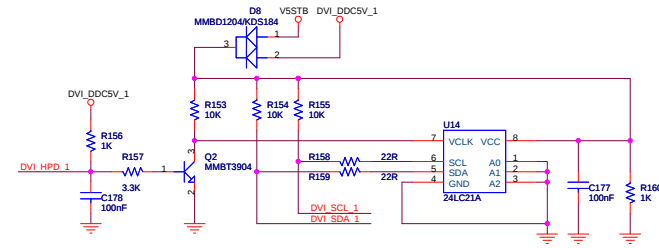
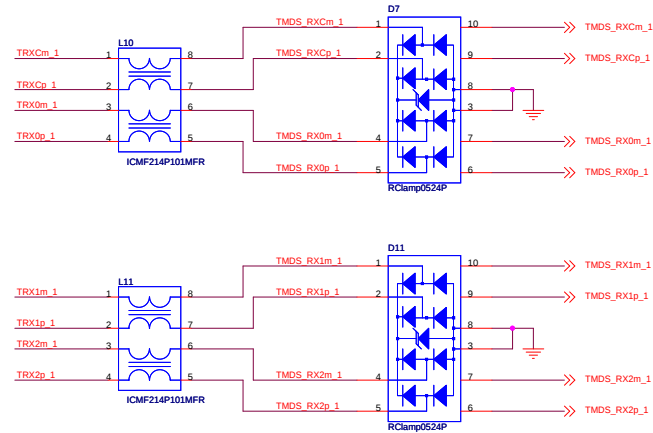
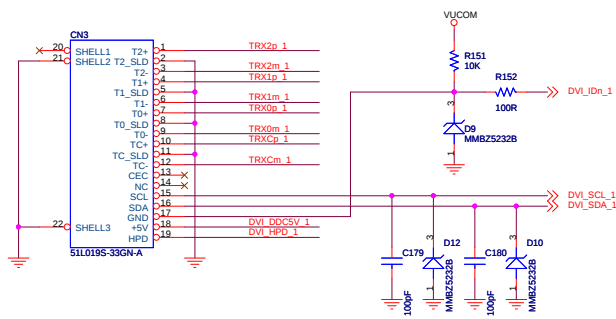


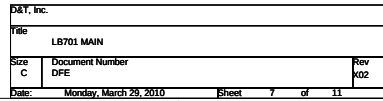
Note :

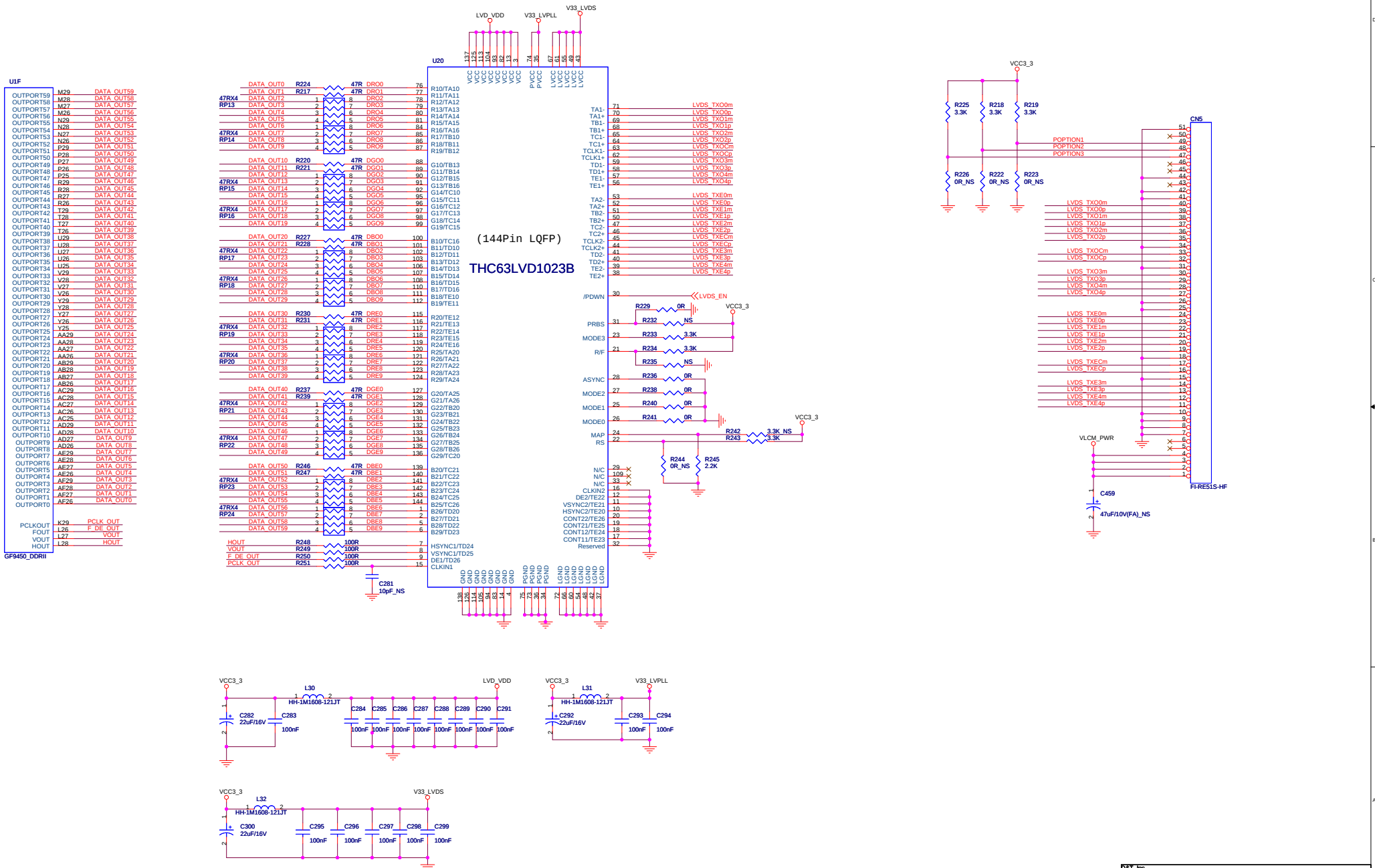
- Place termination CAPS; C300 - C307 as close as possible to respective resistor network; RN12 - RN19
- Place probe points (vias) immediately after resistor networks on DQS_P_[7:0] & DQS_N_[7:0]

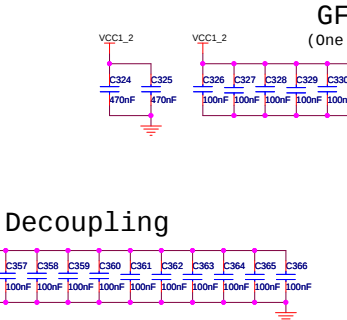
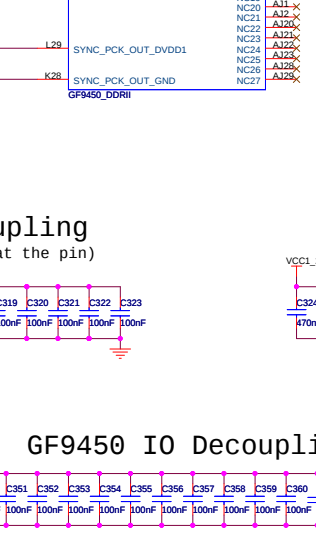






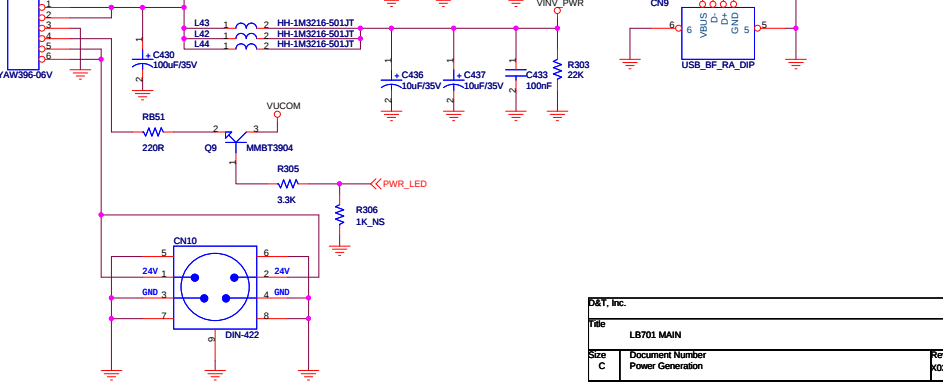
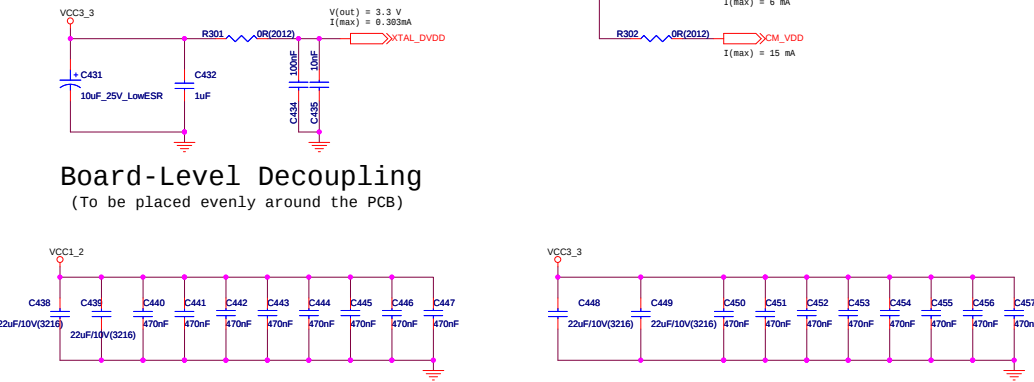
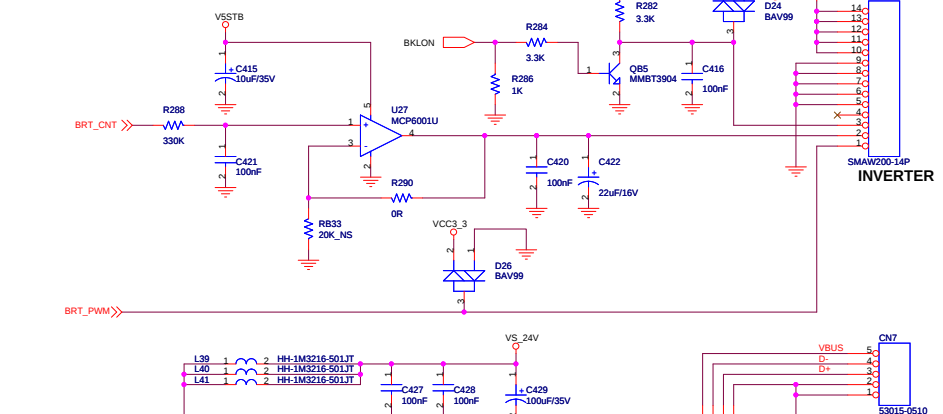
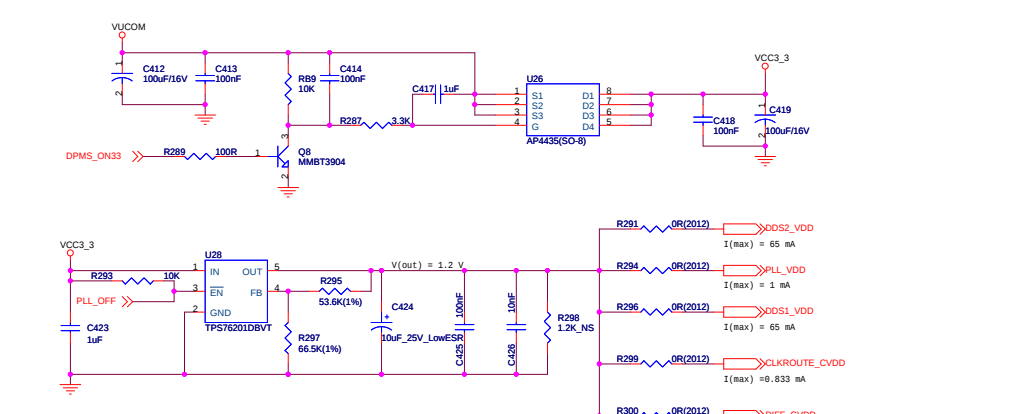
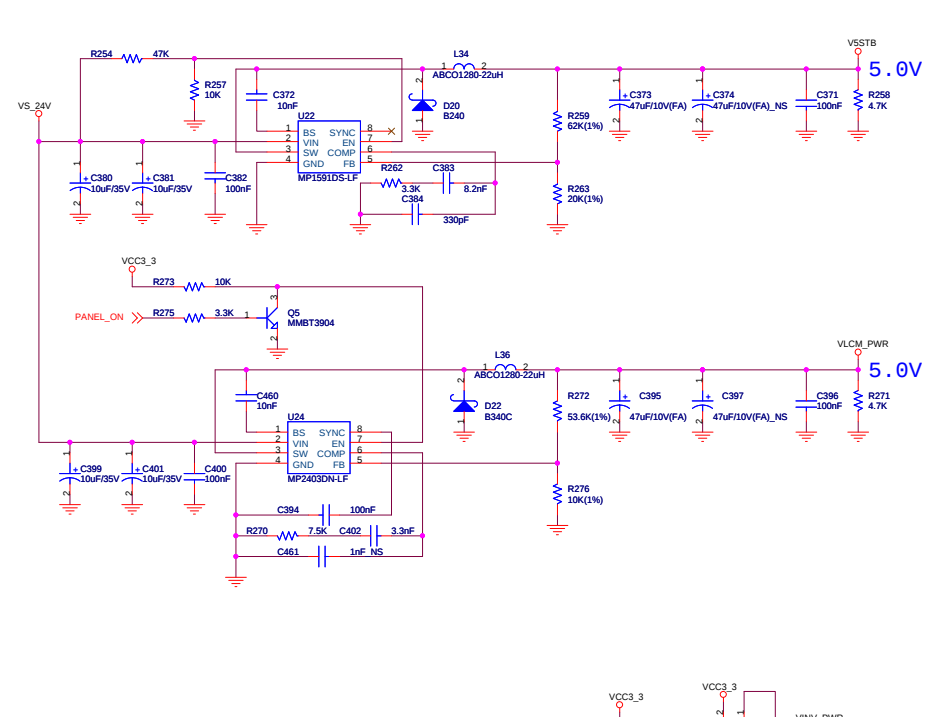
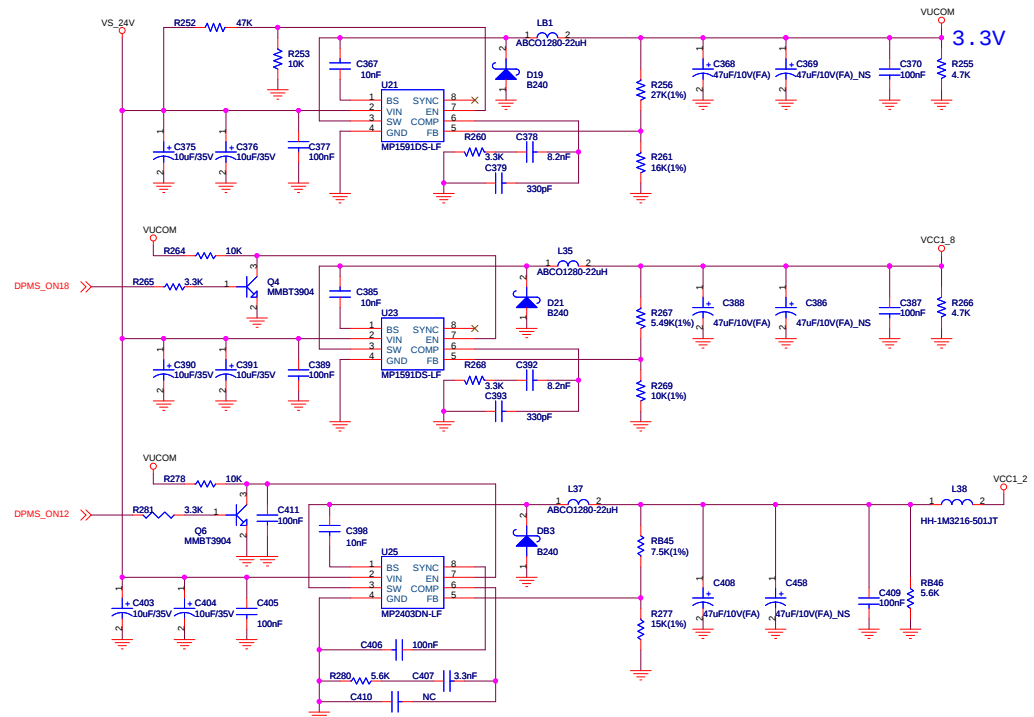






GF9450 CORE Decoupling

GF9450 IO Decoupling



Board-Level Decoupling

(To be placed evenly around the PCB)

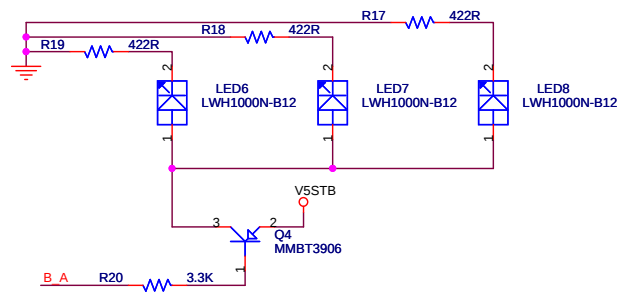
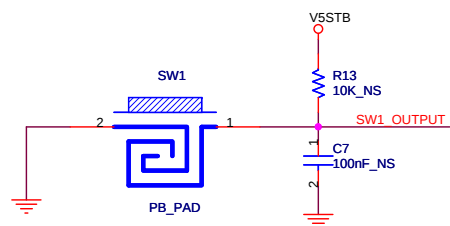
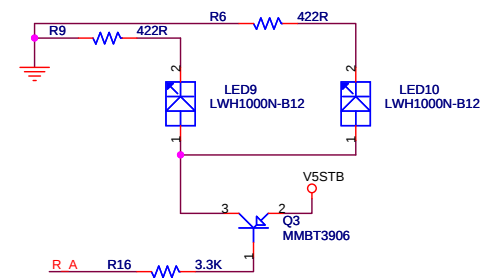
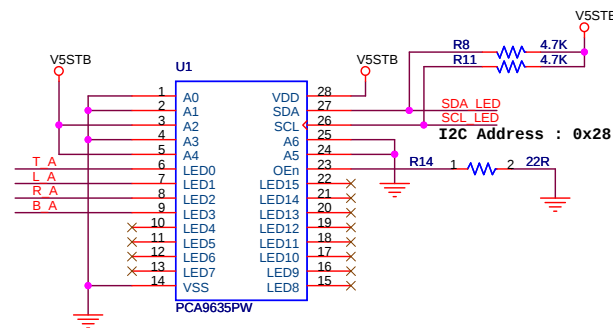
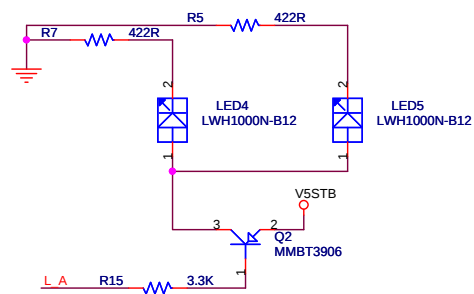
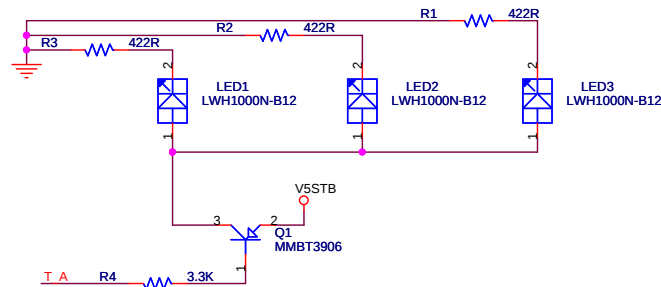
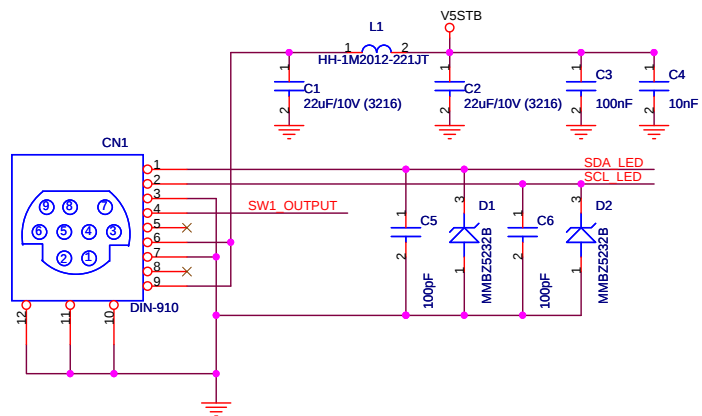
D&T, Inc.			
File	LB701 MAIN		
Size	Document Number	Rev	
C	Power Generation	K02	
Date:	Monday, March 29, 2010	Sheet	10 of 11

MODEL : Side Show Push Button

REVISION NO : X02

REV	DATE	HISTORY
X01	2009/12/11	1st Edition
X02	2010/01/19	CN1위치 변경, SW pattern 달팽이모양으로 변경

APPROVAL		
DESIGNER	PROJECT MANAGER	R&D DIRECTOR



D&T, Inc.		
Title		
Side Show Push Button		
Size	Document Number	Rev
B	Main	X02
Date:	Wednesday, February 03, 2010	Sheet 2 of 2