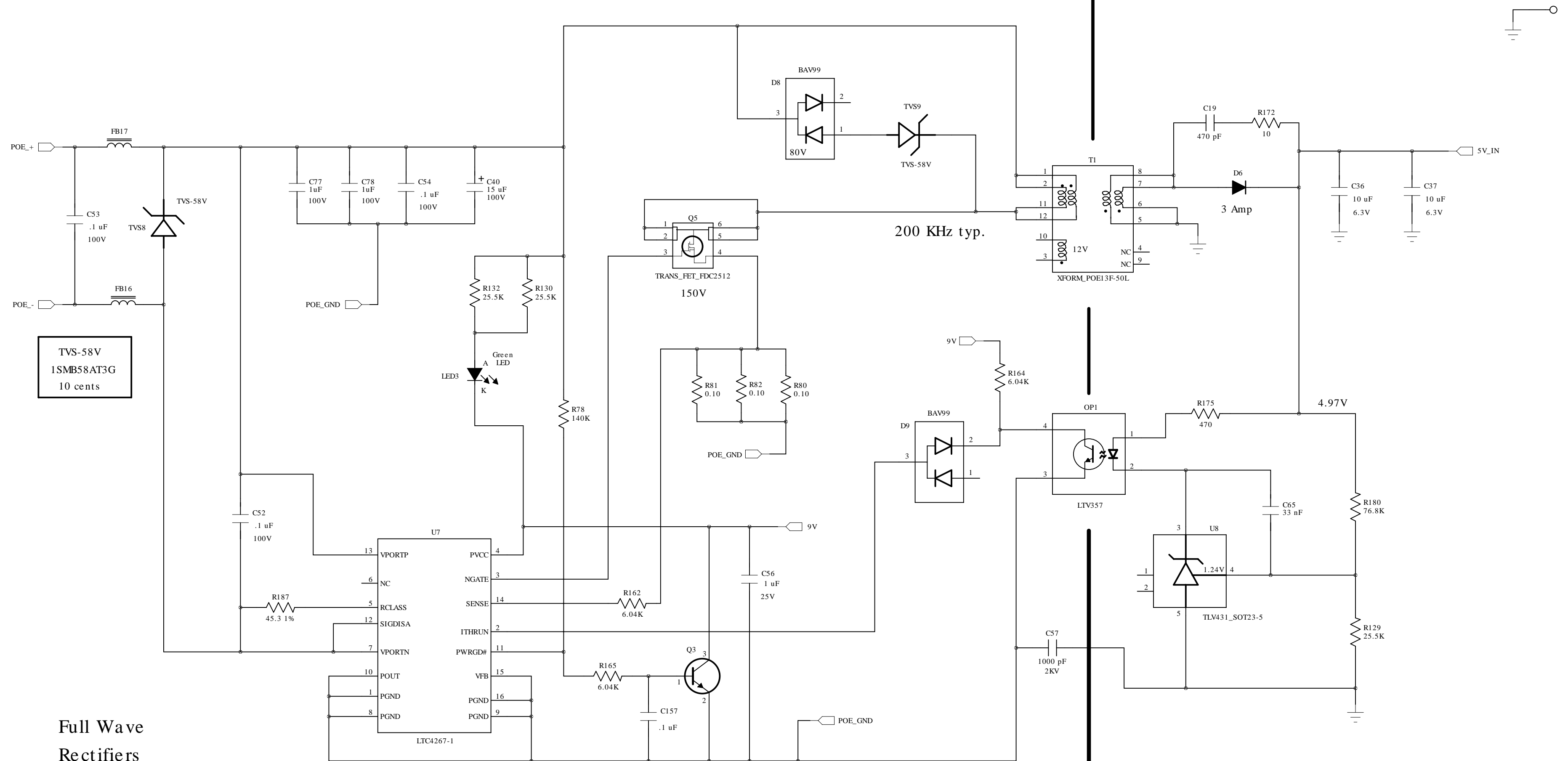
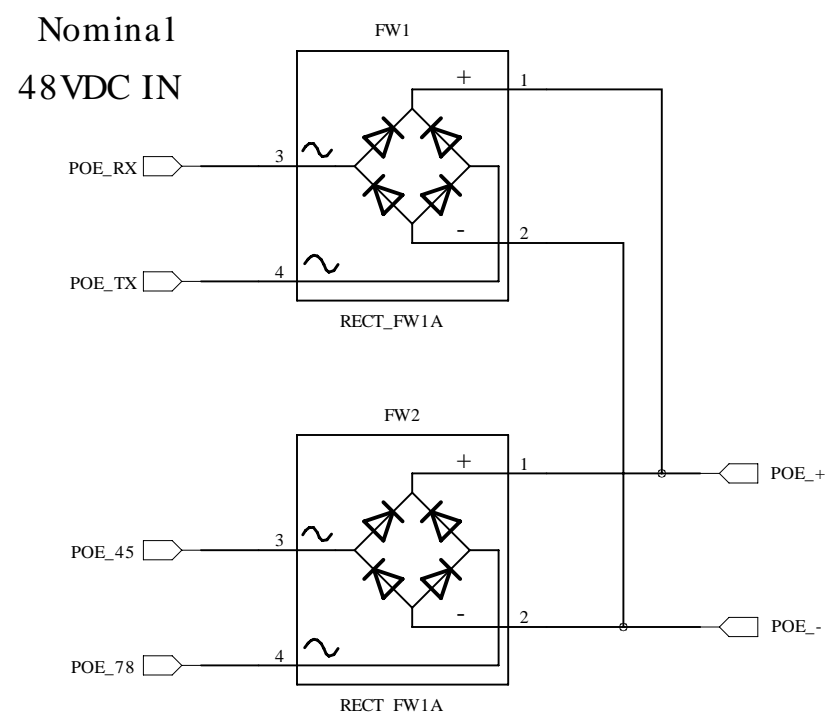


# POE Side 48V DC Input

# Reg. 5V Out



## Full Wave Rectifiers



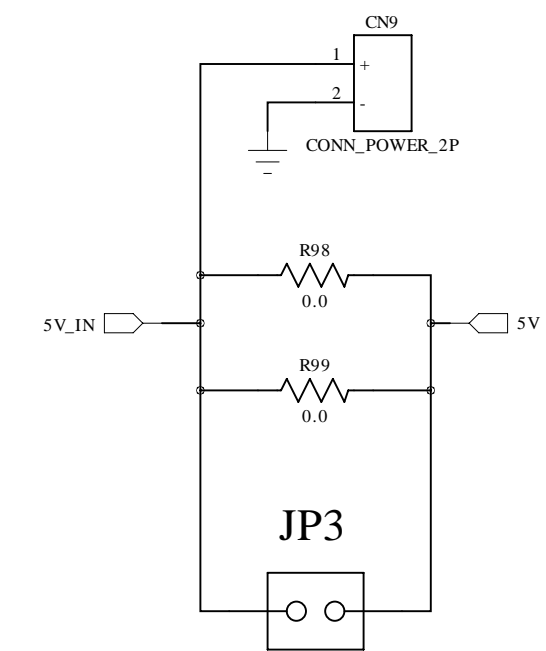
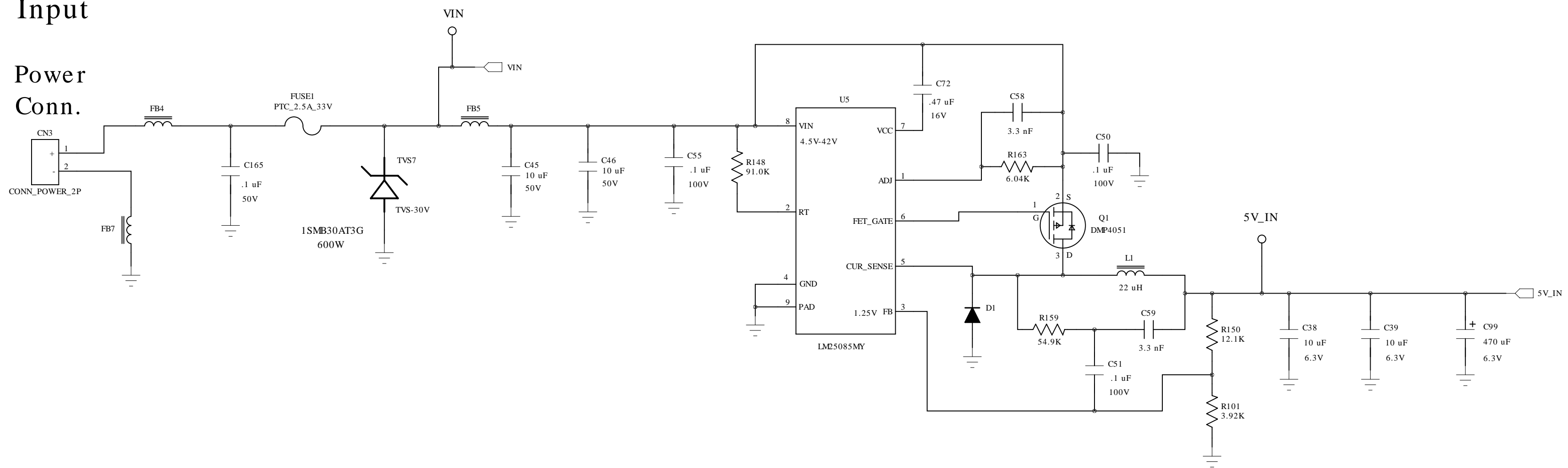
Technologic Systems		Date May 15, 2011	
Title: TS-8900 POE			
Rev: P1_B	Designer	Sheet 1 of 15	

# 5V Power Supply (3.0 Amps)

5V-30V

Input

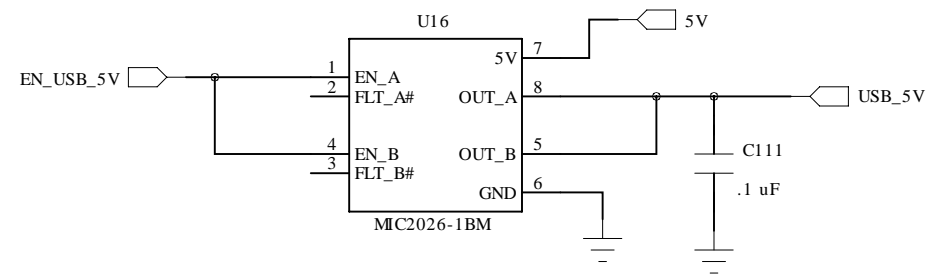
Power  
Conn.



Technologic Systems		Date May 15, 2011	
Title: TS-8900		5V Power, LCD 3.3V Power	
Rev: P1_B	Designer	Sheet 2 of 15	

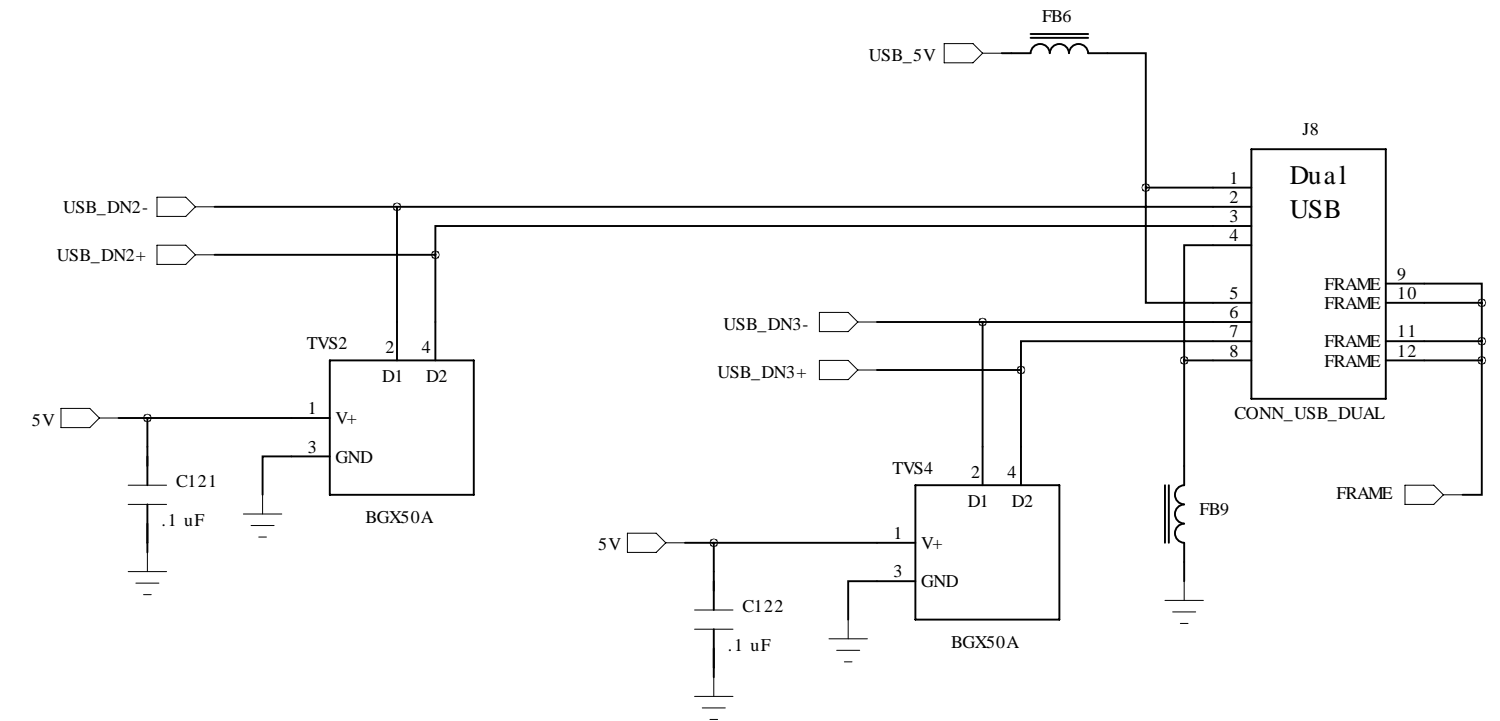
# USB Ports

## USB Power Switch

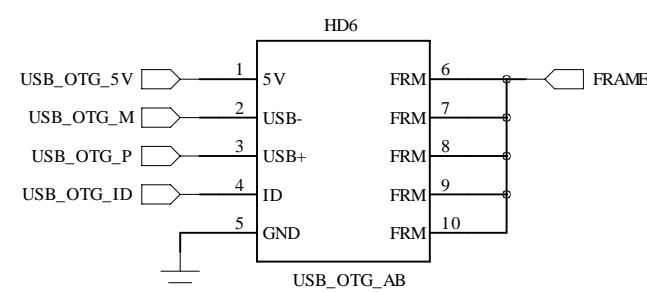


1400 mA typ. current limit

## Dual Host USB Ports



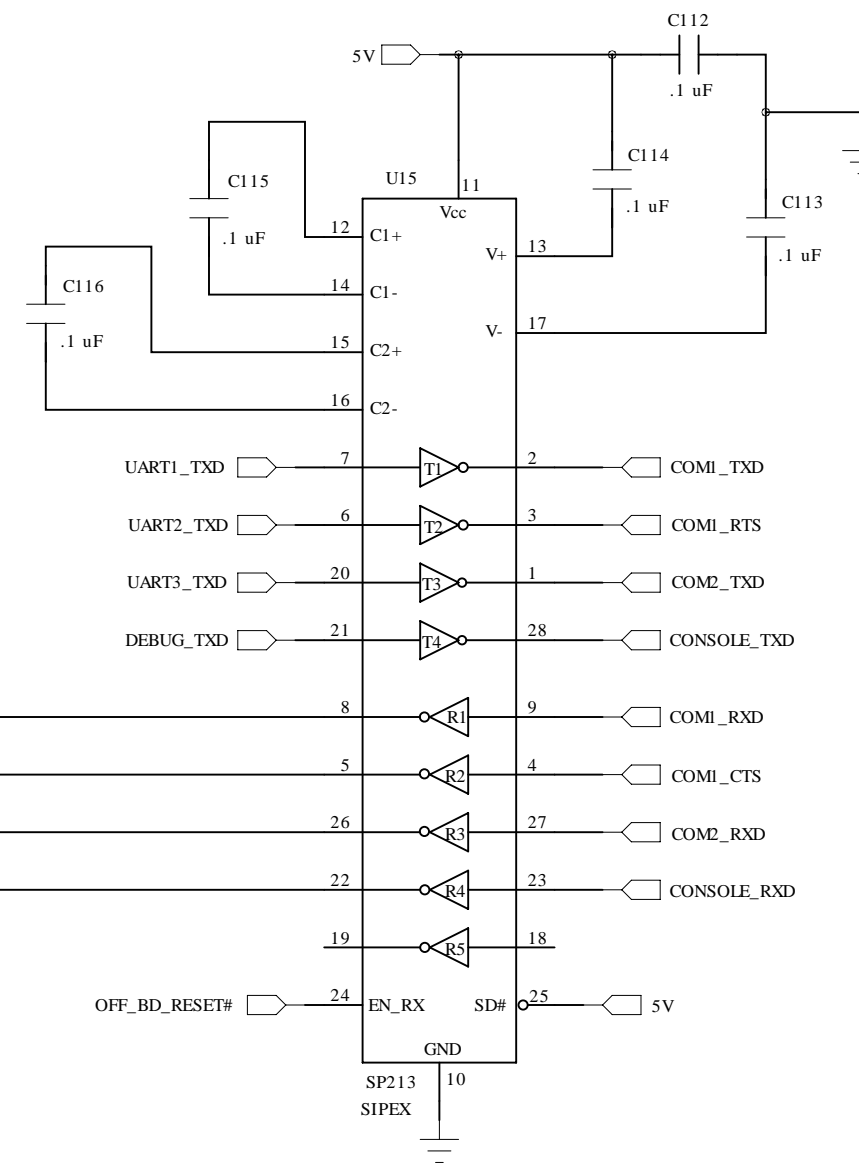
## USB OTG Port



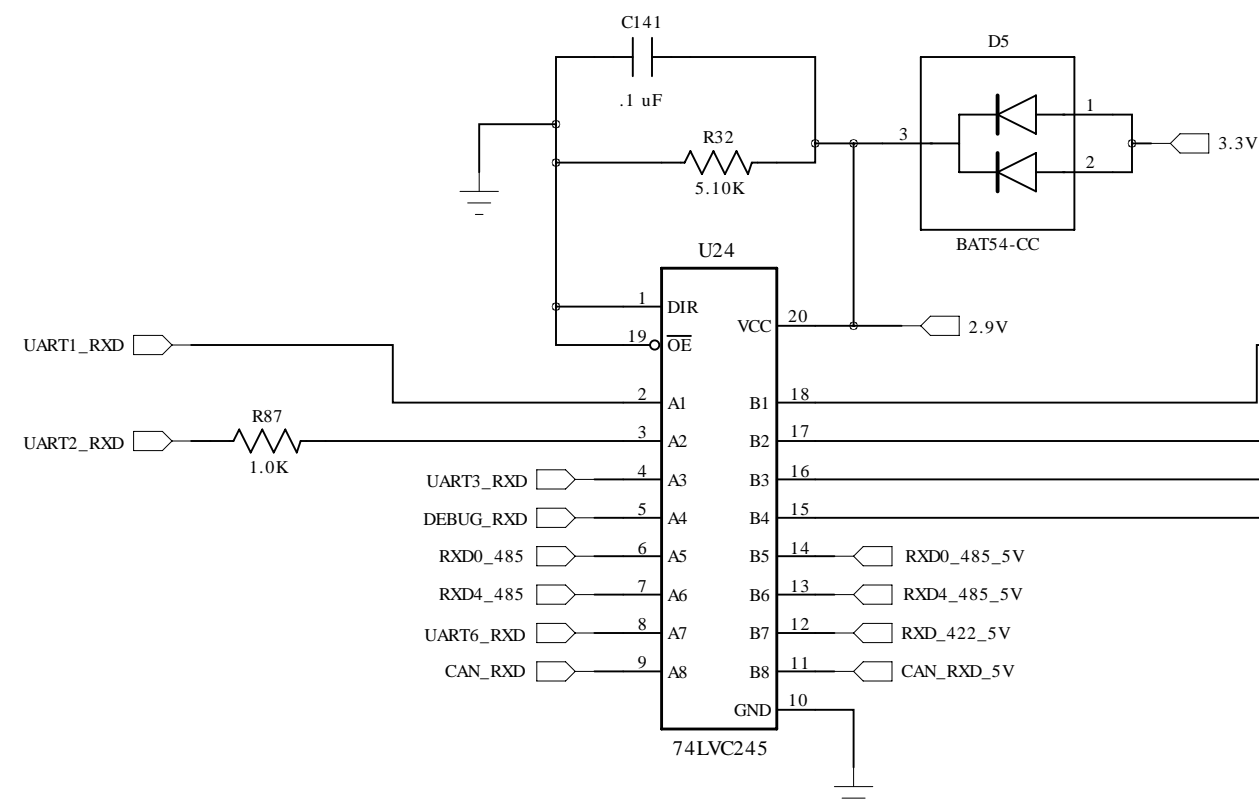
Not normally Populated

Technologic Systems	Date	May 15, 2011
Title: TS-8900	USB ports	
Rev: P1_B	Designer	Sheet 3 of 15

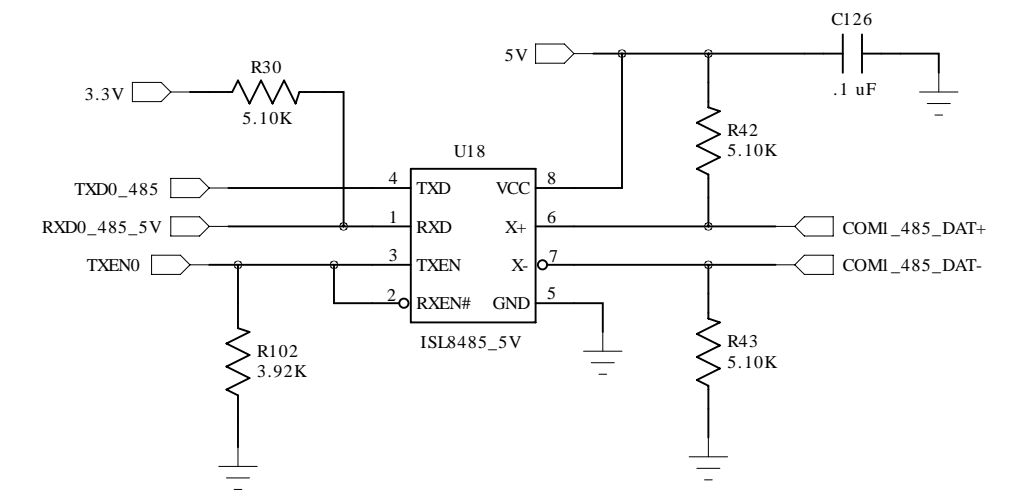
## RS-232 Transceiver



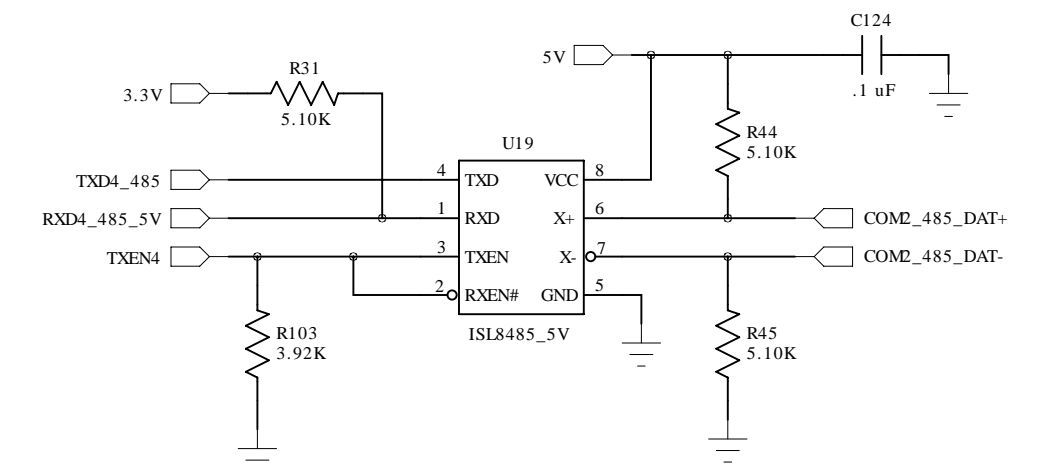
## 2.9V <-- 5V Level shifter



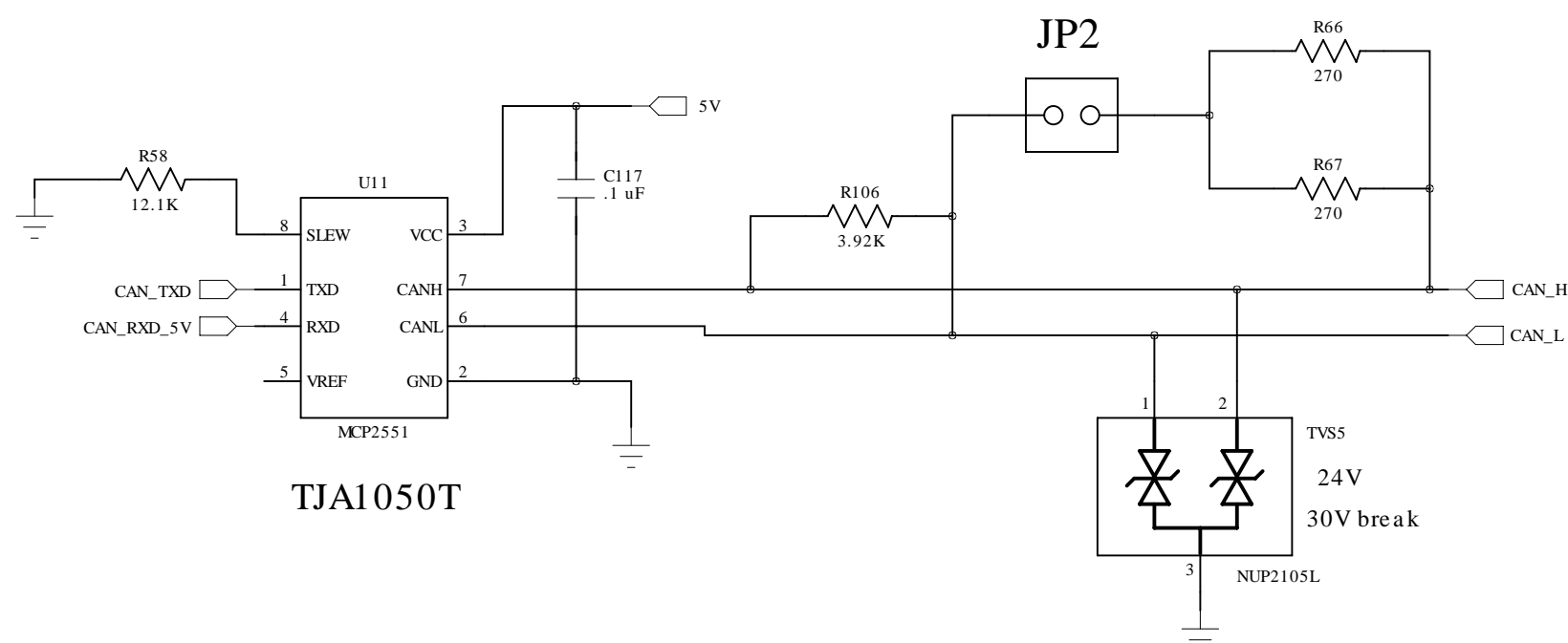
## COM1 RS-485 Driver



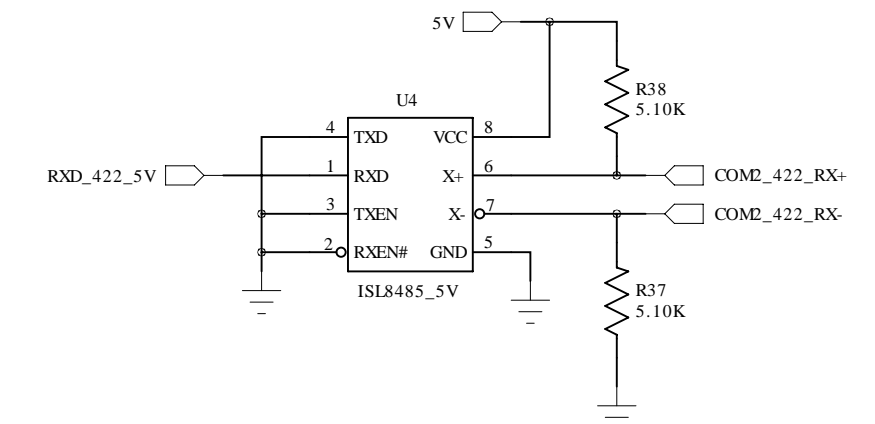
## COM2 RS-485 Driver



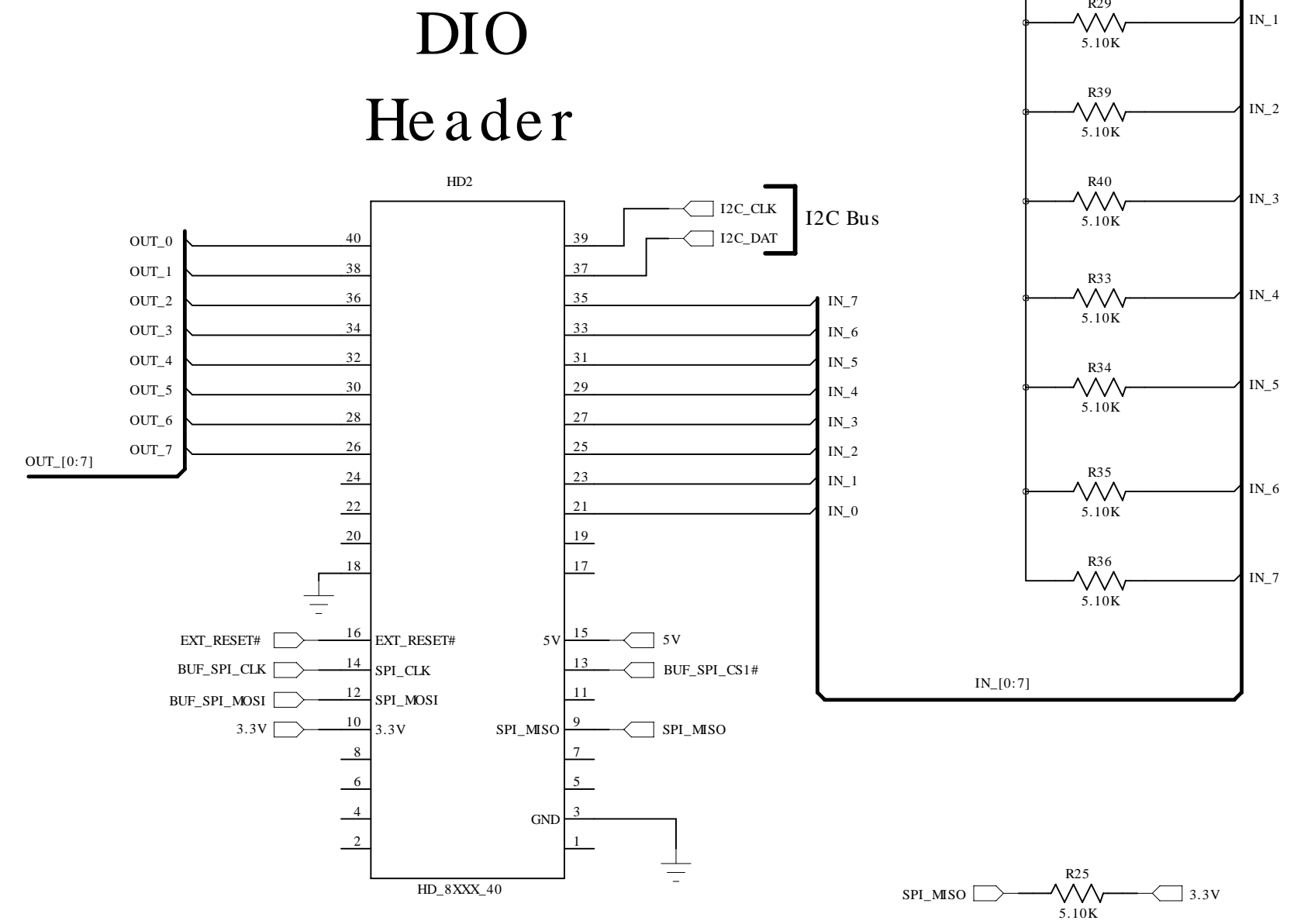
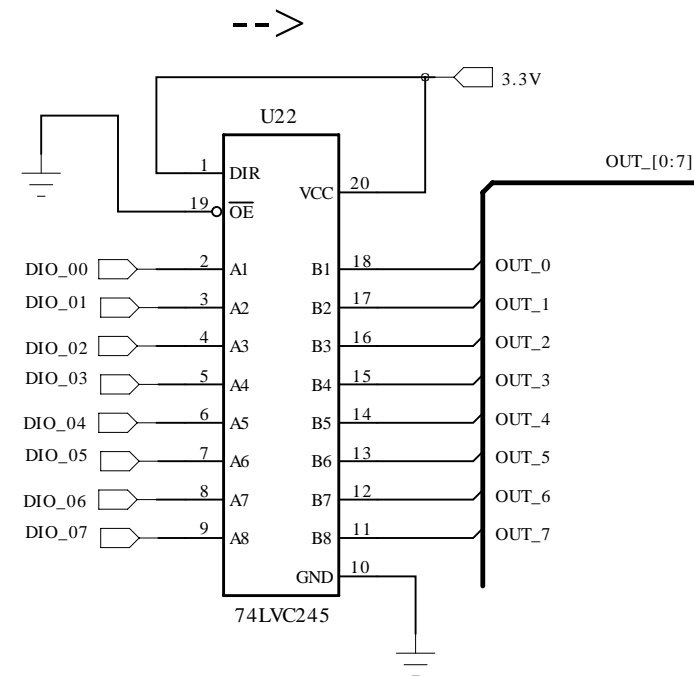
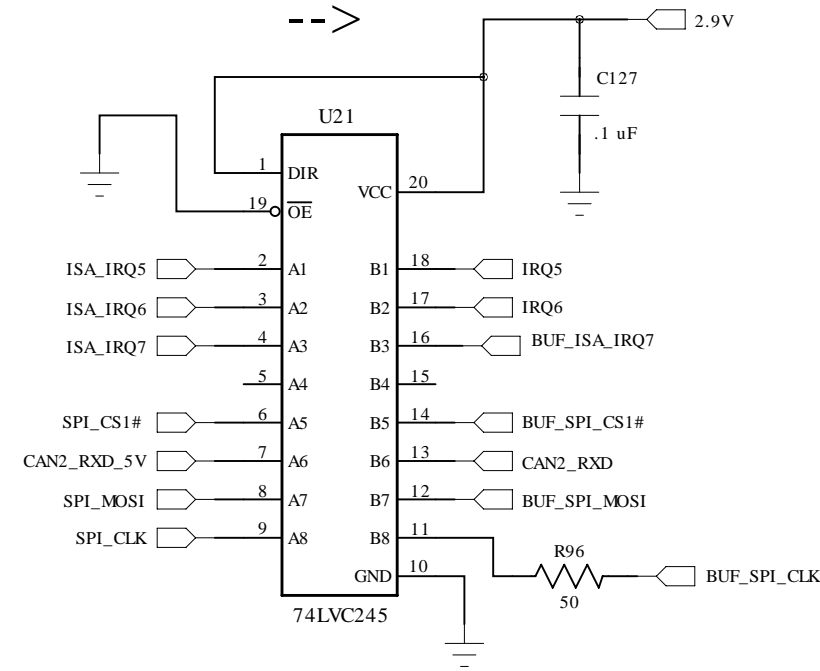
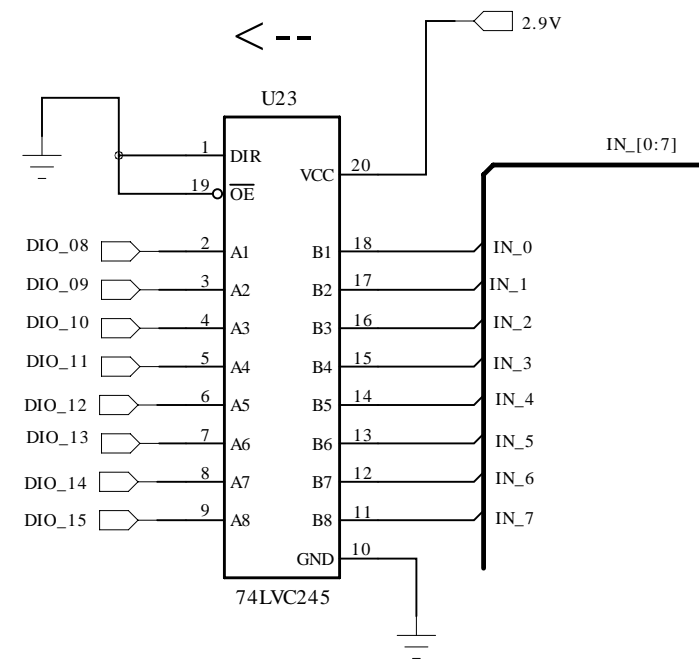
## CAN Transceiver



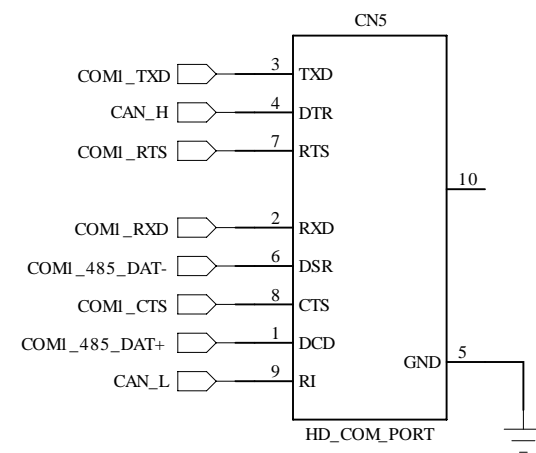
## COM2 RS-422 Receiver



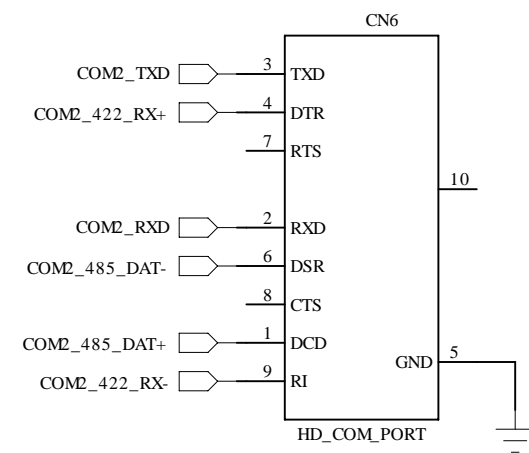
# DIO Port



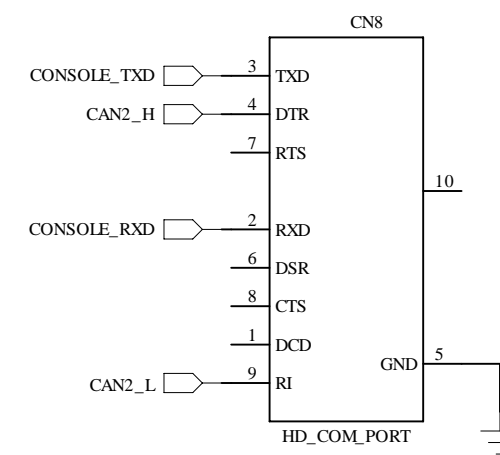
## COM1 Header



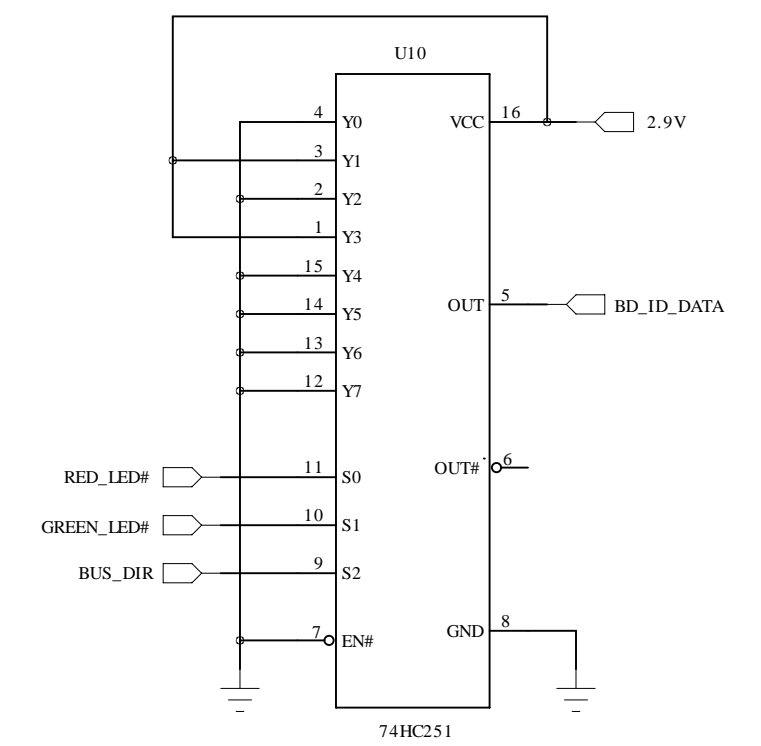
## COM2 Header



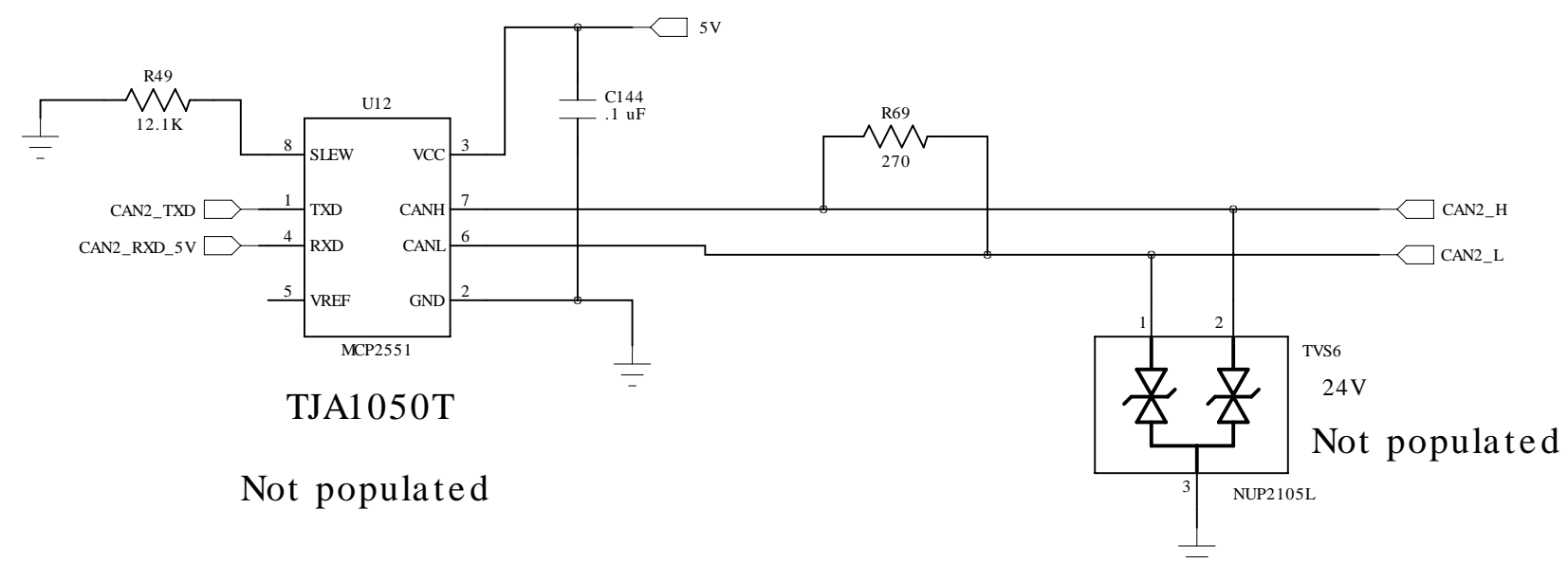
## Console Header



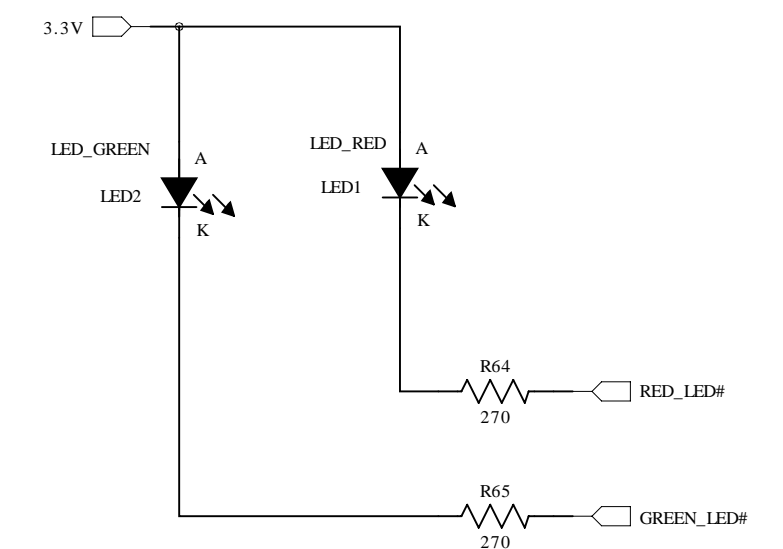
## Board ID = 10



## 2nd CAN Transceiver

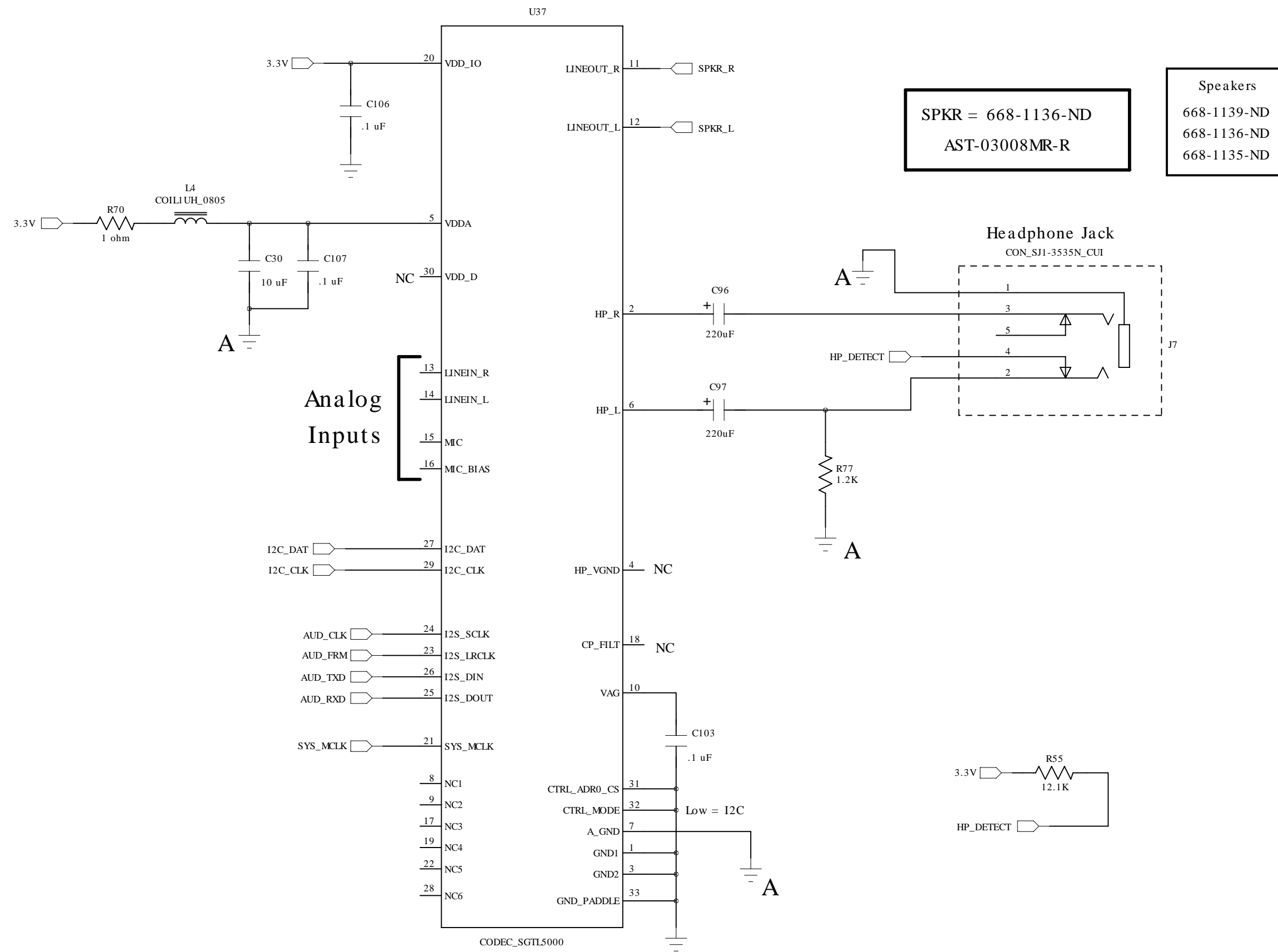


## SBC LEDs

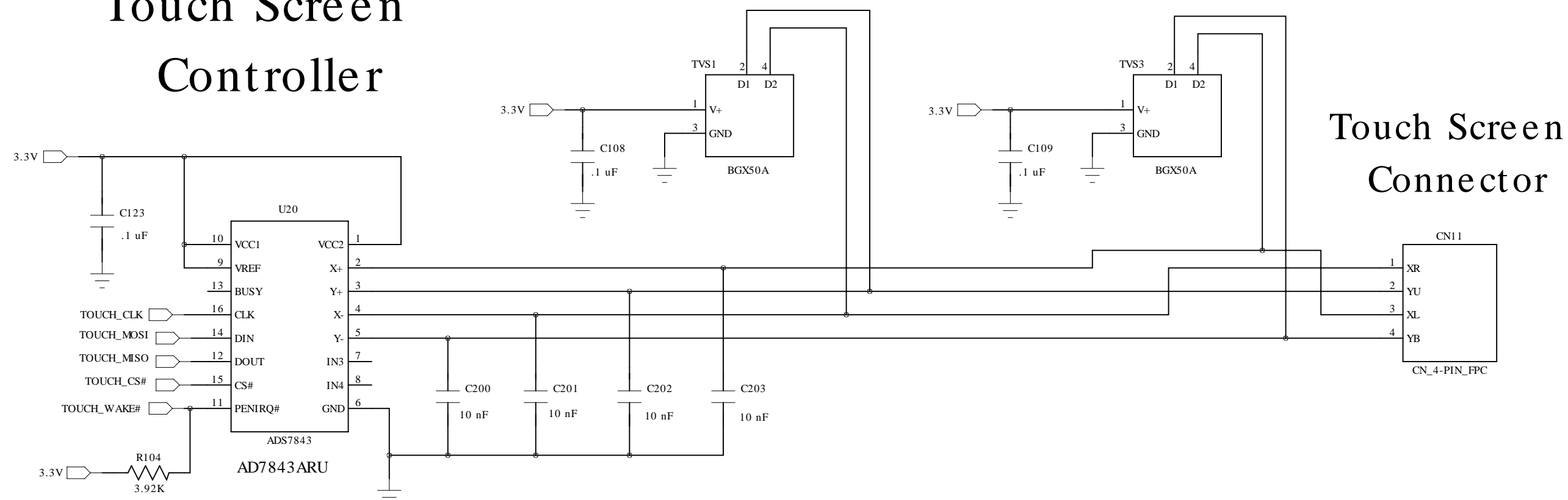


Technologic Systems	Date	May 15, 2011
Title: TS-8900 COM Ports, Expansion Header		
Rev: P1_B	Designer	Sheet 6 of 15

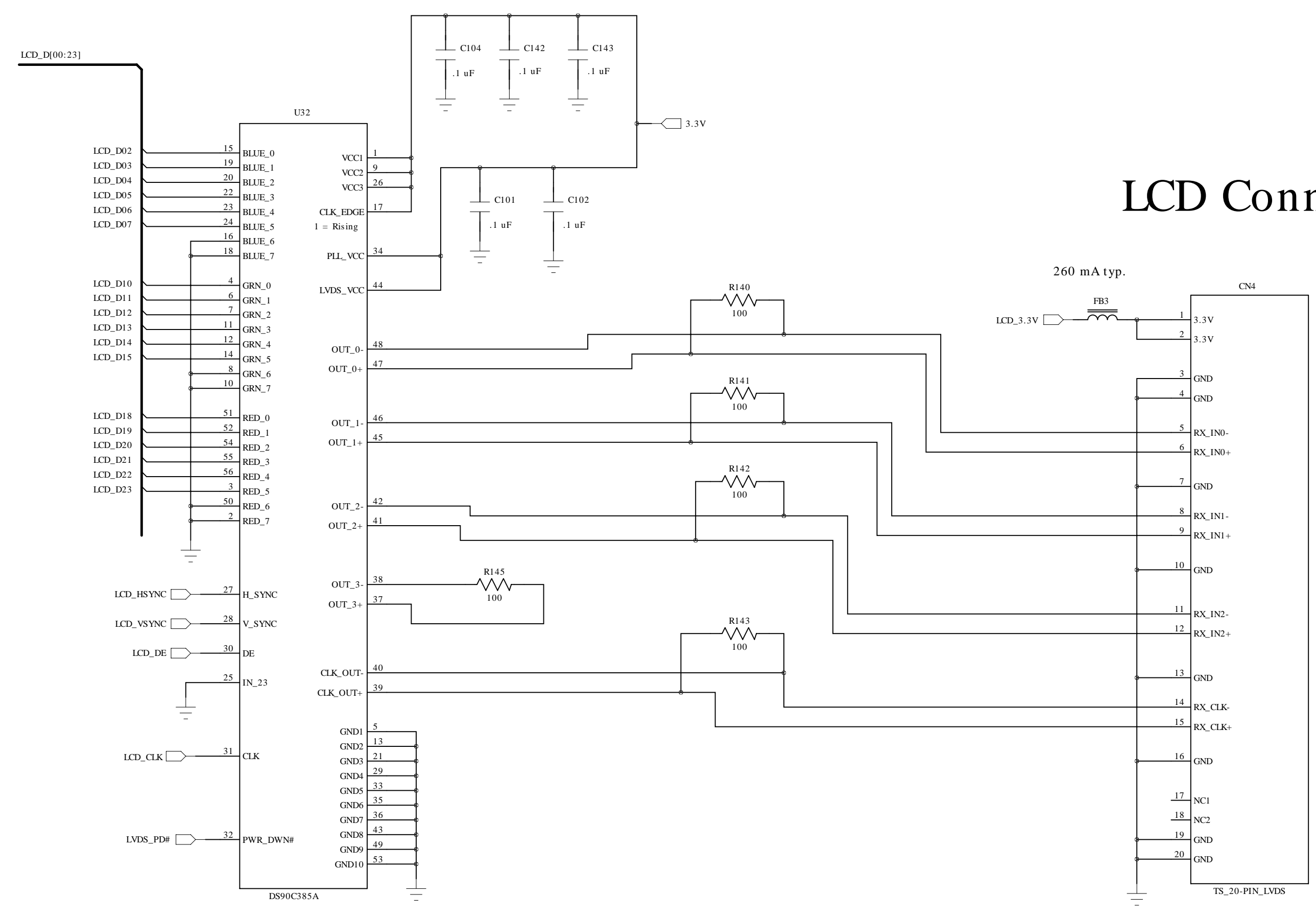
# Audio CODEC



# Touch Screen Controller

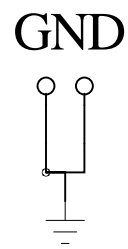
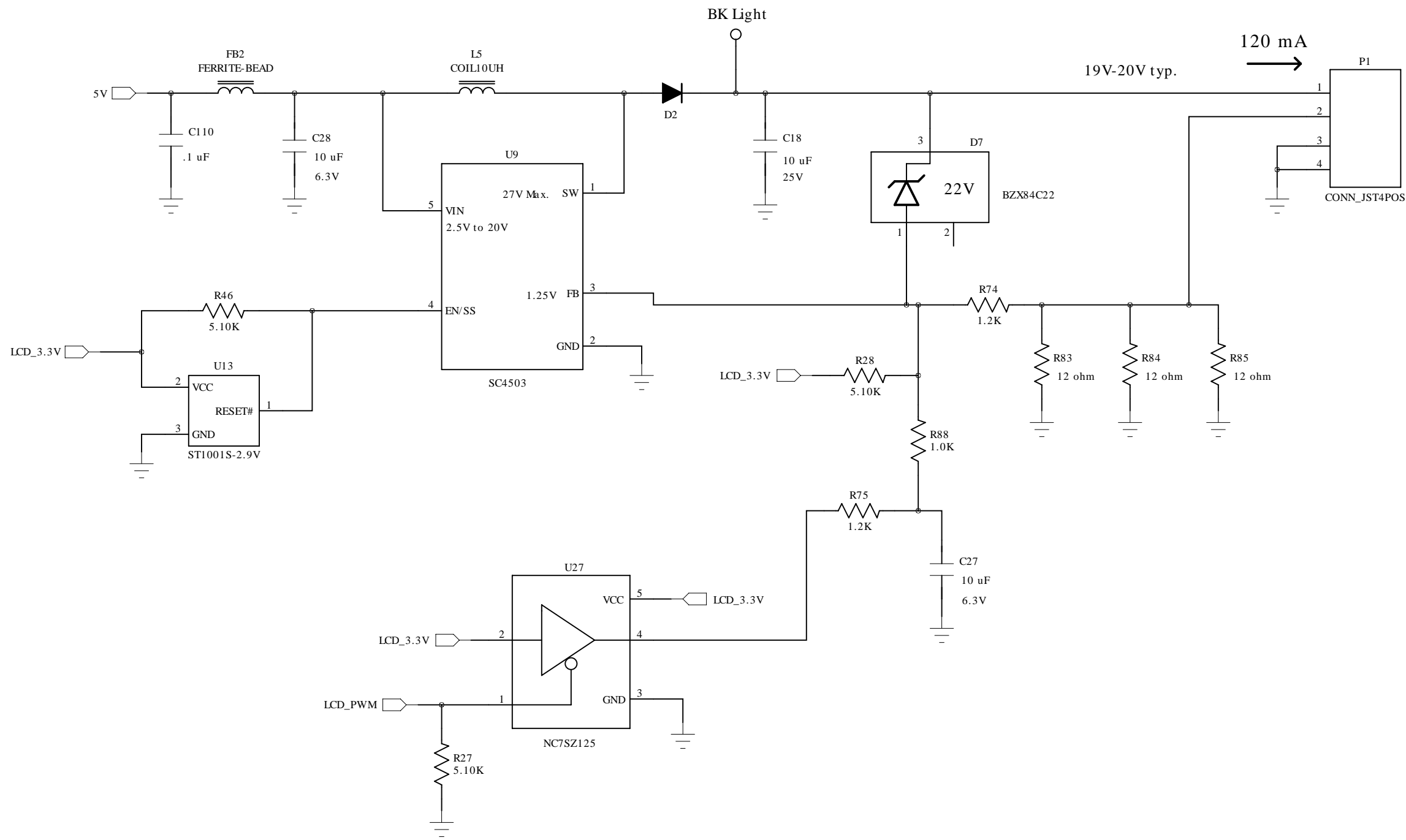


# LCD Conn.

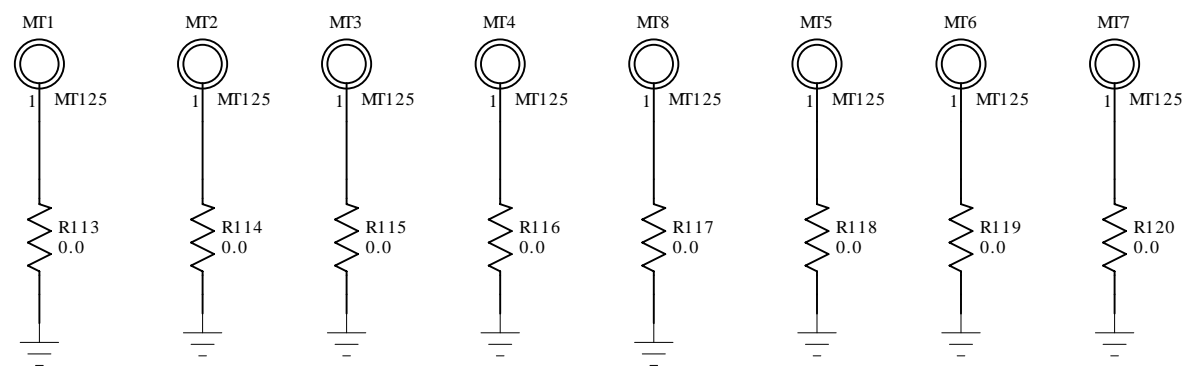
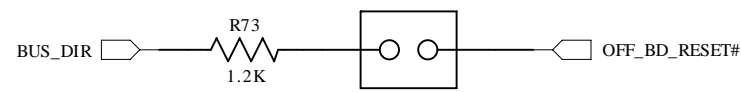




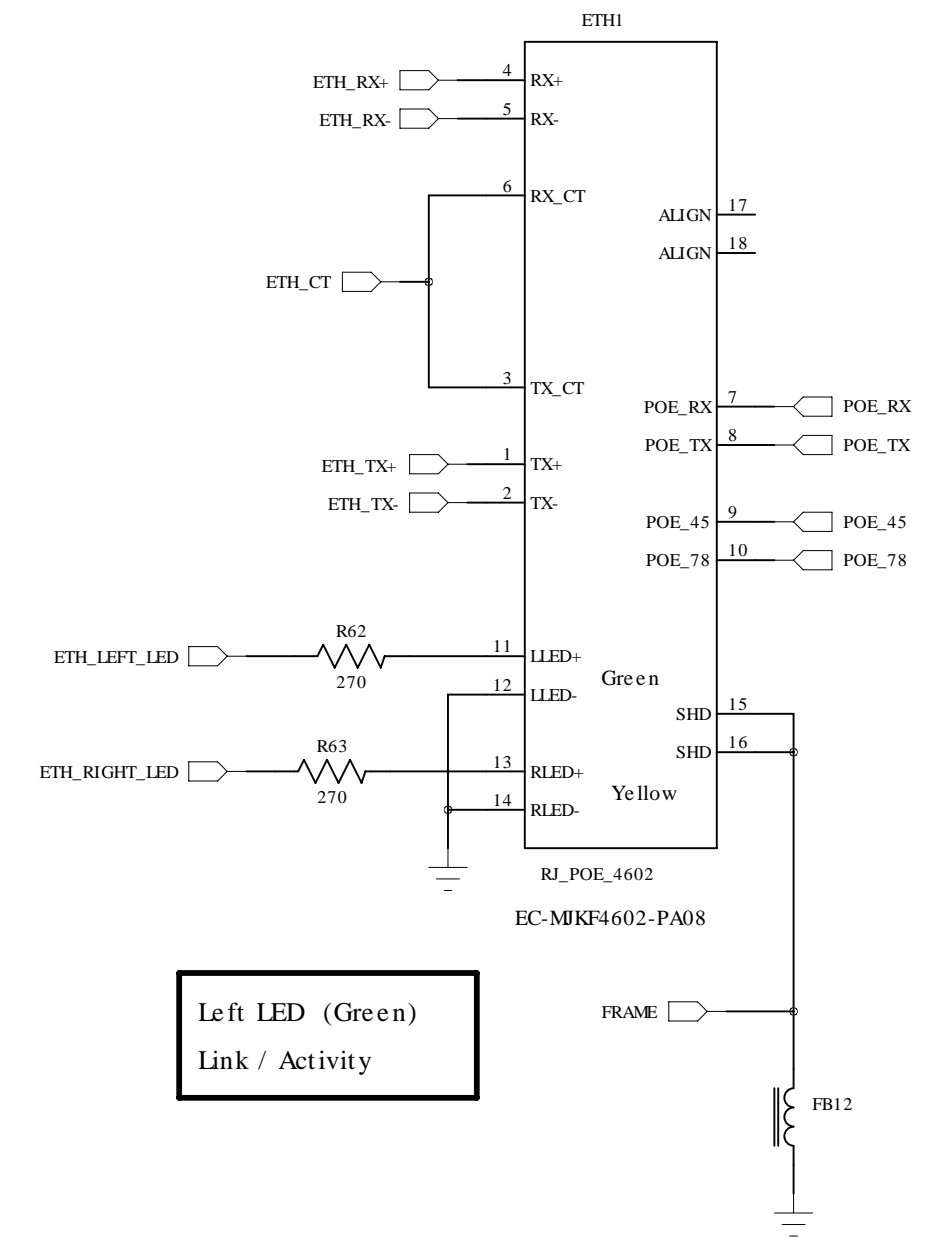
# BackLight Power



## Force Boot to SD card

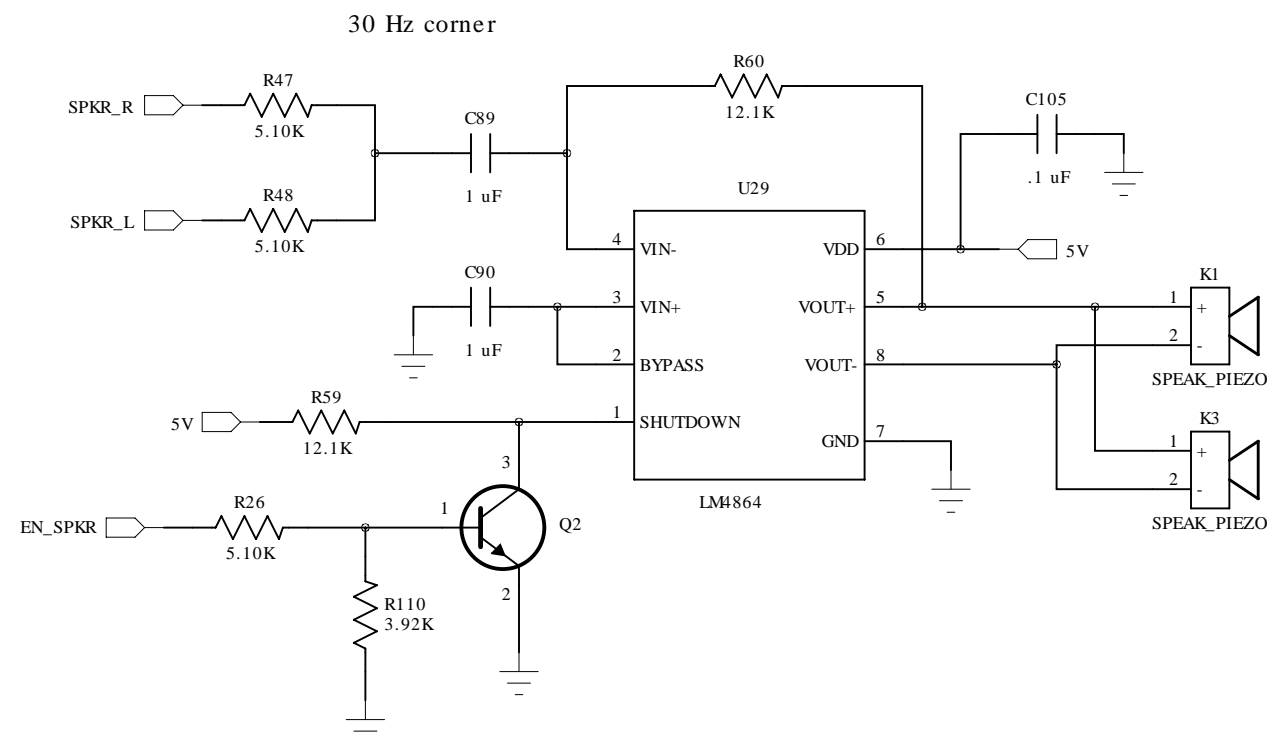


# 10/100 Ethernet ETH1



Left LED (Green)  
Link / Activity

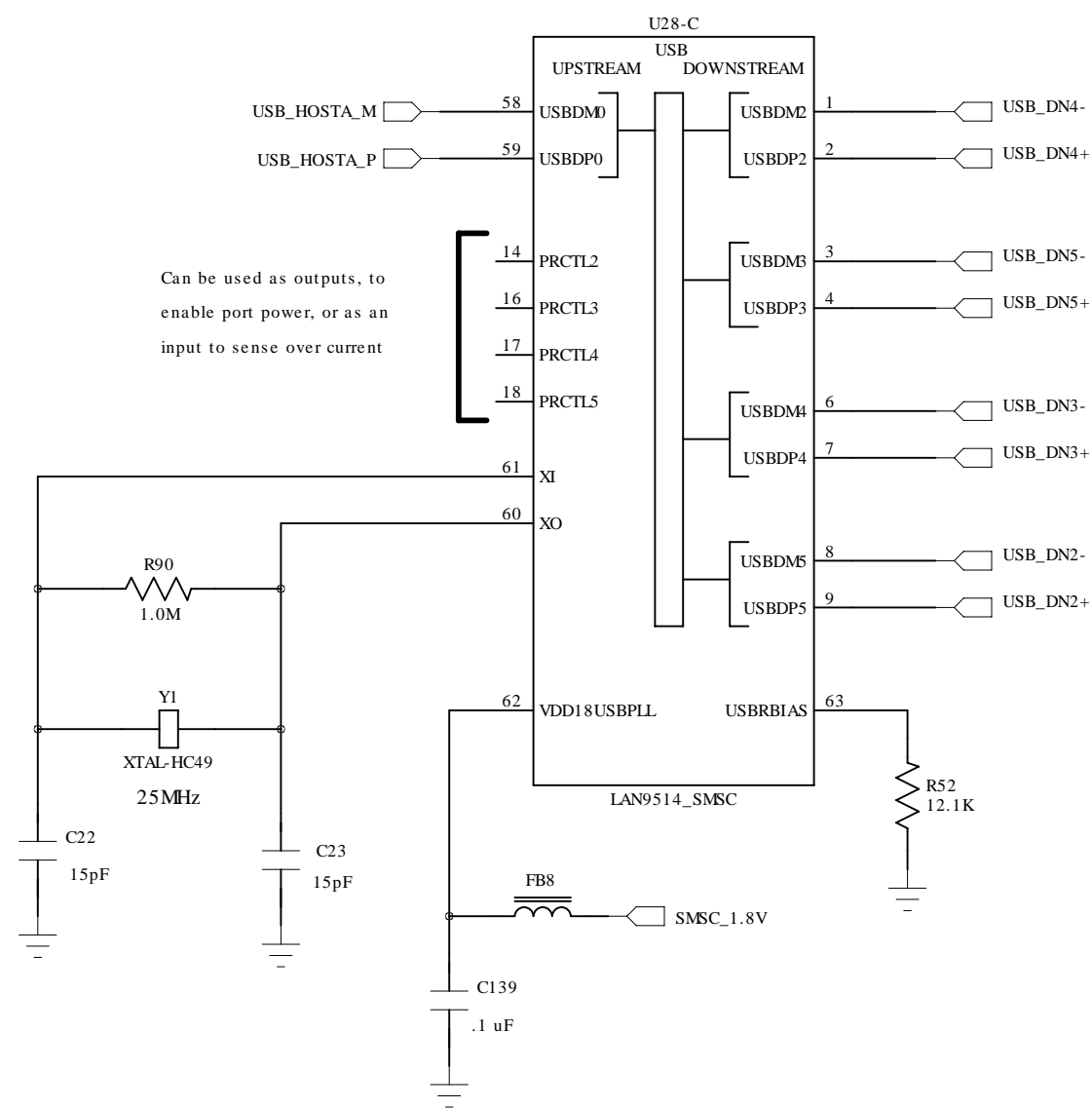
# Speaker Amp



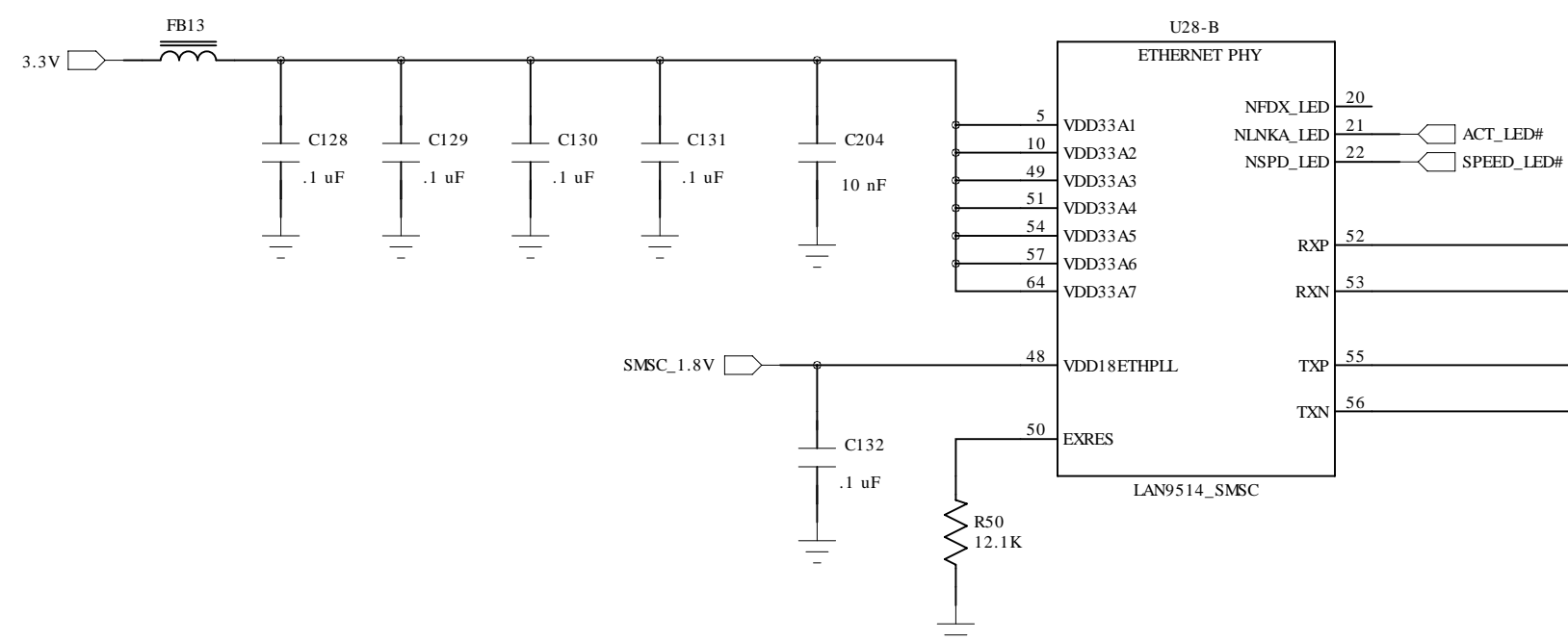
Technologic Systems	Date	May 15, 2011
Title: TS-8900	Backlight Power Ethernet	
Rev: P1_B	Designer RLM	Sheet 9 of 15

# 2nd Ethernet Port

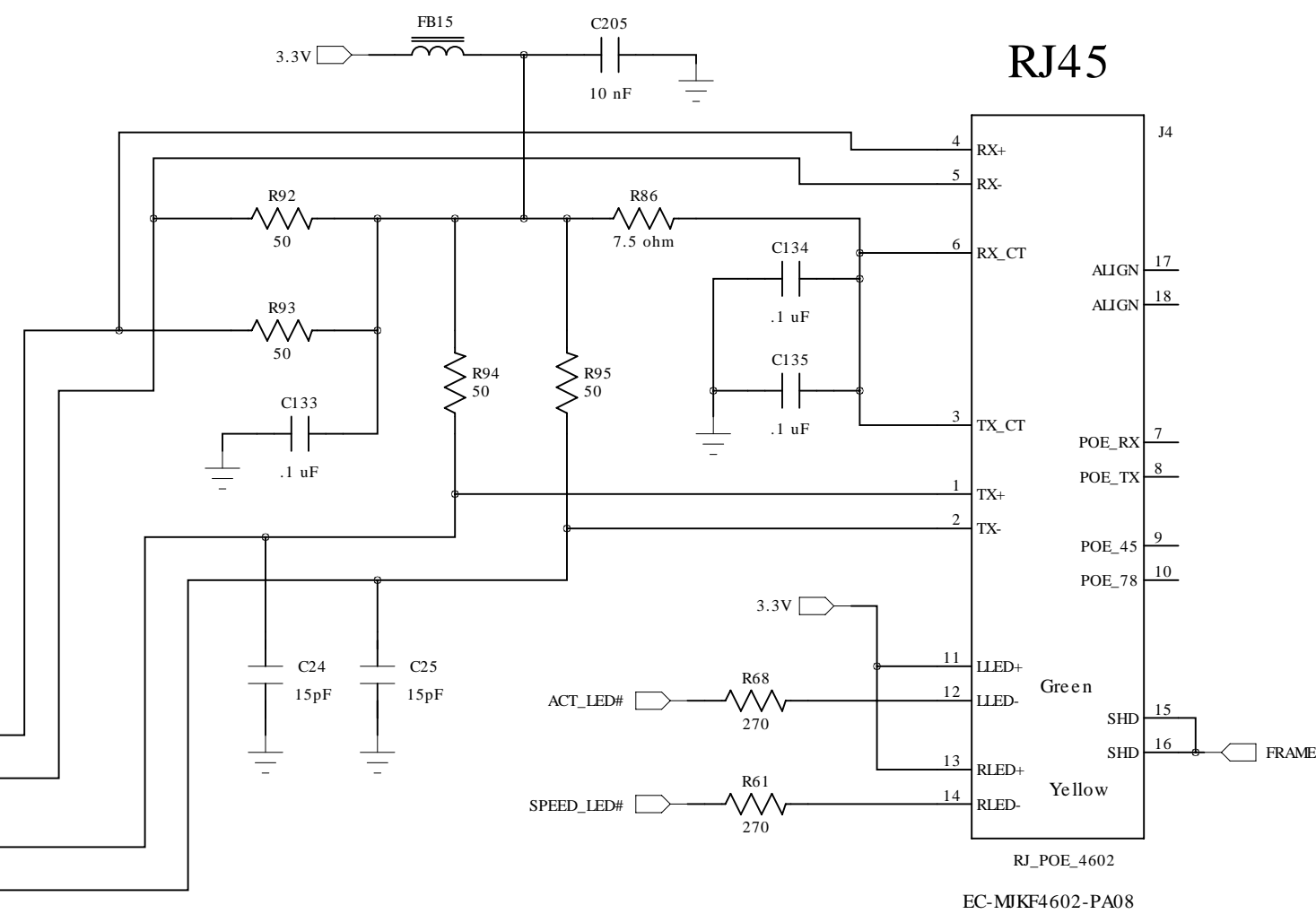
## SMSC USB Hub



## SMSC Ethernet Port



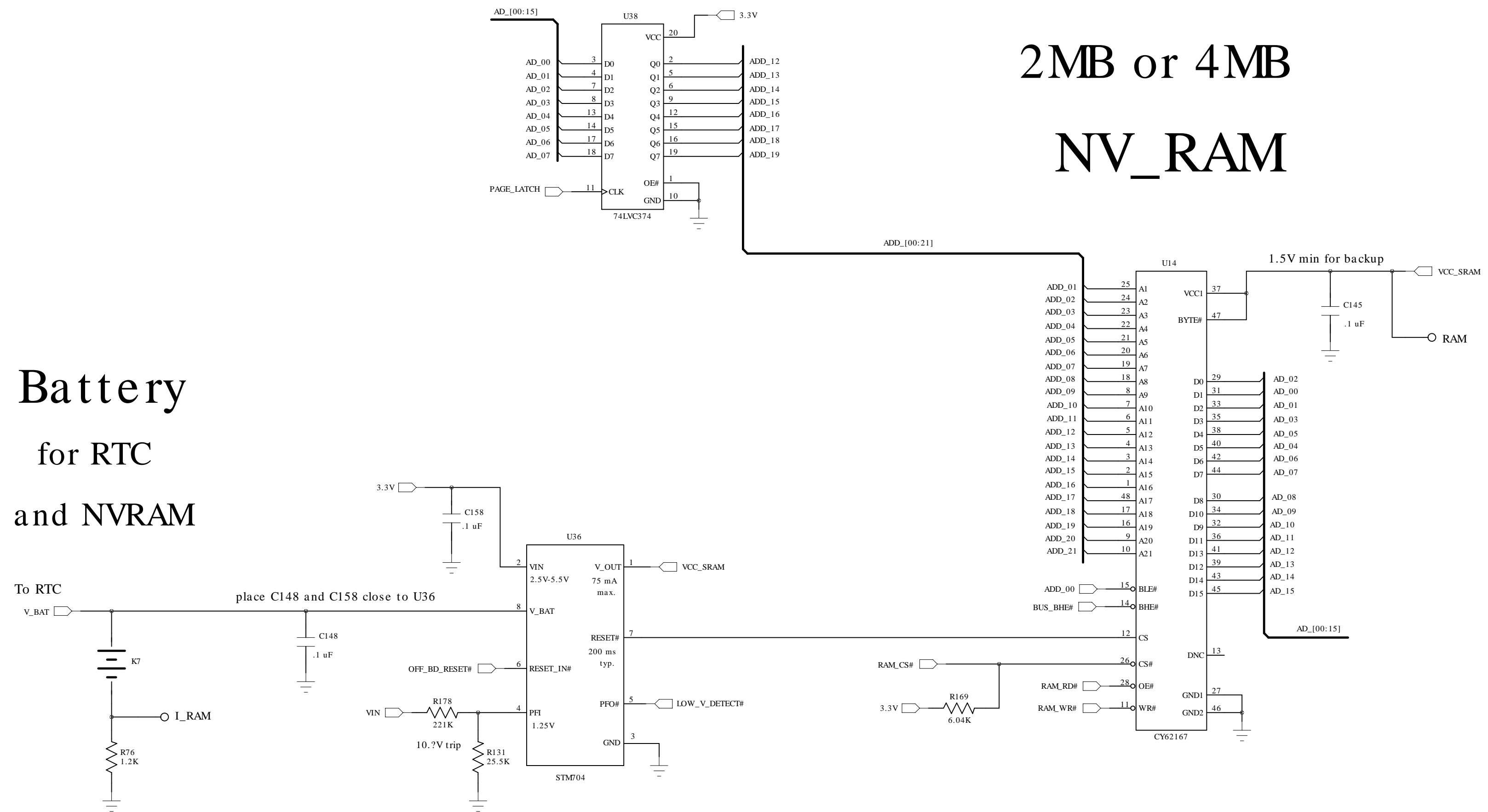
## ETH2 RJ45



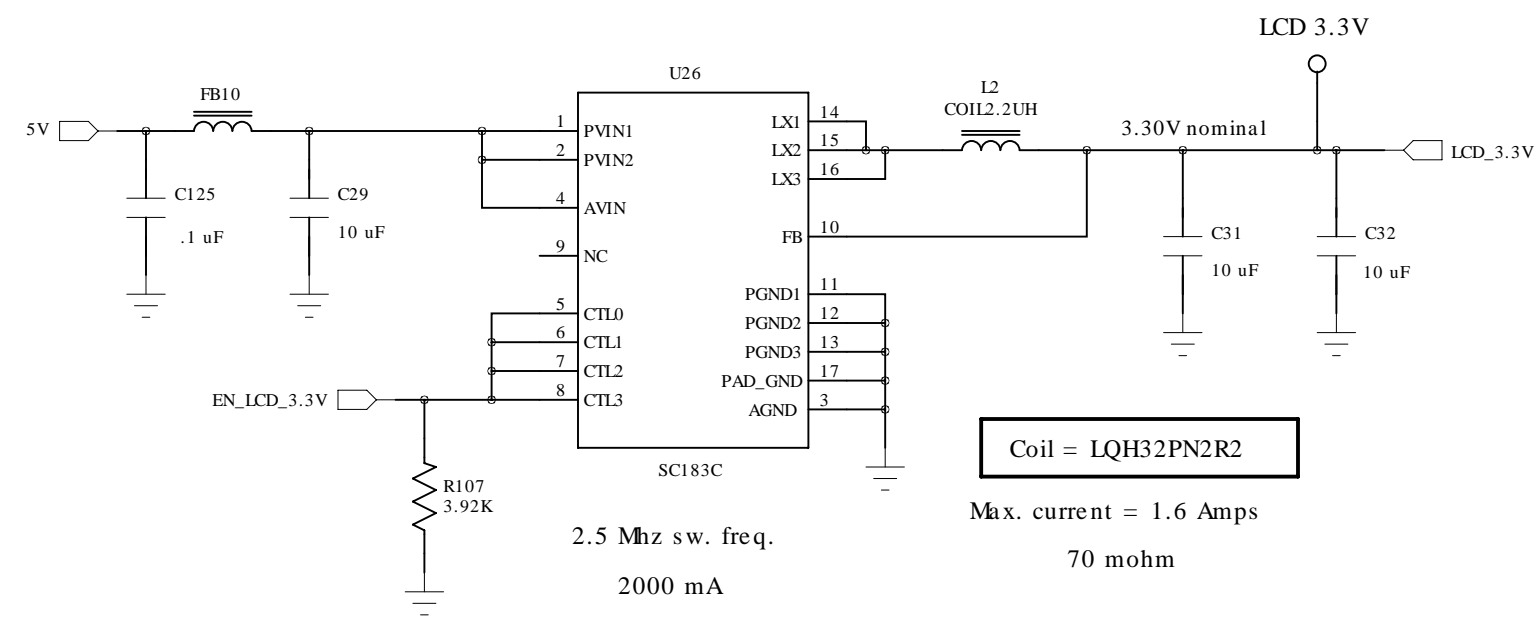
# NV\_RAM Page Reg.

## 2MB or 4MB NV\_RAM

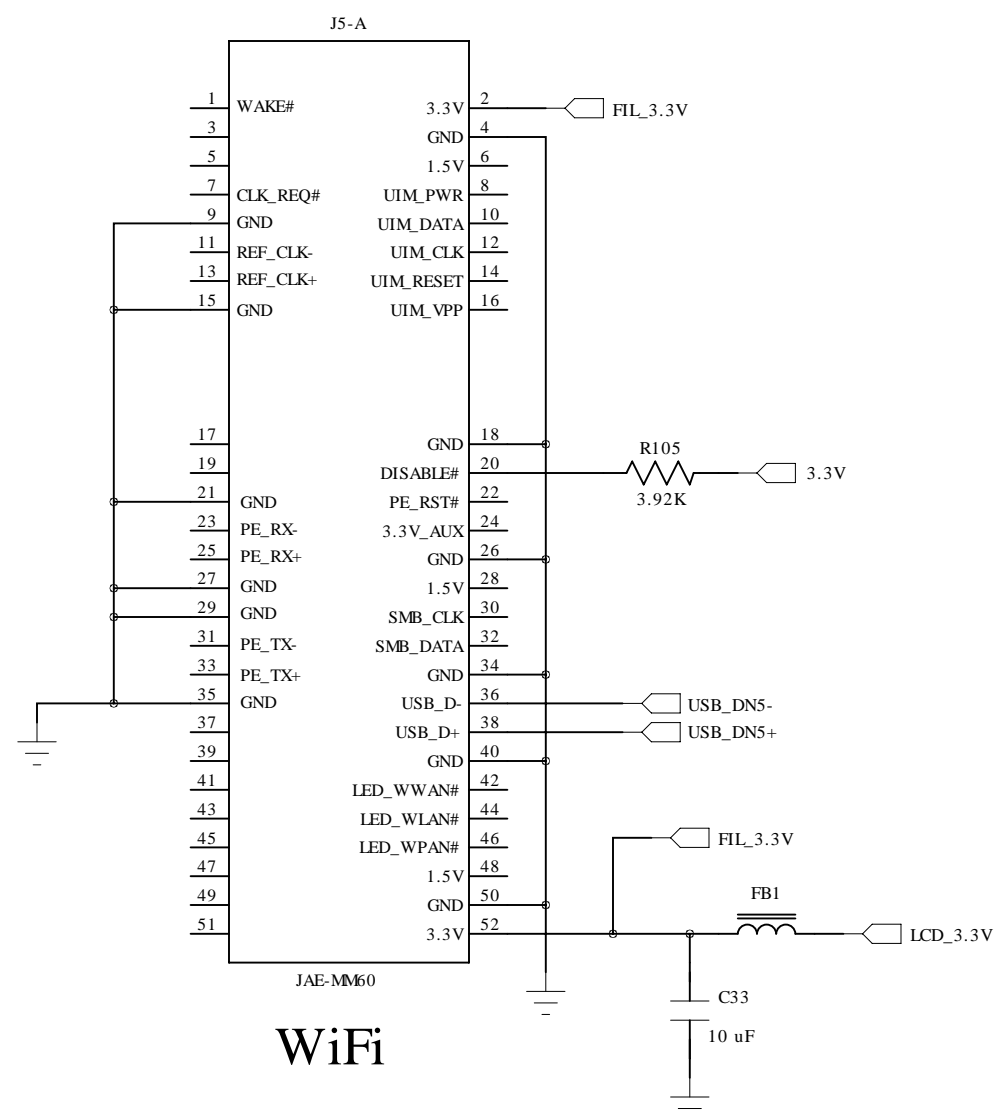
### Battery for RTC and NVRAM



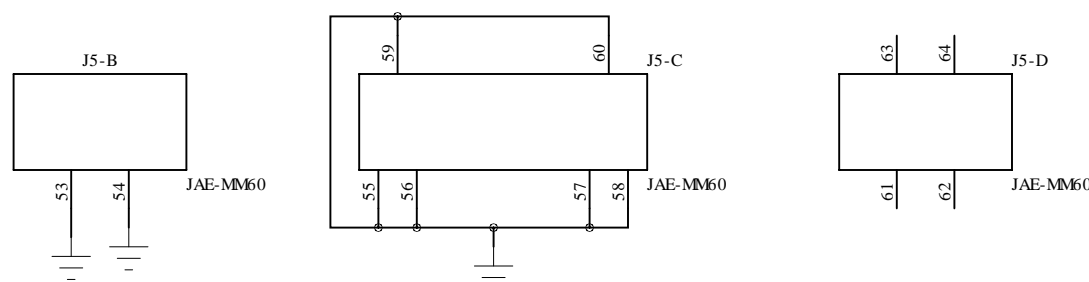
# 3.3V Power Supply for LCD and PCIe



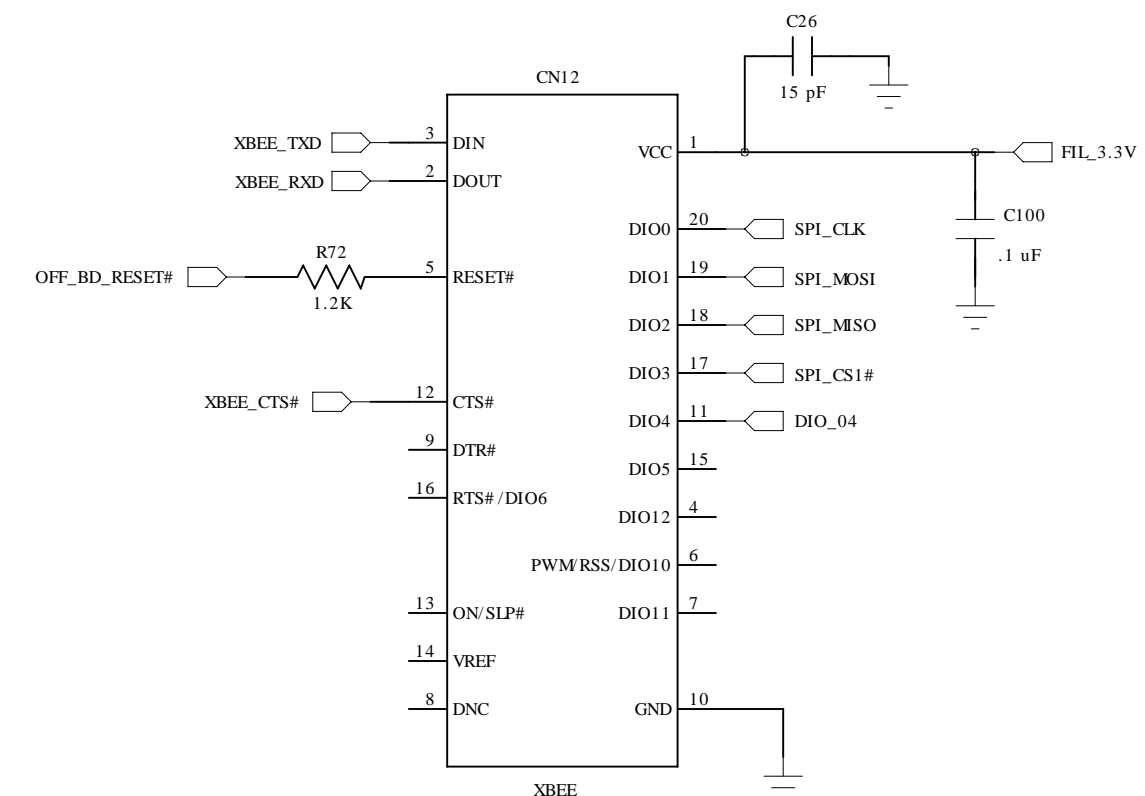
## Mini PCIe Socket



WiFi



## Digi/MaxStream ZigBee Radio

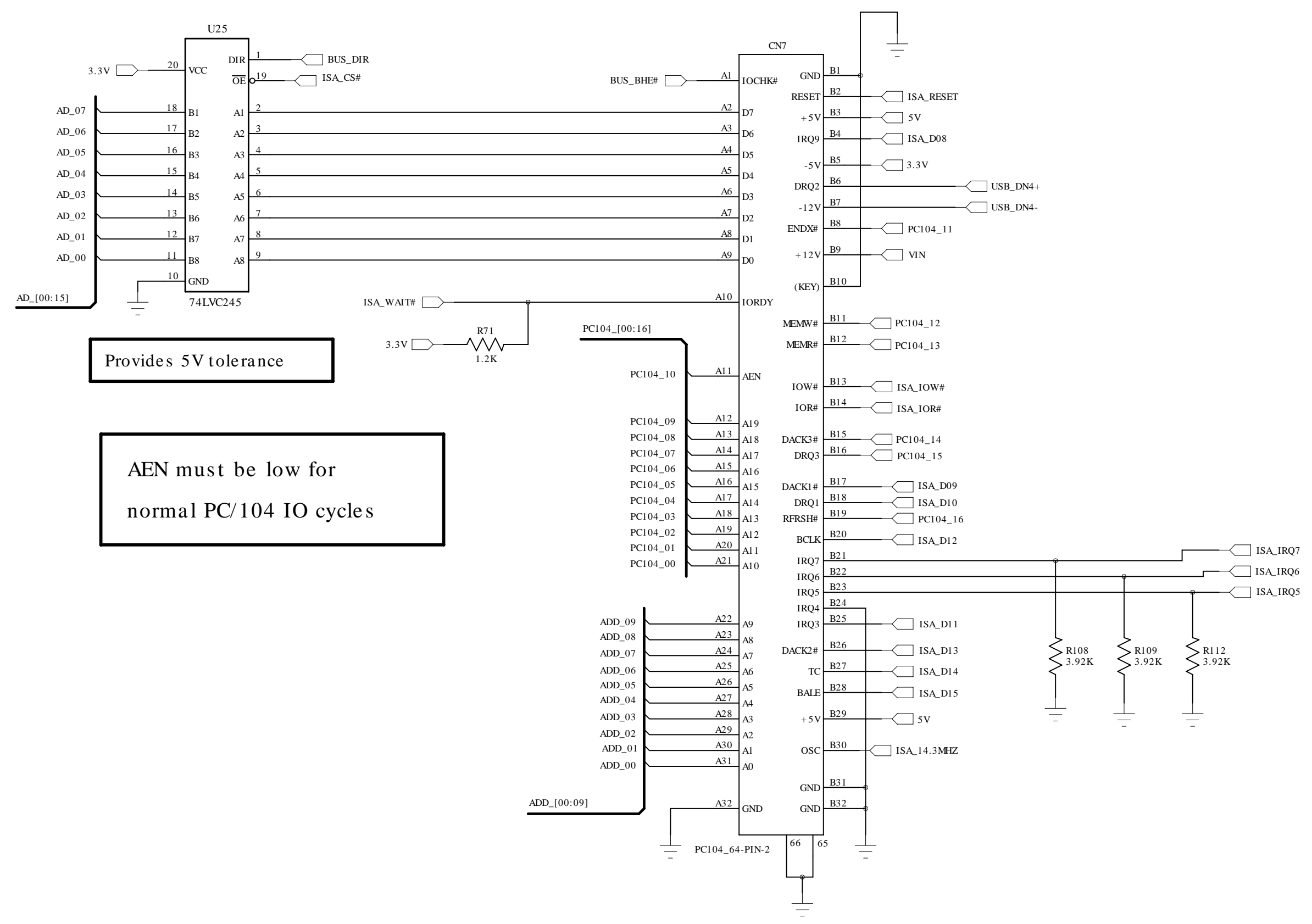


CTS# is an output that can be used for hardware flow control

Baud rates up to 230.4K supported

# PC/104

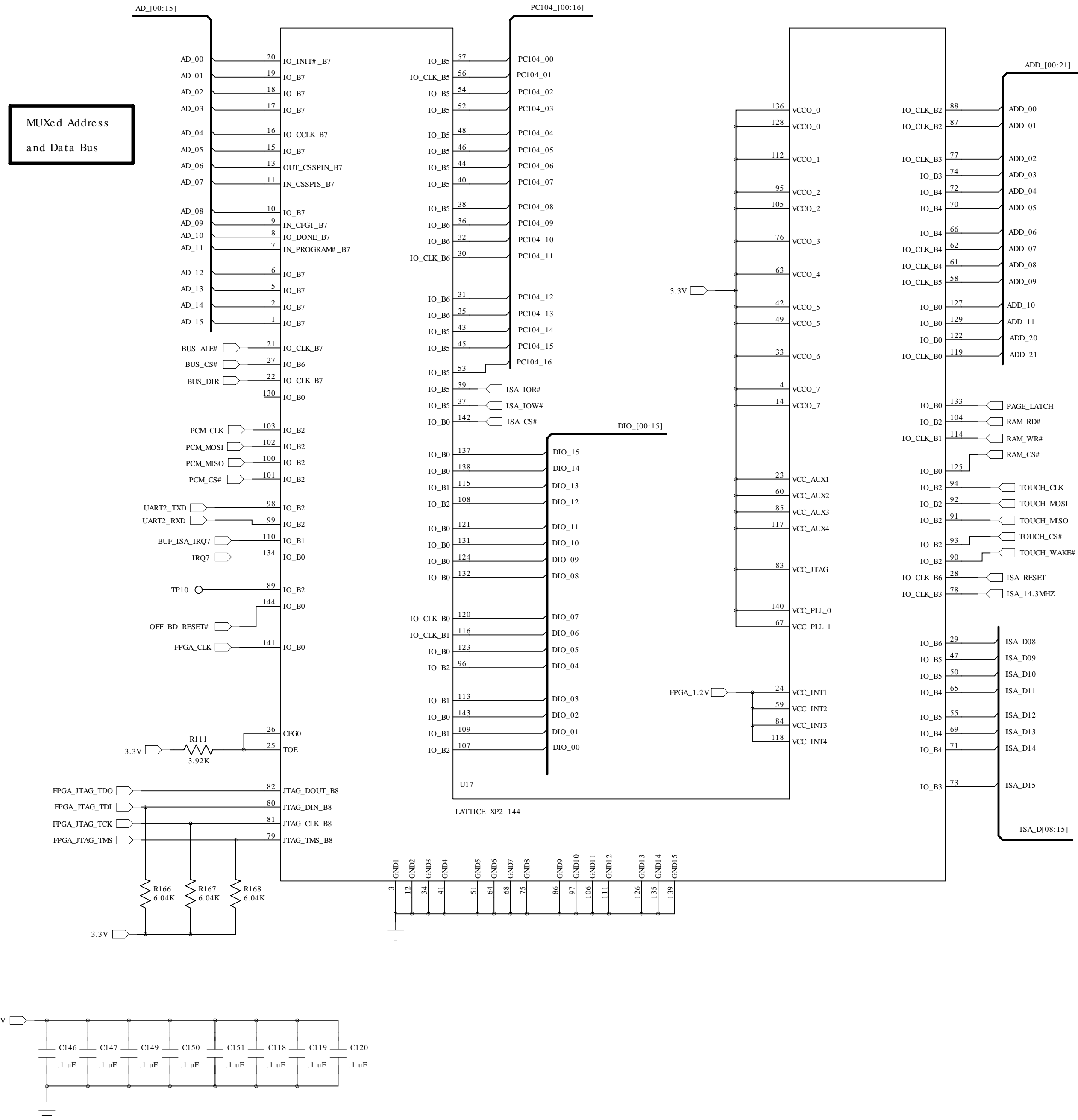
## 64-pin Connector



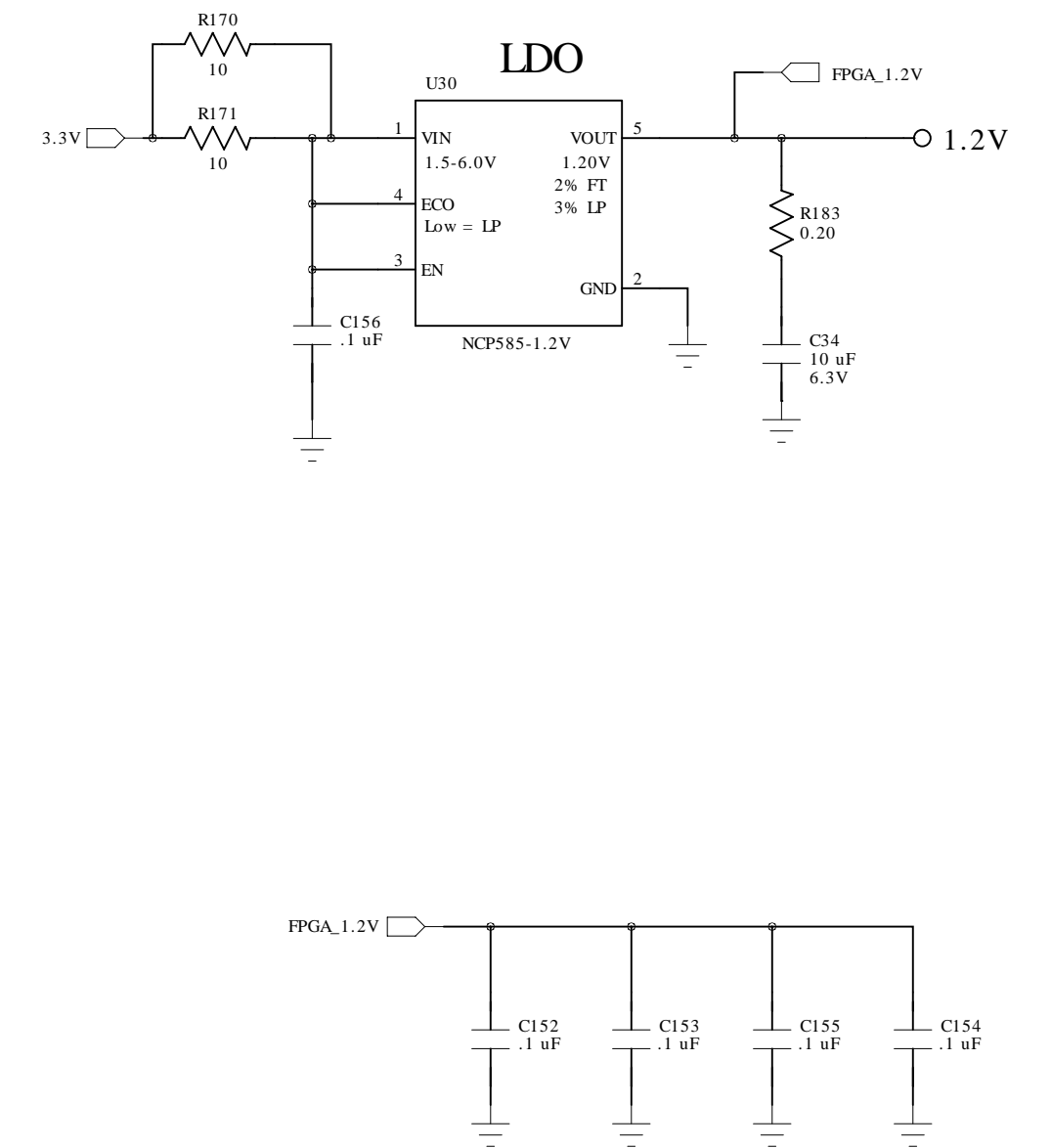
Provides 5V tolerance

AEN must be low for normal PC/104 IO cycles

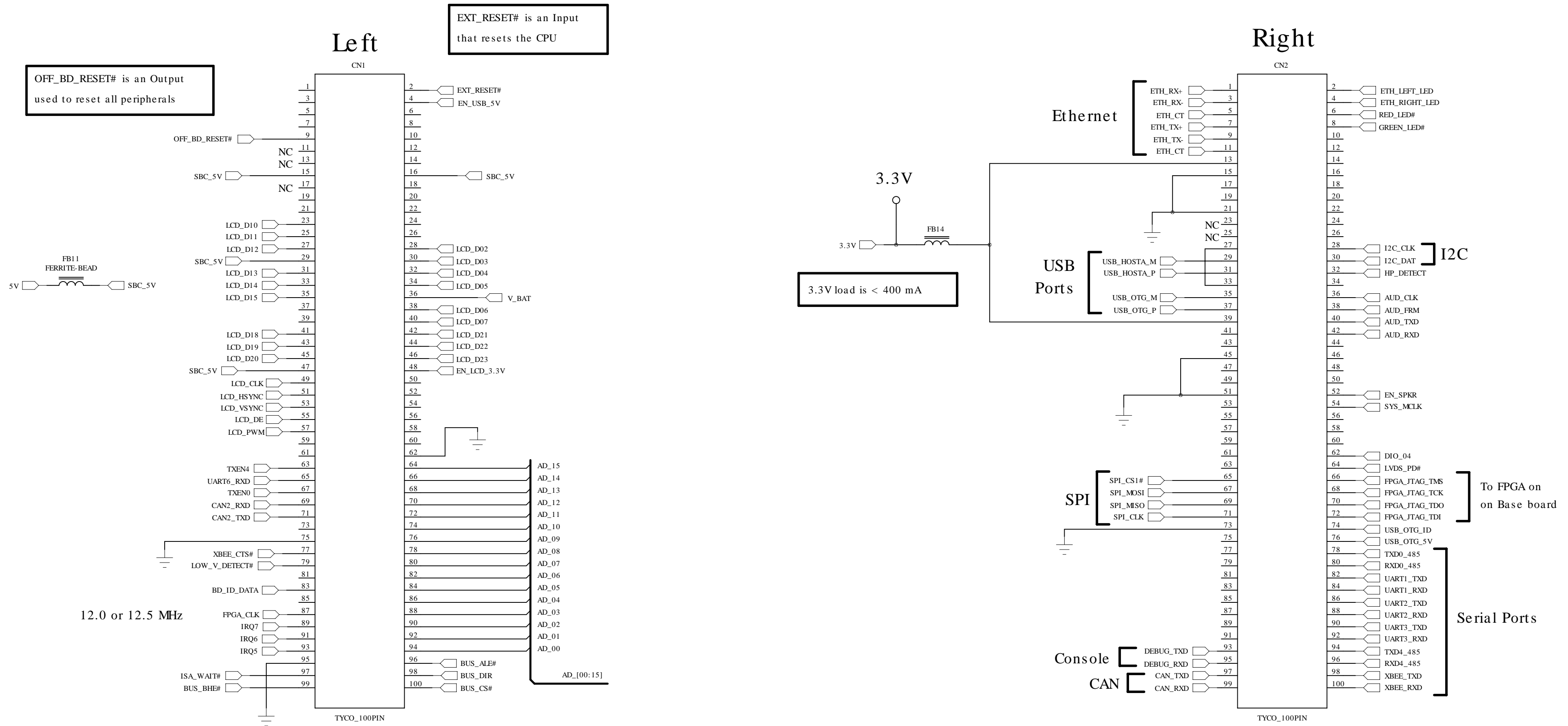
# FPGA with 5000 LUTs



## FPGA 1.2V Reg.



# Two 100-pin Module Connectors



## Boot Strap

Mode 2	SBC Boots from
1	NAND Flash
0	SD Card

MODE2 state is latched prior to OFF\_BD\_RESET# deasserted

MODE2 has a 12K PU on the SBC module