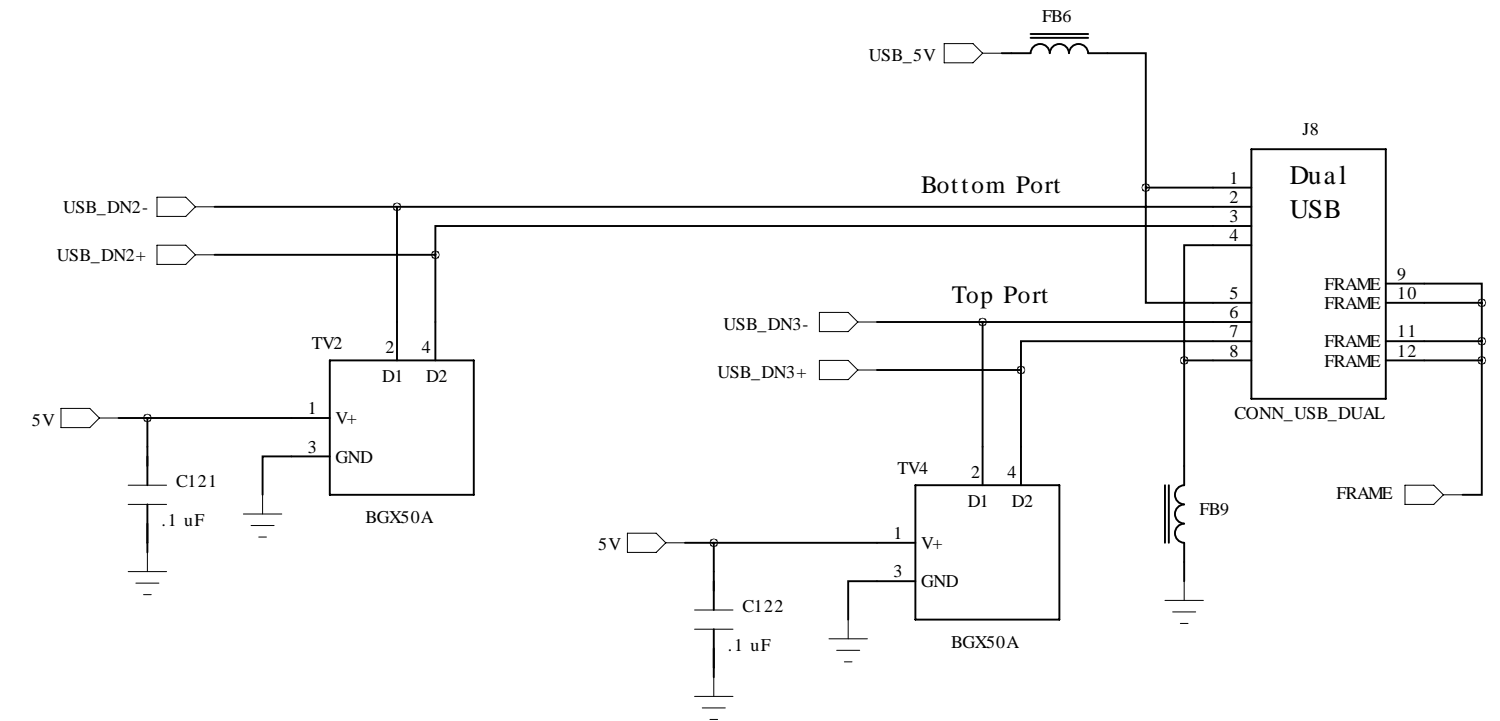
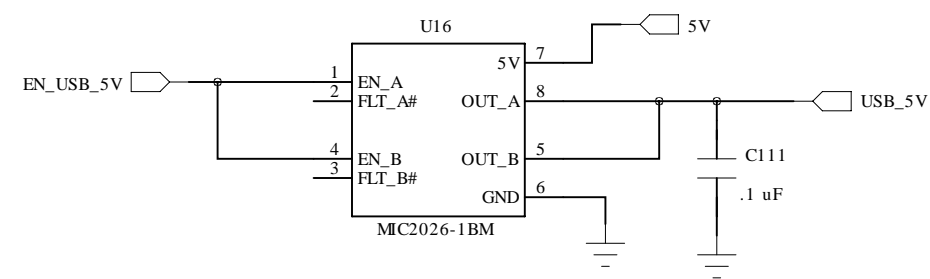


USB Ports

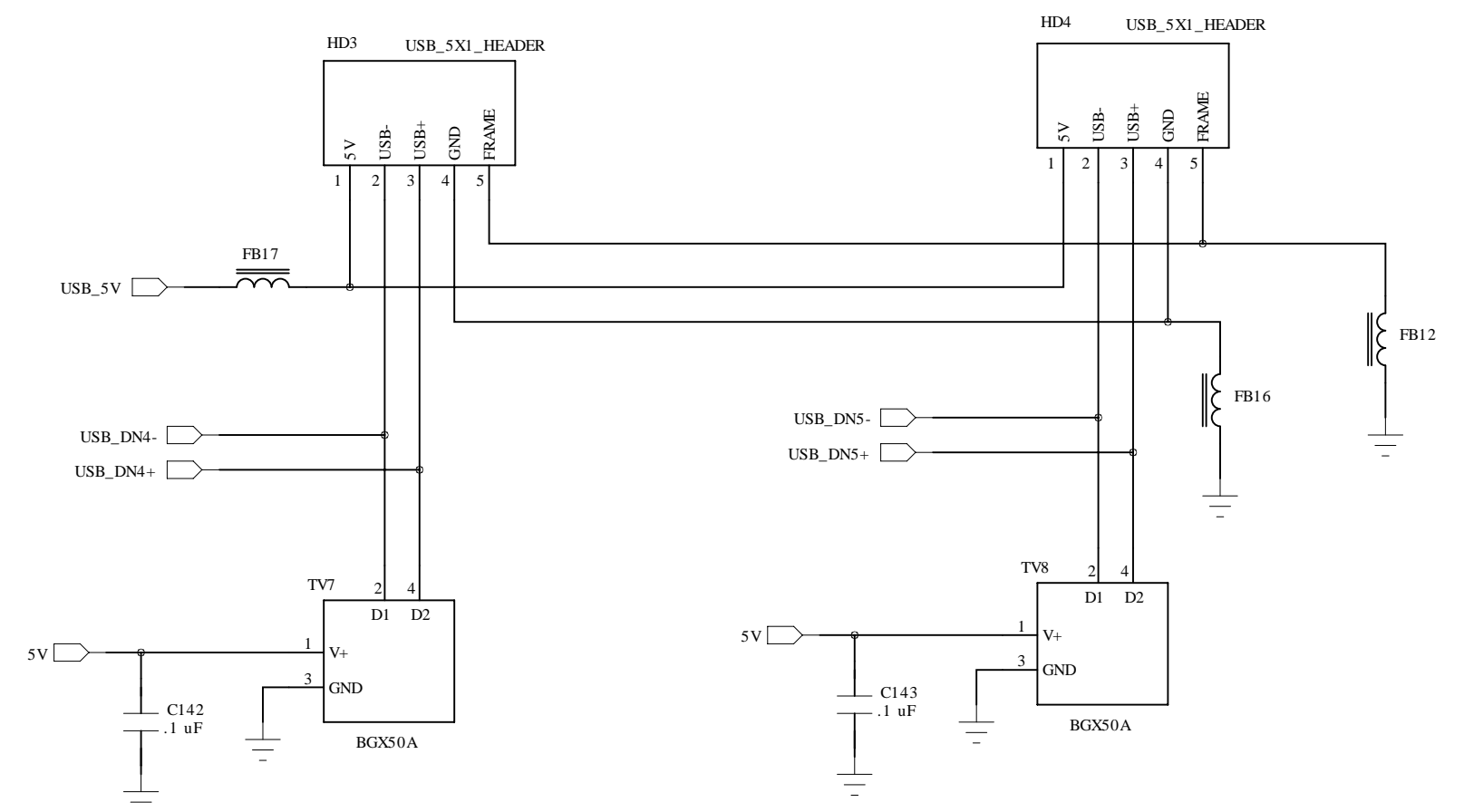
Dual Host USB Ports



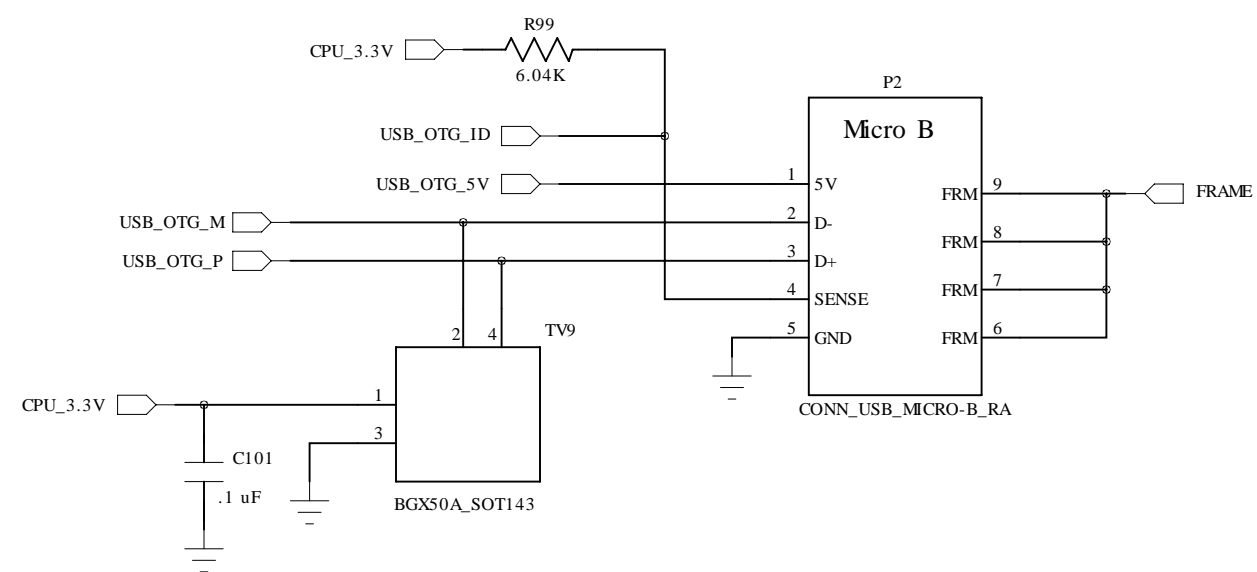
USB Power Switch



Internal USB Headers



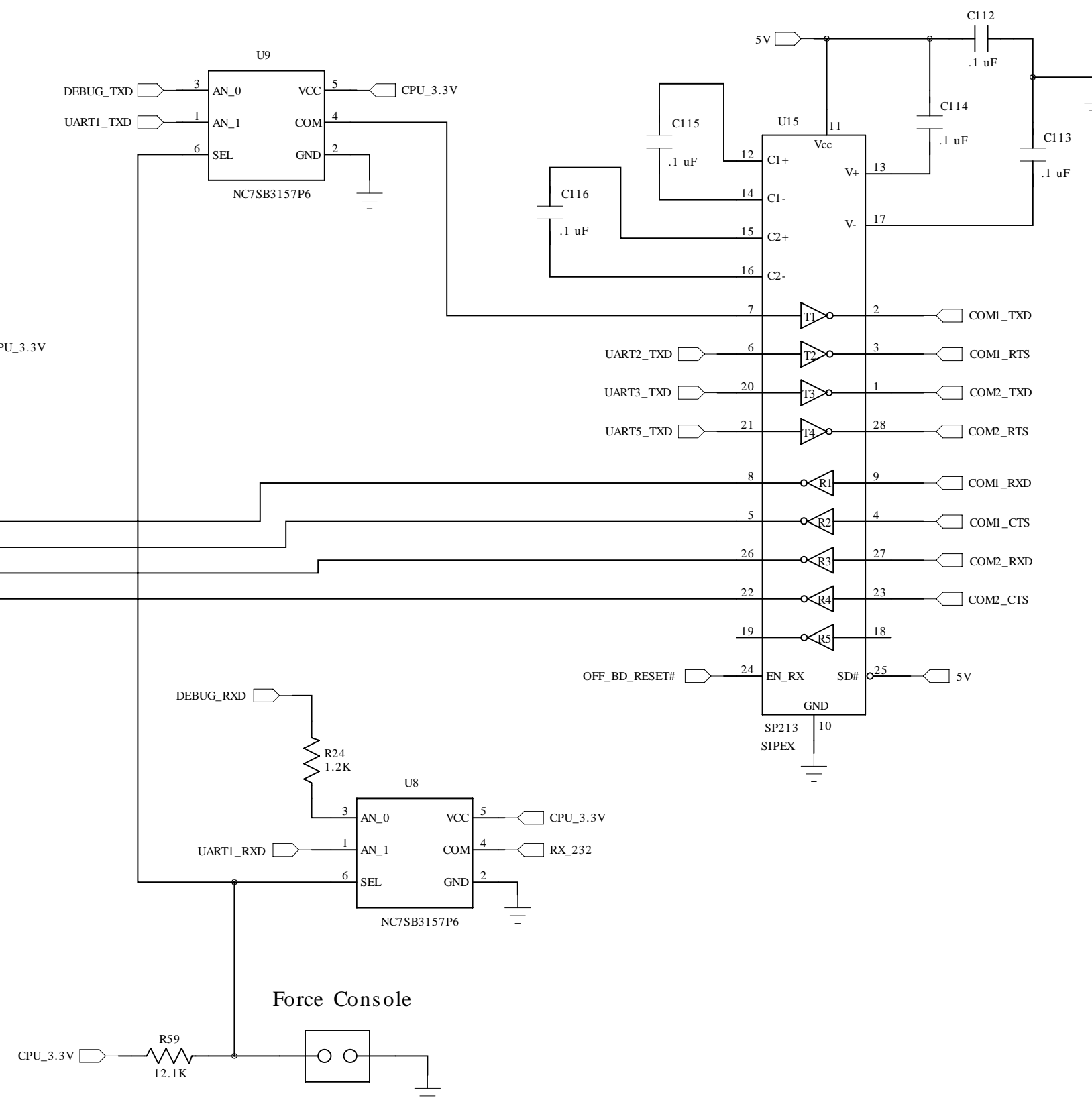
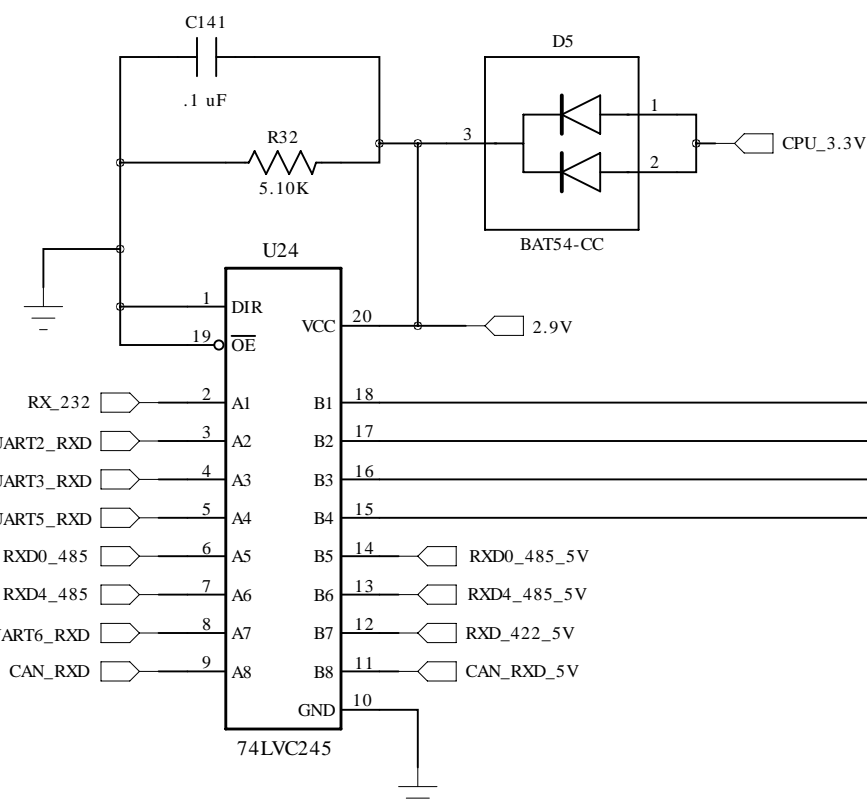
USB OTG Port



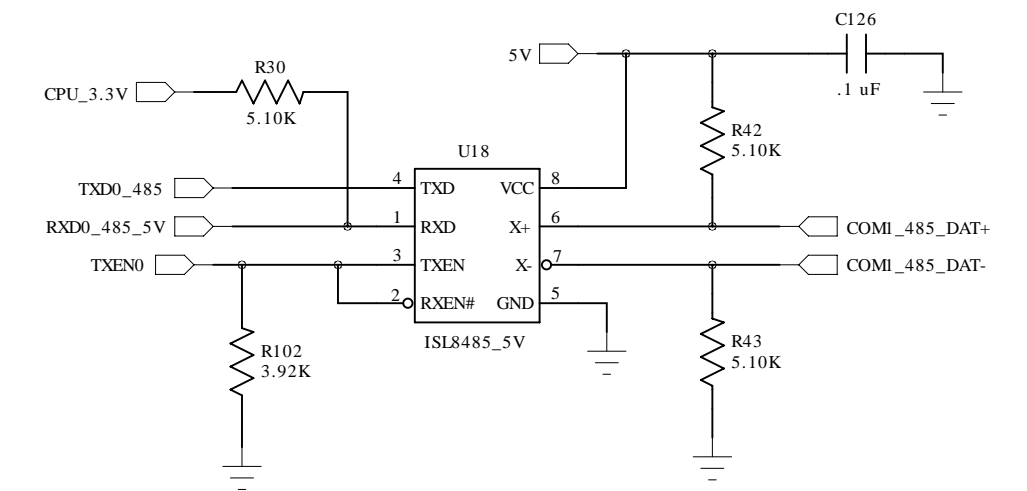
Technologic Systems	Date	May 19, 2014
Title: TS-8390	USB ports	
Rev: D	Designer	Sheet 1 of 10

RS-232 Transceiver

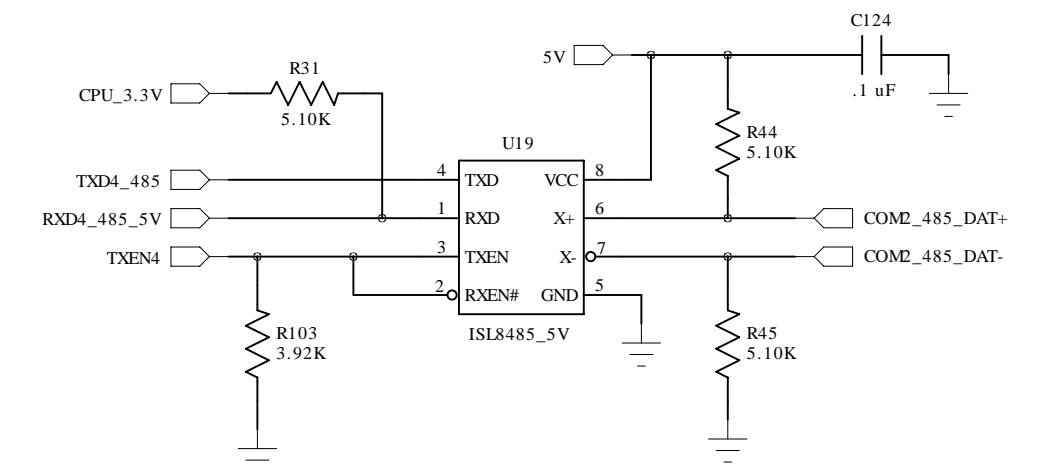
2.9V <-- 5V
Level shifter



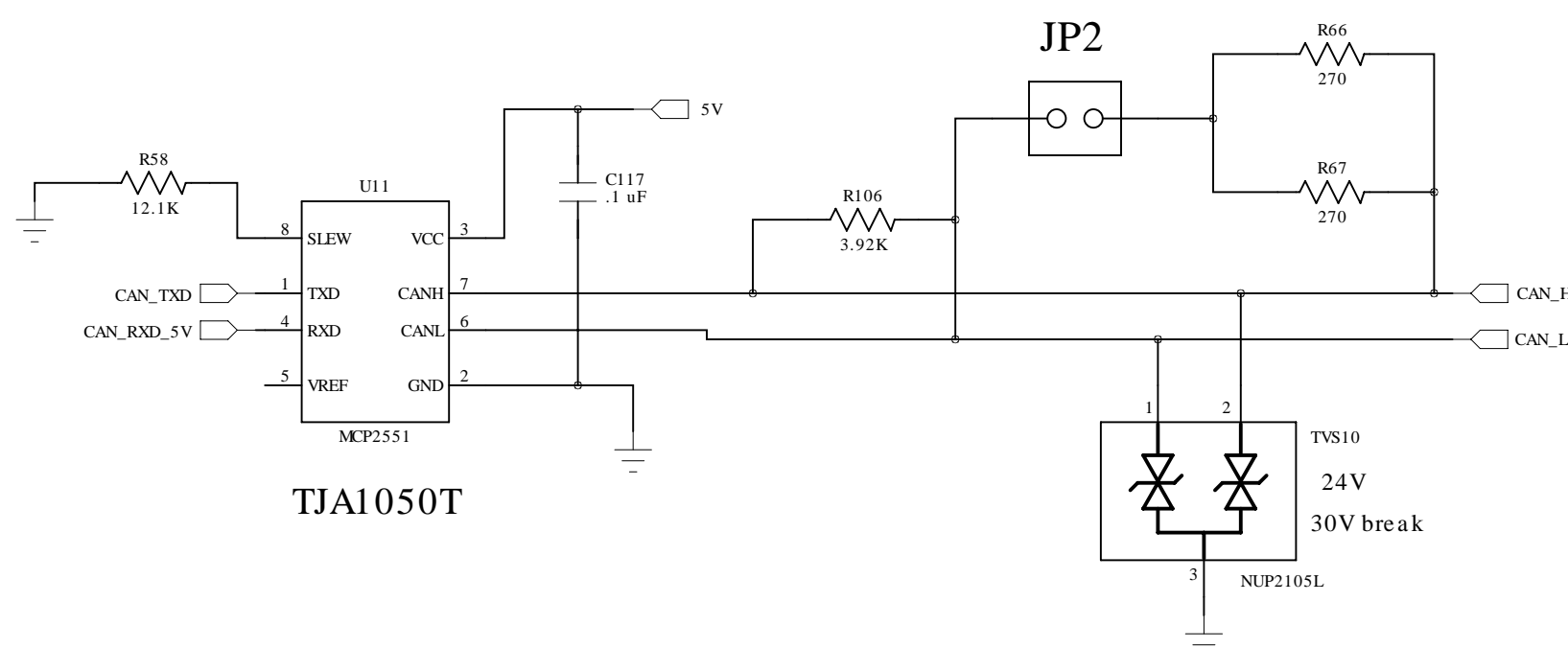
COM1 RS-485 Driver



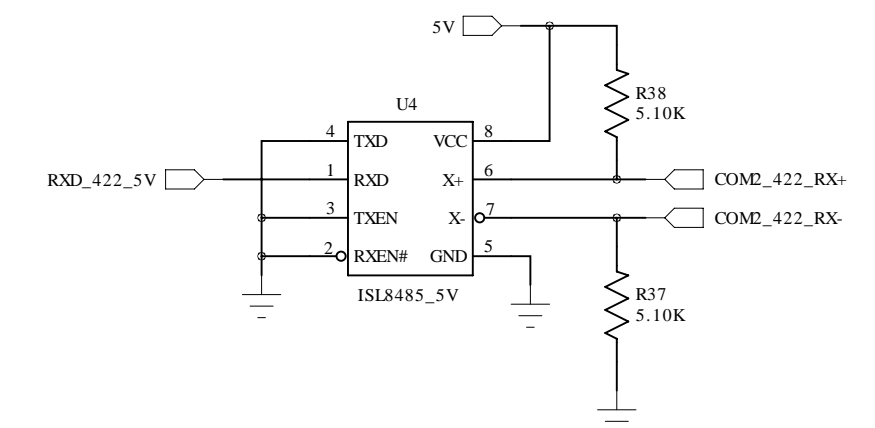
COM2 RS-485 Driver



CAN Transceiver

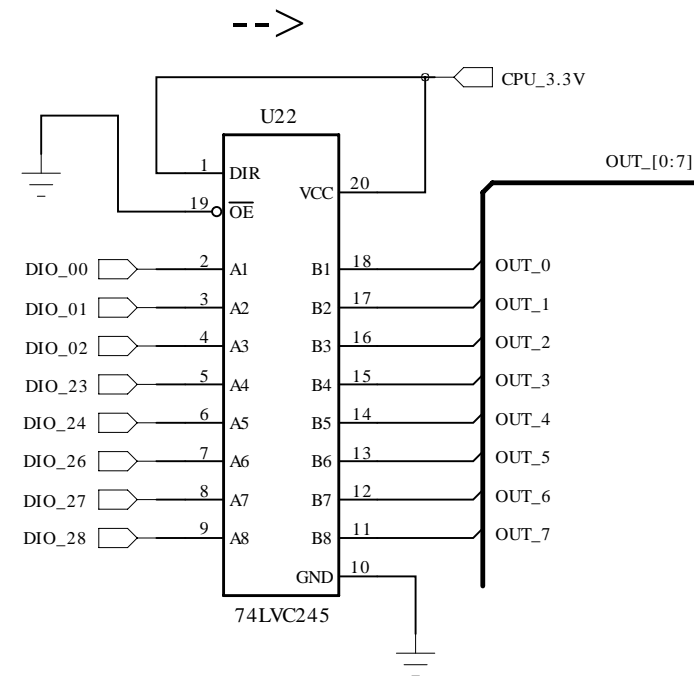
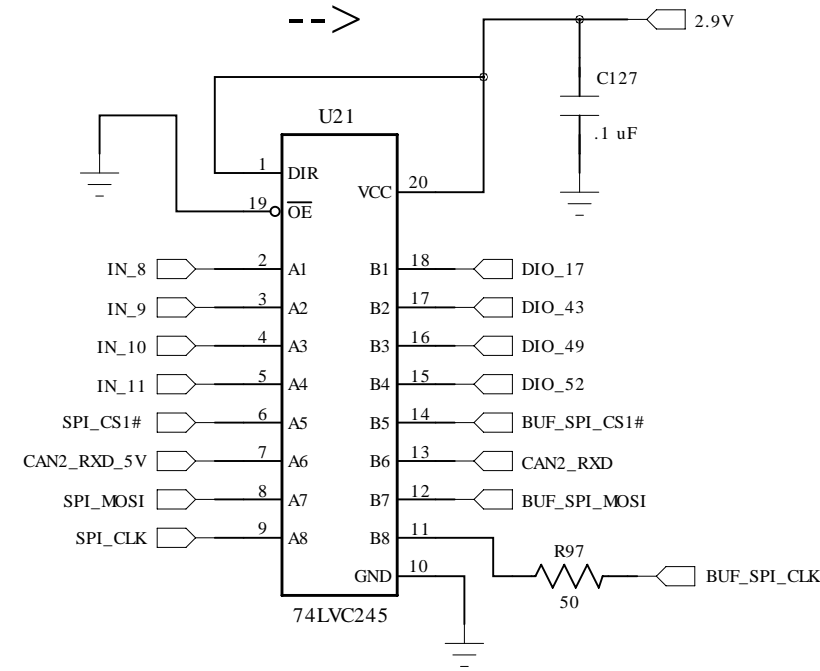
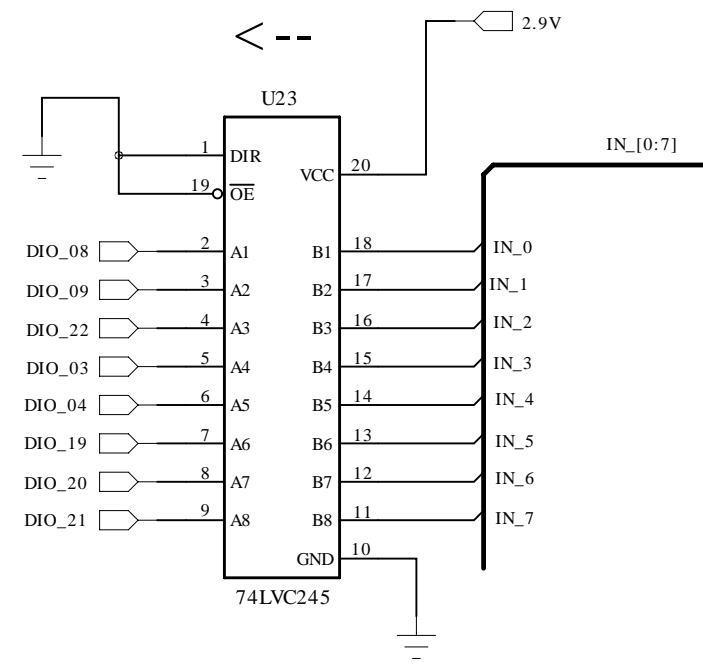


COM2 RS-422 Receiver

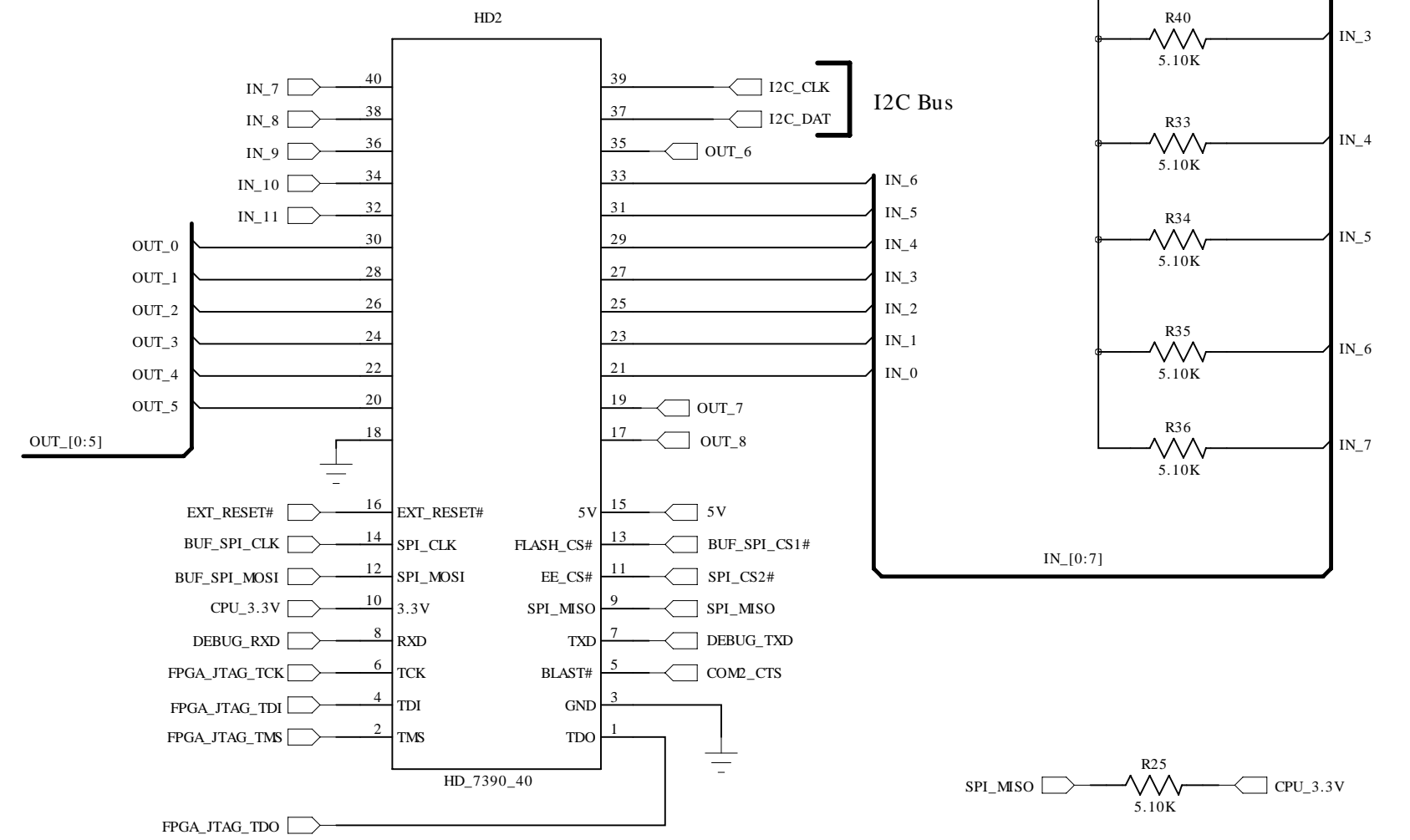


Technologic Systems	Date	May 19, 2014
Title: TS-8390	COM Ports, CAN	
Rev: D	Designer	Sheet 2 of 10

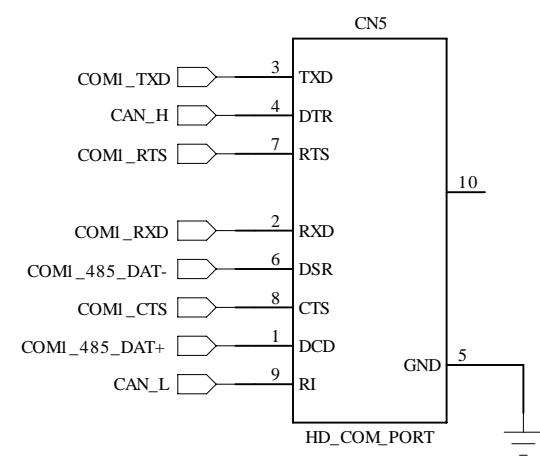
DIO Port



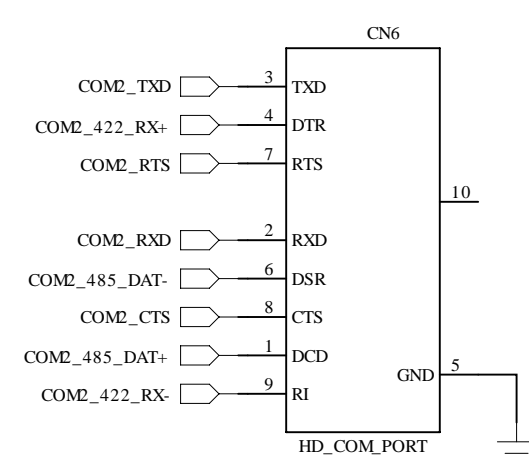
DIO Header



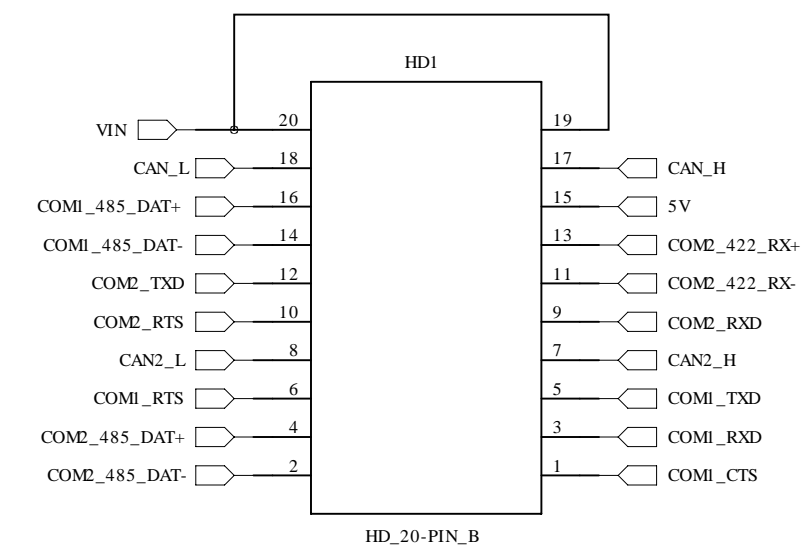
COM1 Header



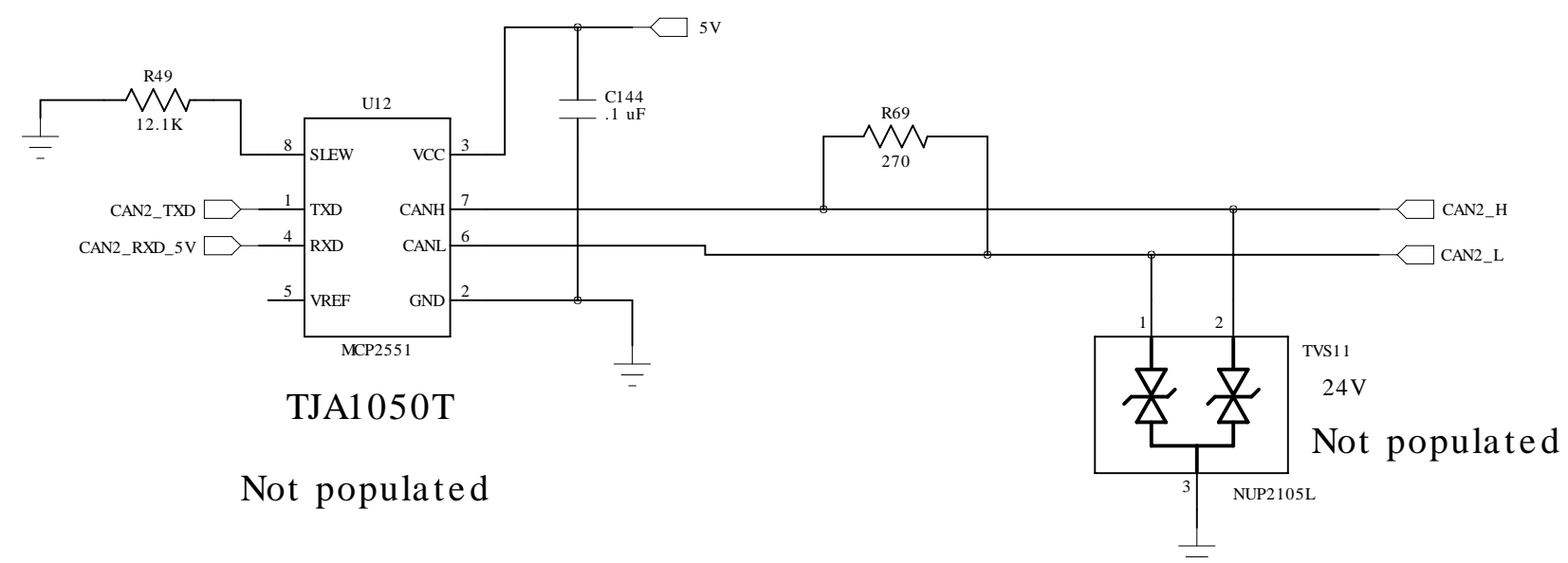
COM2 Header



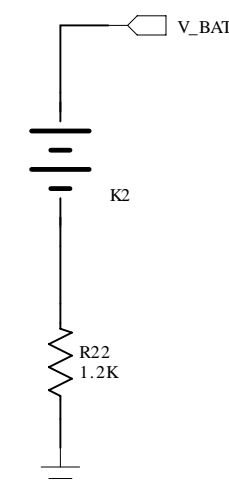
Expansion Header



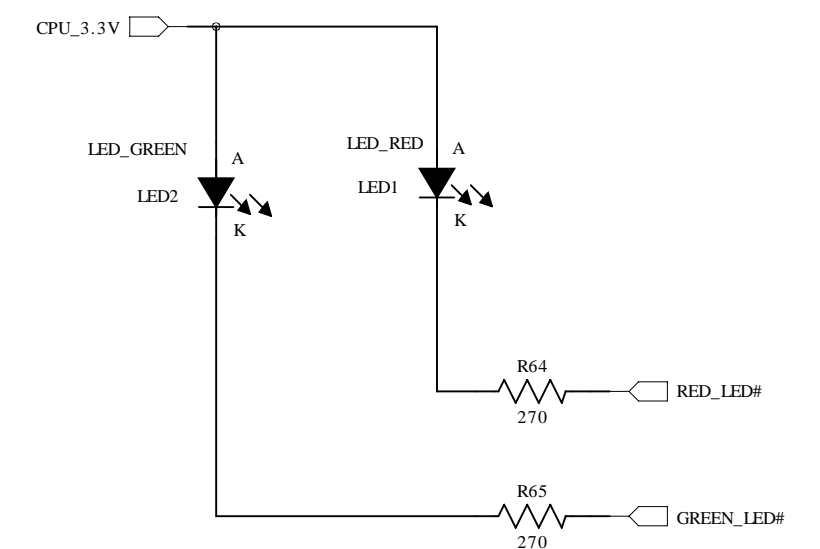
2nd CAN Tranceiver



RTC Battery

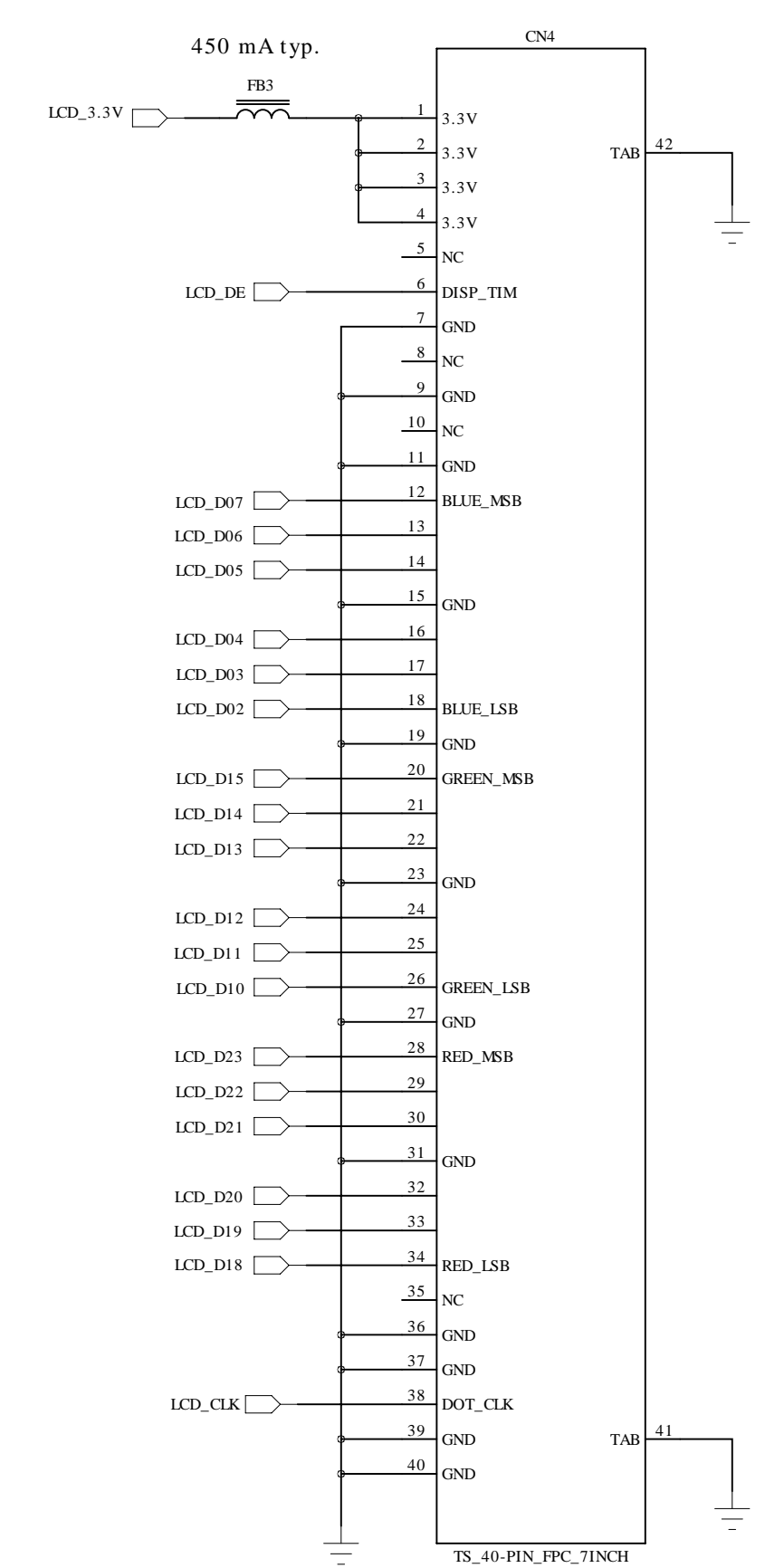
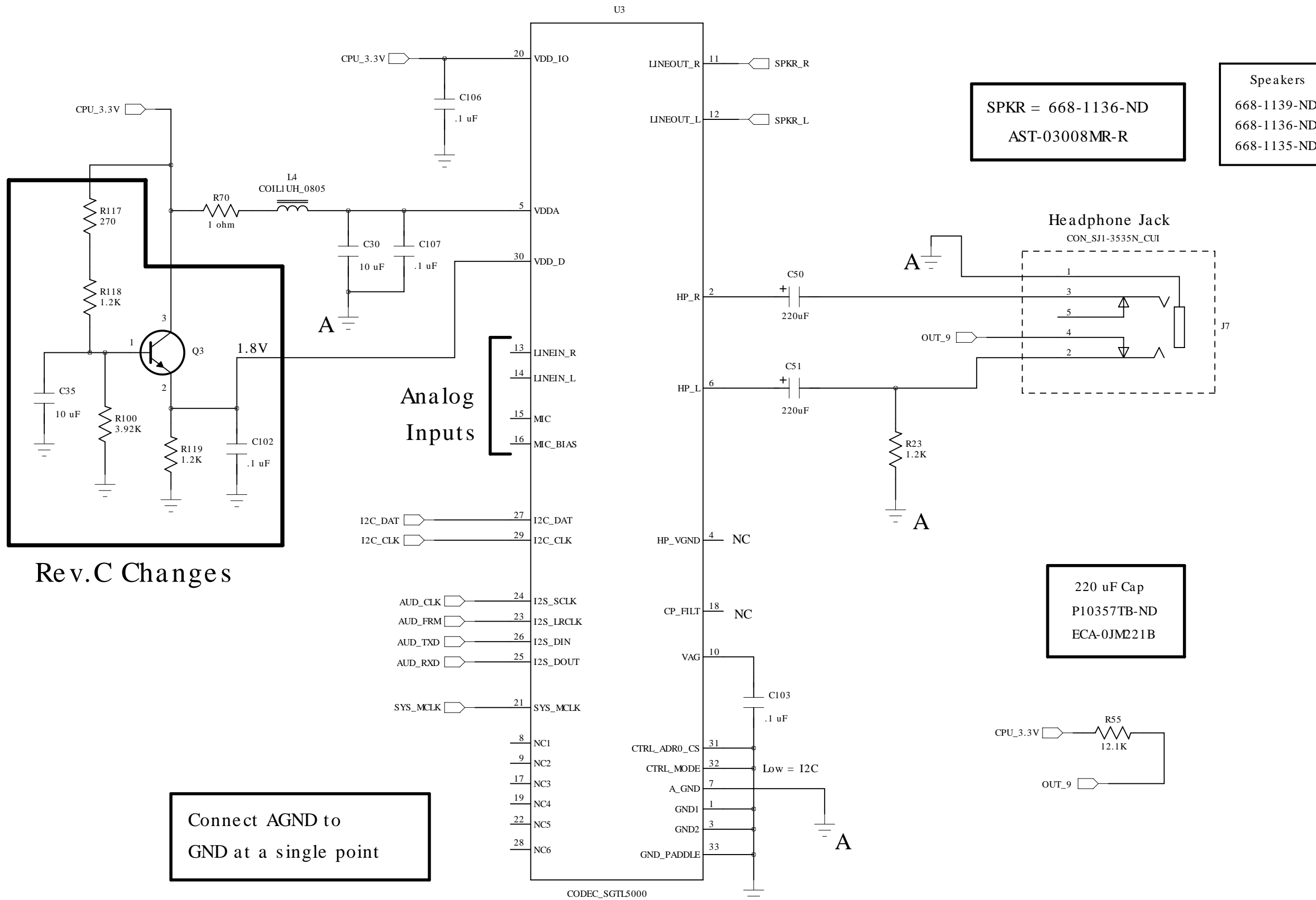


LEDs



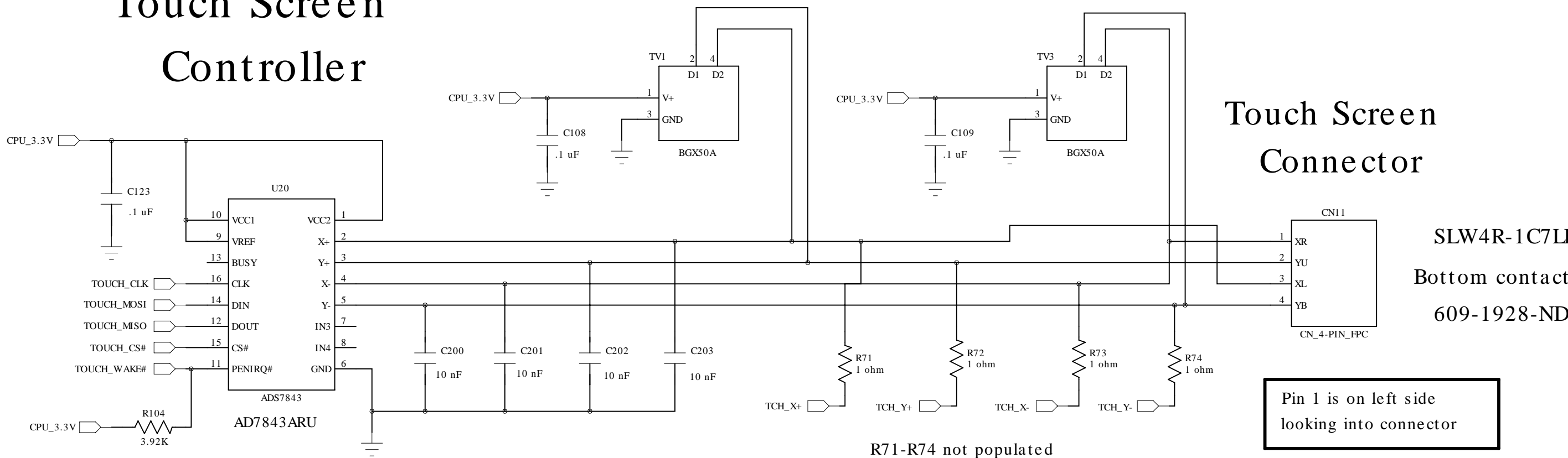
Audio CODEC

LCD Conn.



Touch Screen Controller

Touch Screen Connector



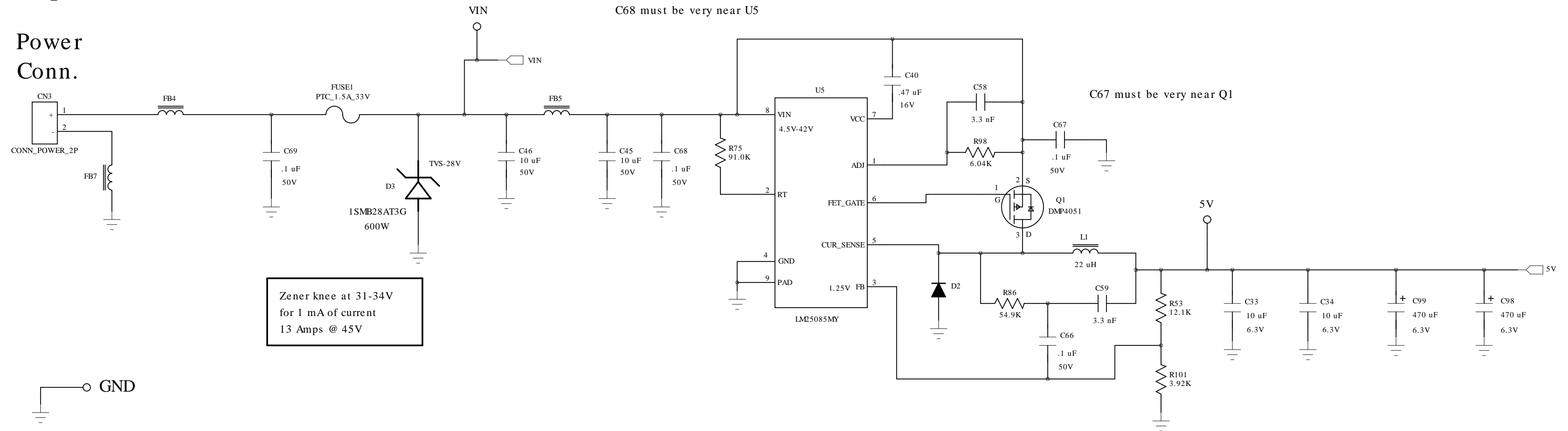
62684-402100ALF
Top contacts
609-1200-1-ND

LCD 40-pin
609-1195-1-ND
Bottom contacts
not used on this design

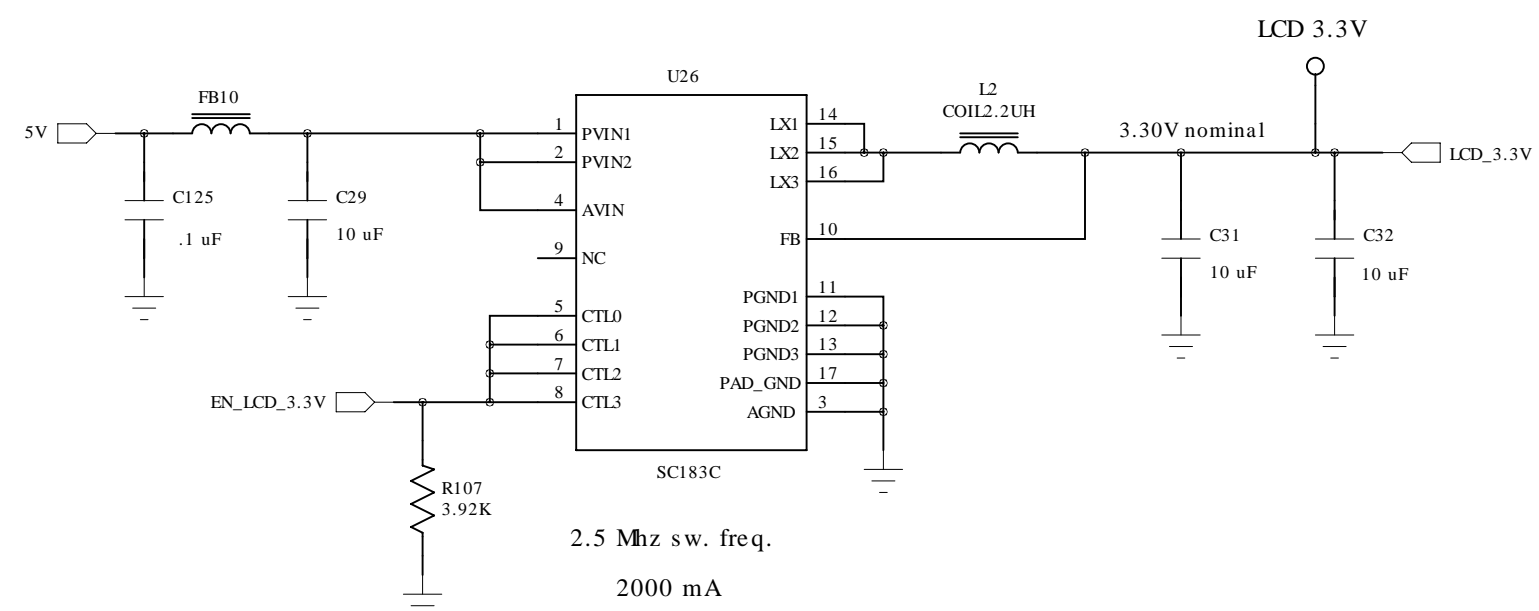
5V Power Supply (3.0 Amps)

5V to 28V
Input

Power
Conn.

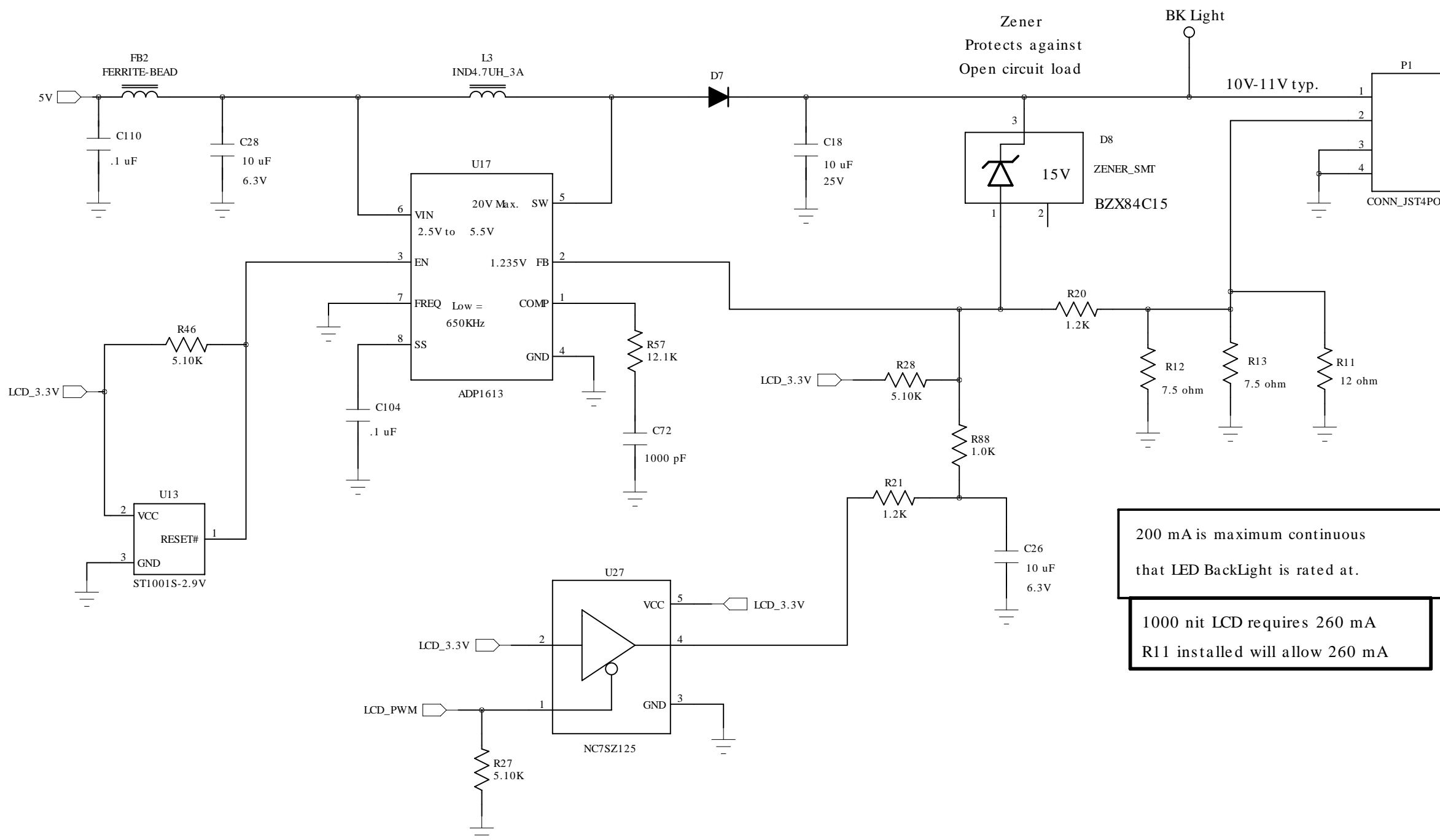


3.3V Power Supply for LCD



Technologic Systems	Date	May 19, 2014
Title:	TS-8390 5V Power, LCD 3.3V Power	
Rev: D	Designer	Sheet 6 of 10

BackLight Power

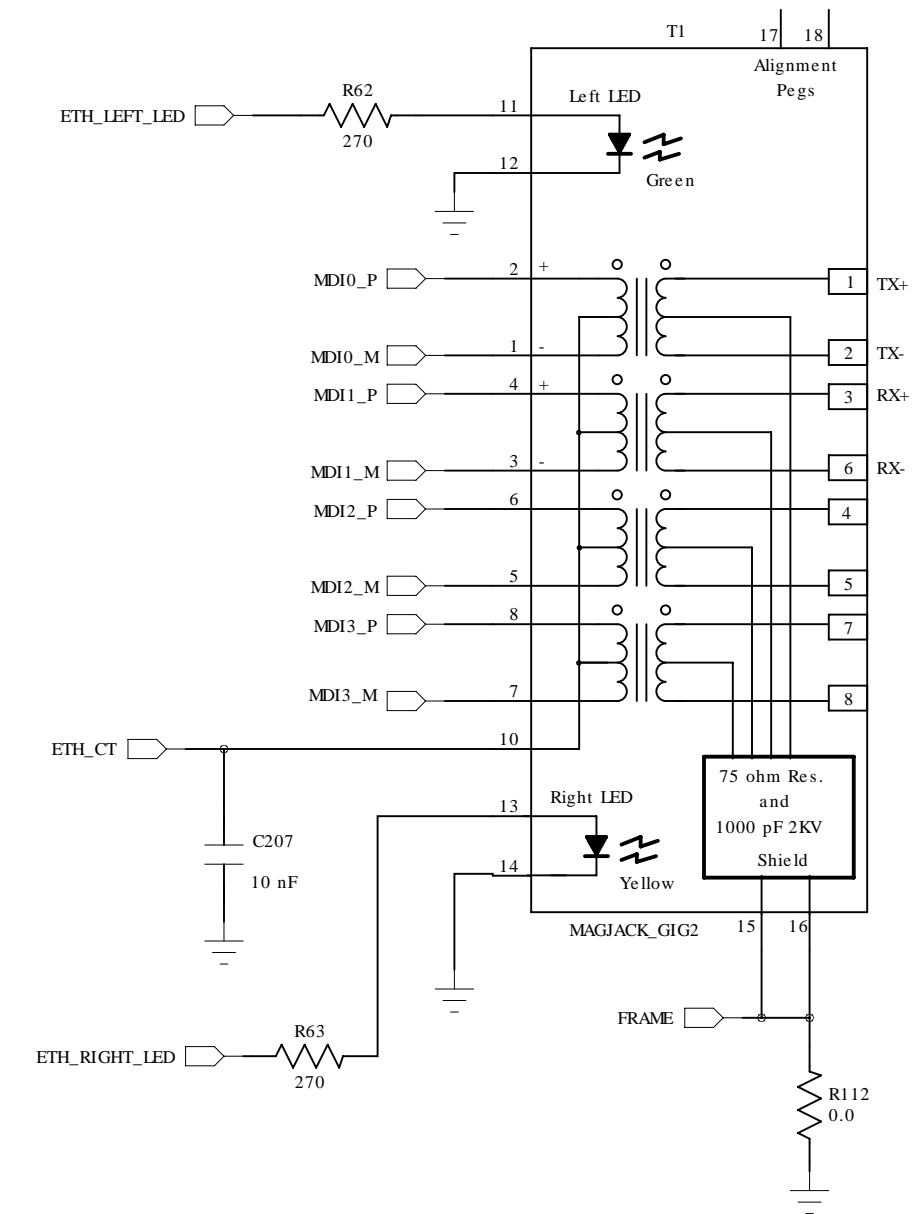


200 mA is maximum continuous that LED BackLight is rated at.

1000 nit LCD requires 260 mA

R11 installed will allow 260 mA

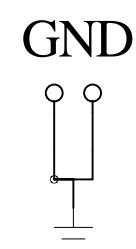
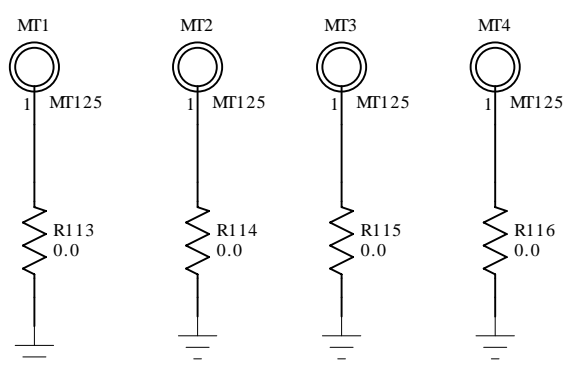
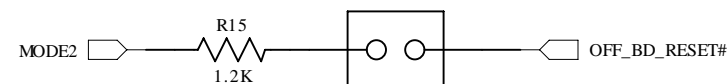
Gig MagJack



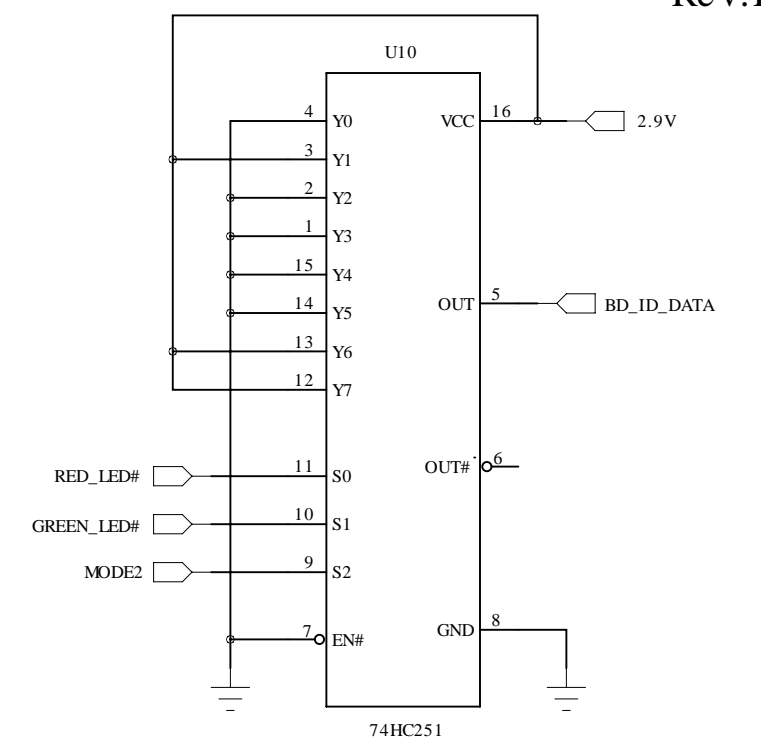
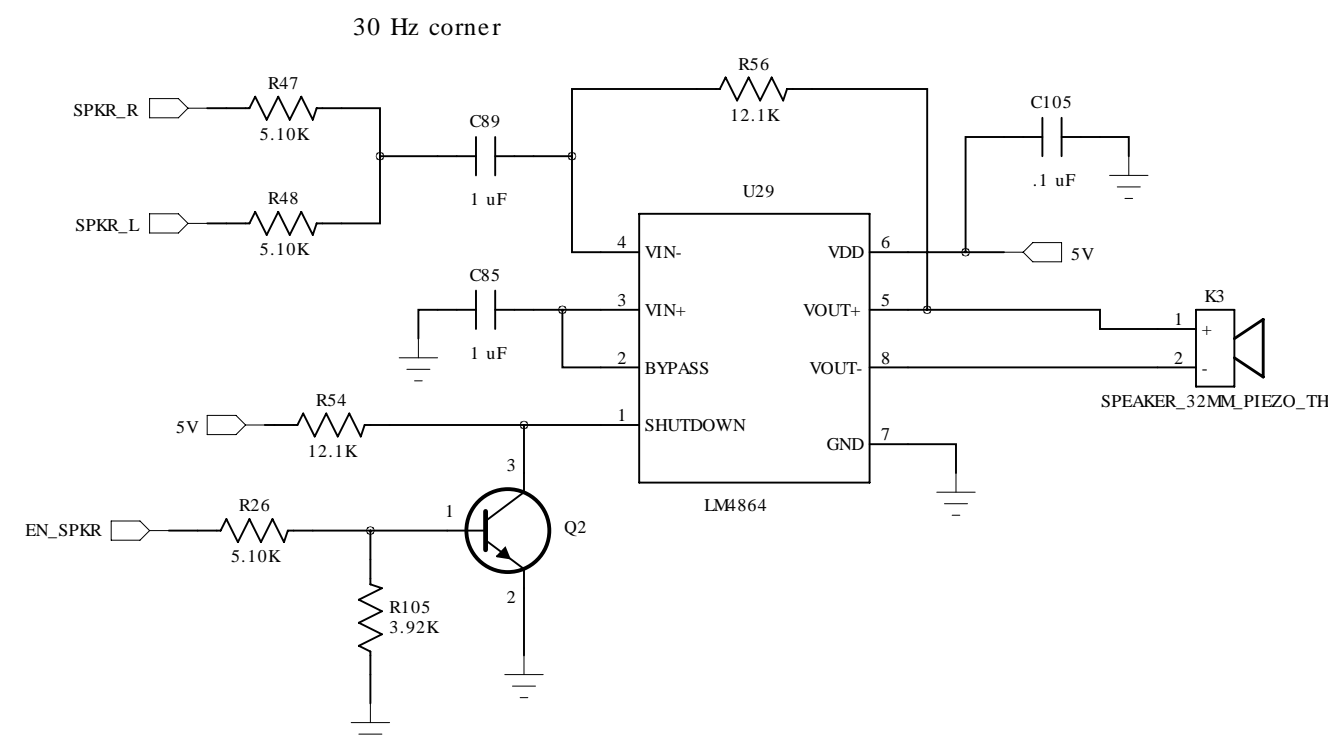
Board ID = 2 + 192

Rev.D

Force Boot to SD card



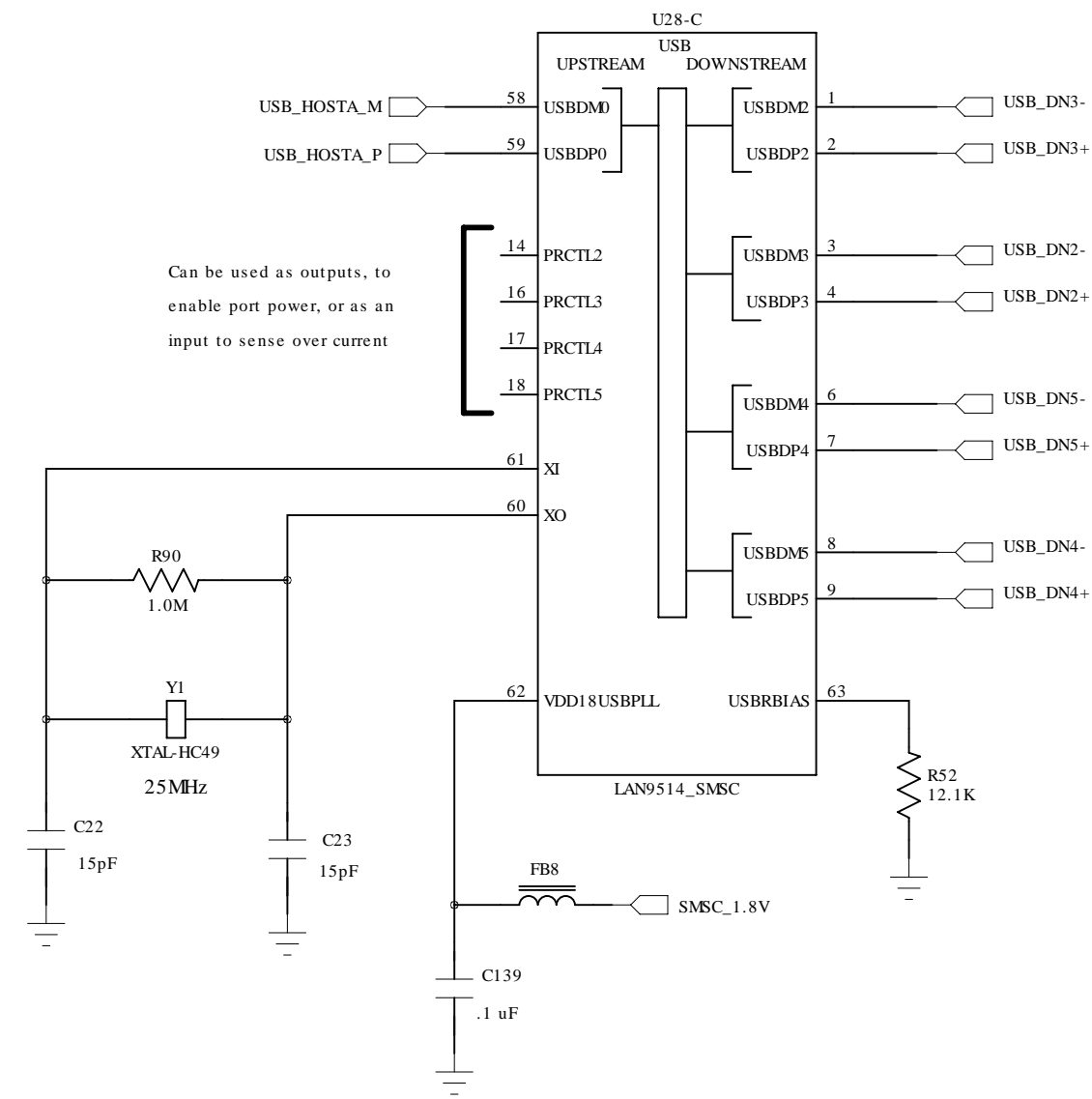
Speaker Amp



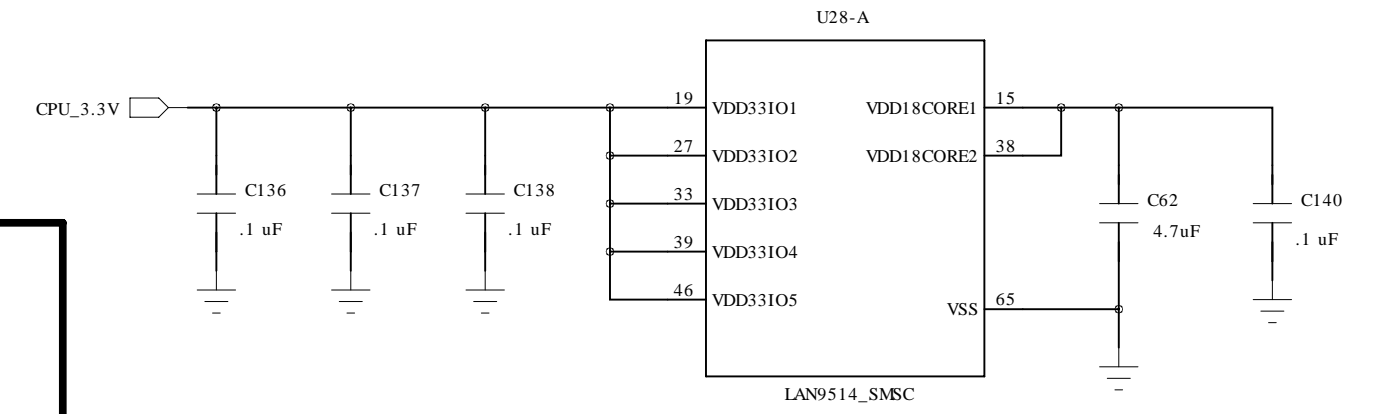
Technologic Systems		Date	May 19, 2014
Title: TS-8390		Backlight Power Ethernet	
Rev: D	Designer	RLM	Sheet 7 of 10

2nd Ethernet Port

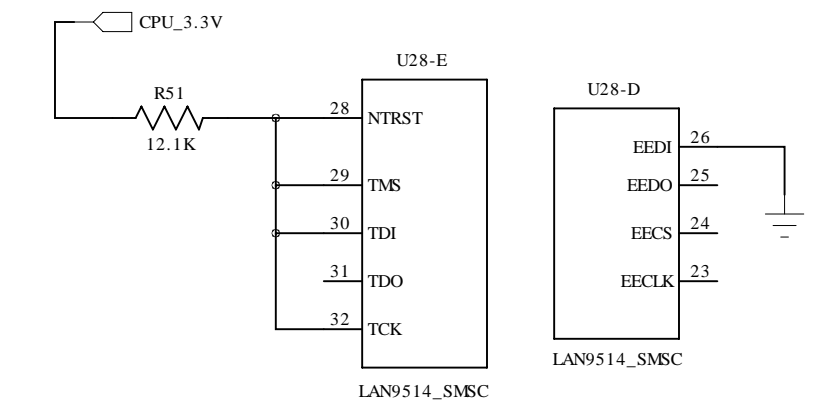
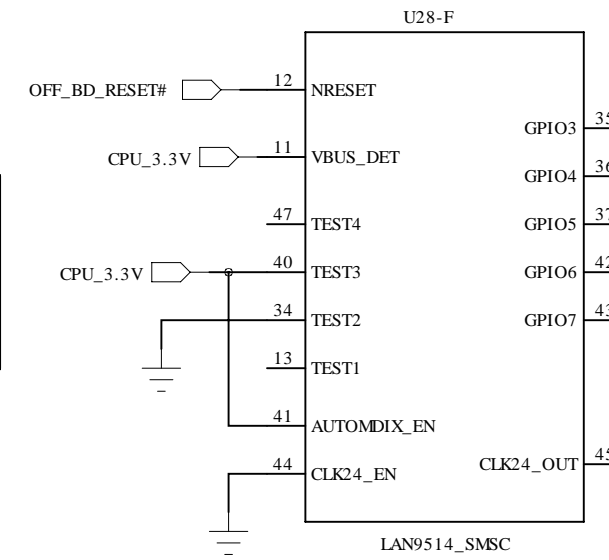
SMSC USB Hub



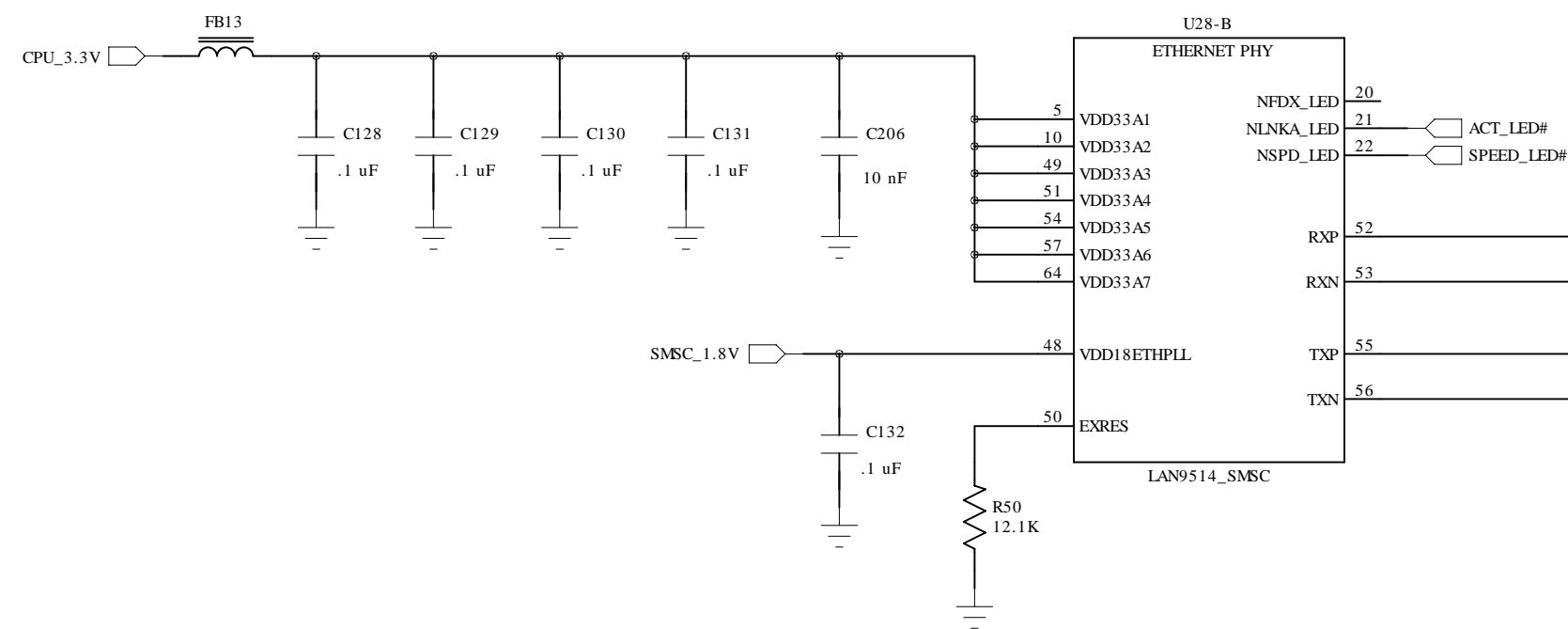
Typical 3.3V current
with all ports active
is 288 mA (950 mw)



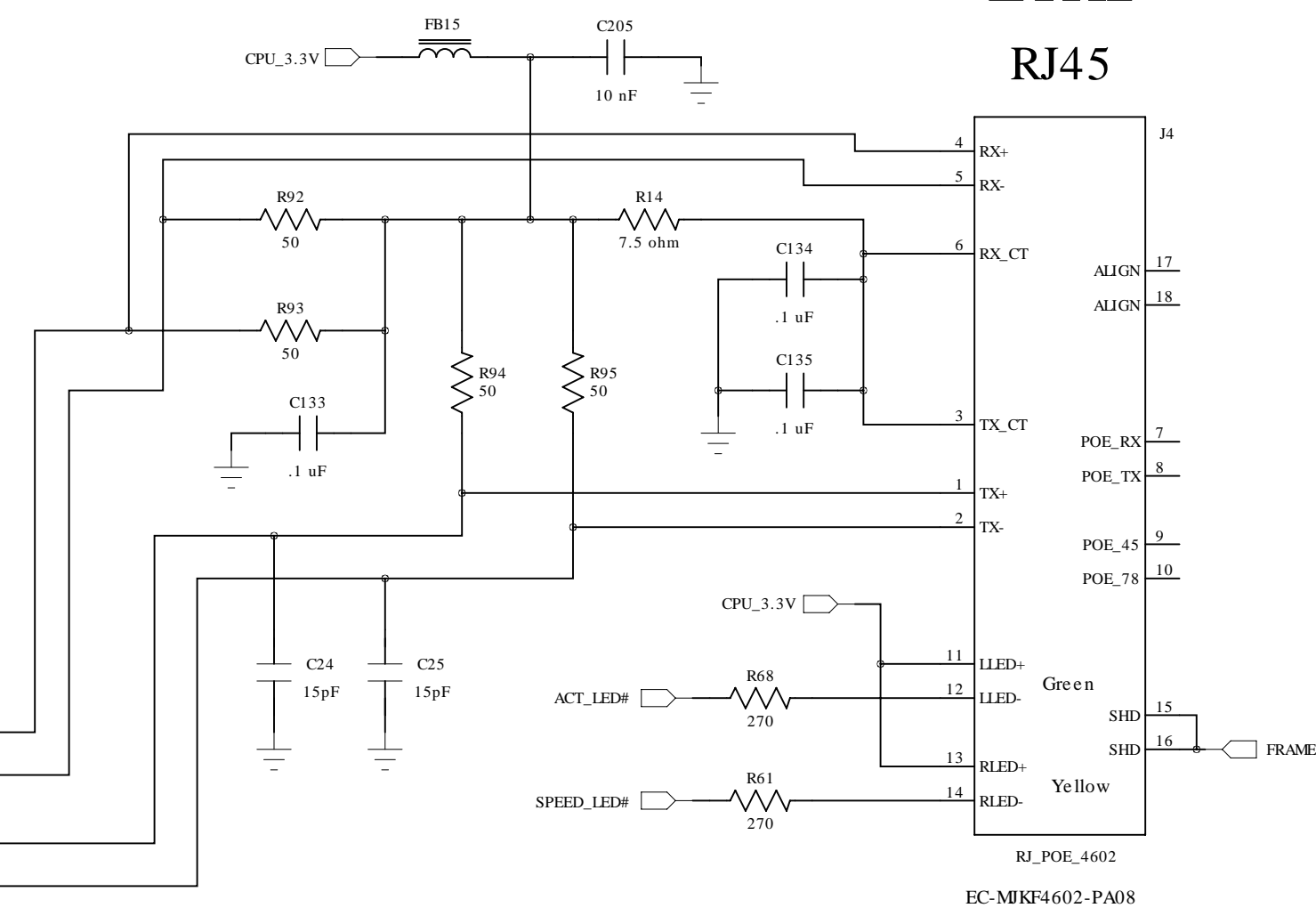
Test pins:
must be as
wired as shown



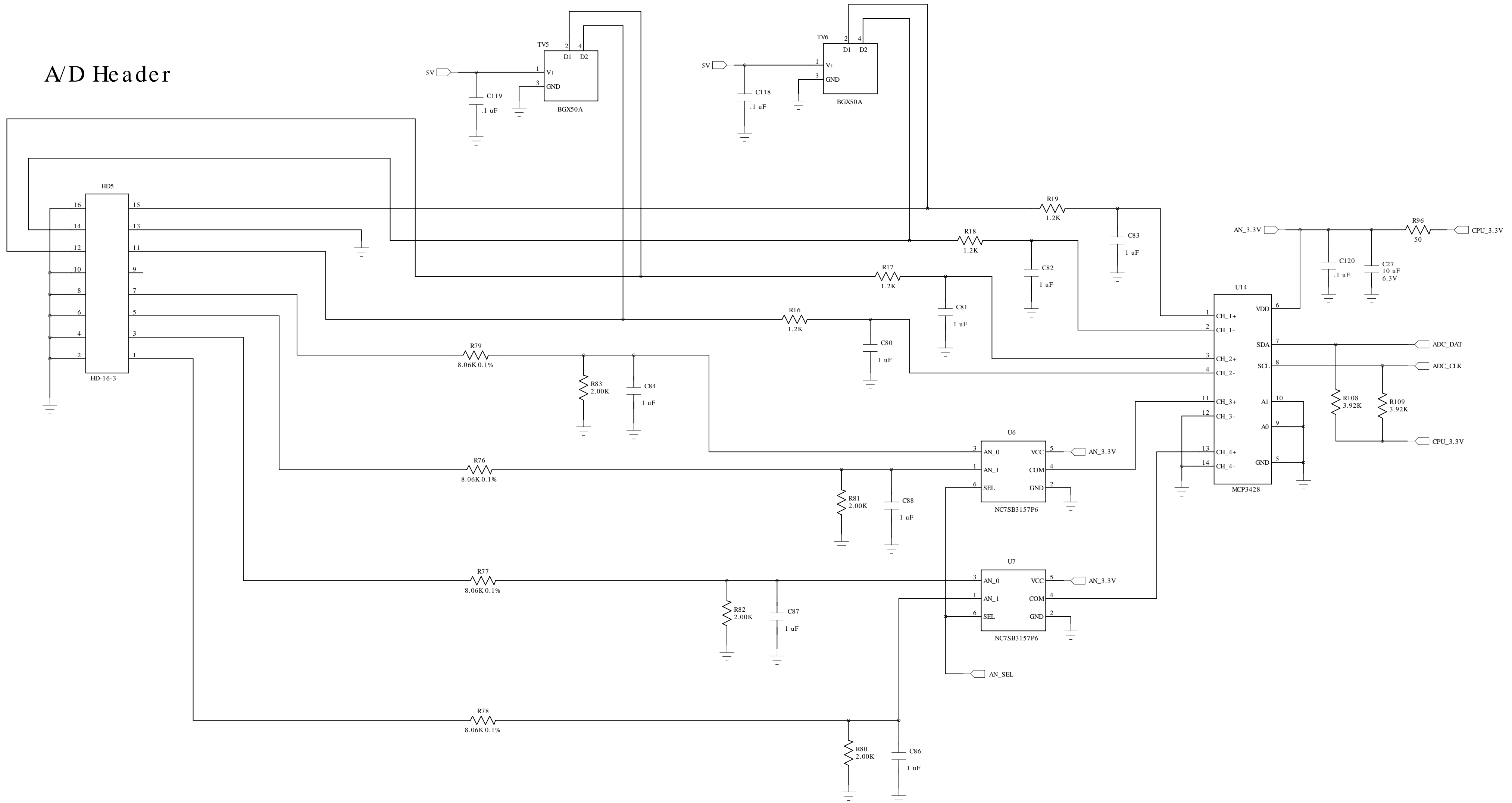
SMSC Ethernet Port



ETH2 RJ45



16-bit A/D Converter



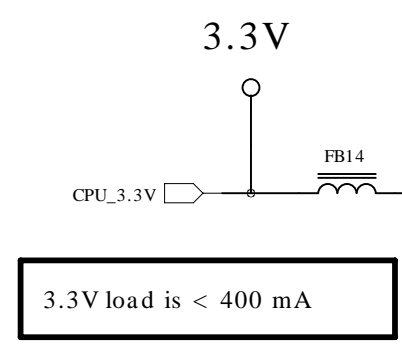
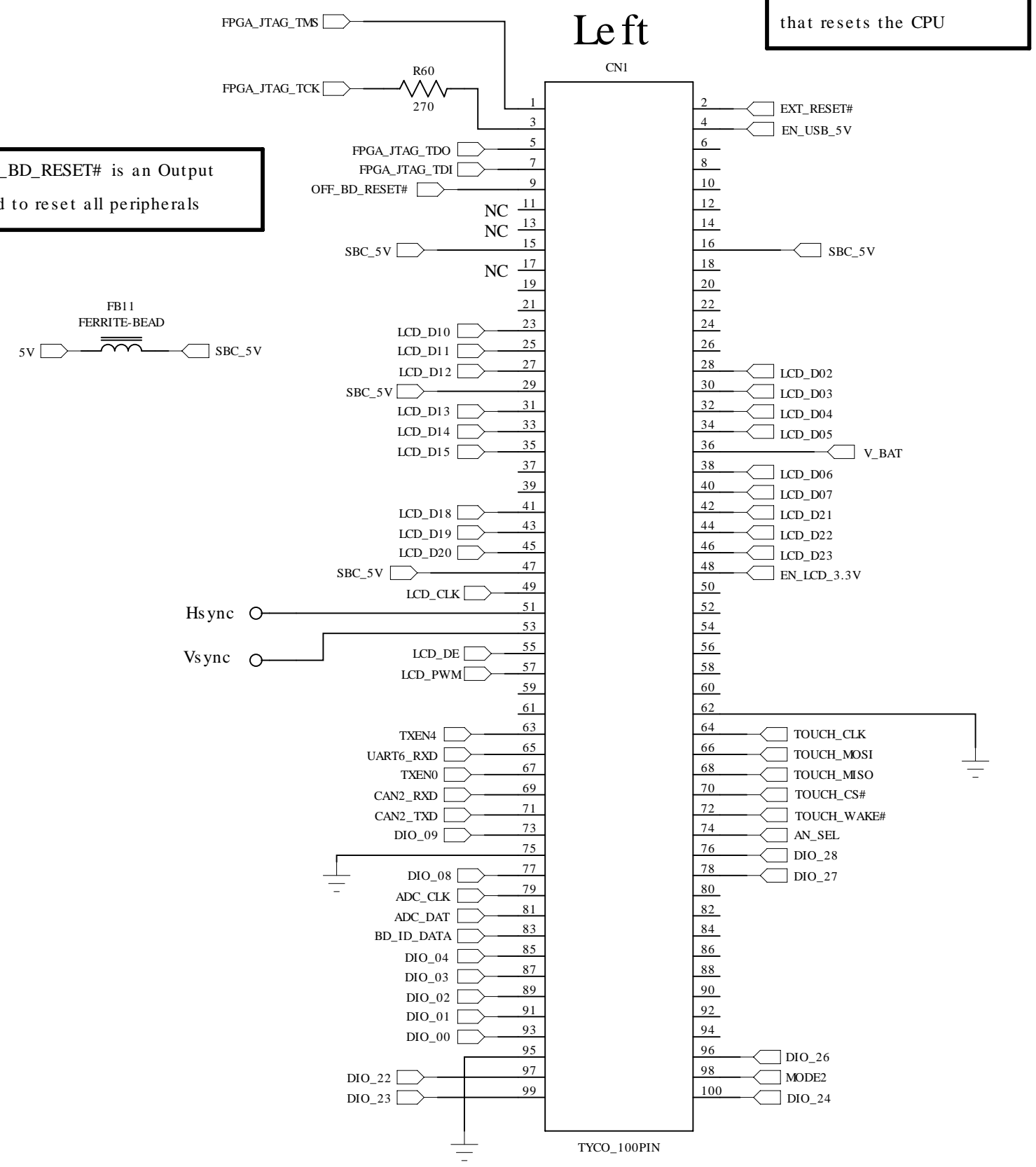
Two 100-pin Module Connectors

Left

EXT_RESET# is an Input
that resets the CPU

Right

OFF_BD_RESET# is an Output
used to reset all peripherals

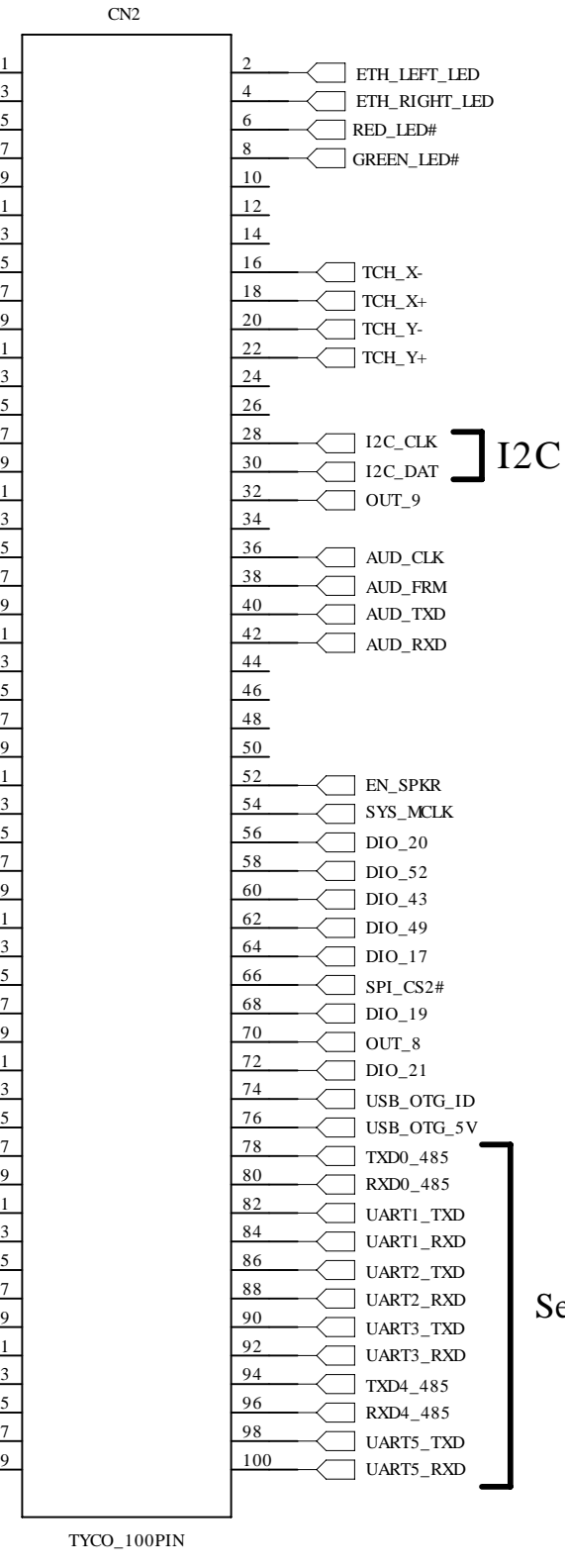


Gigabit Ethernet

USB Ports

SPI

Console
CAN



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