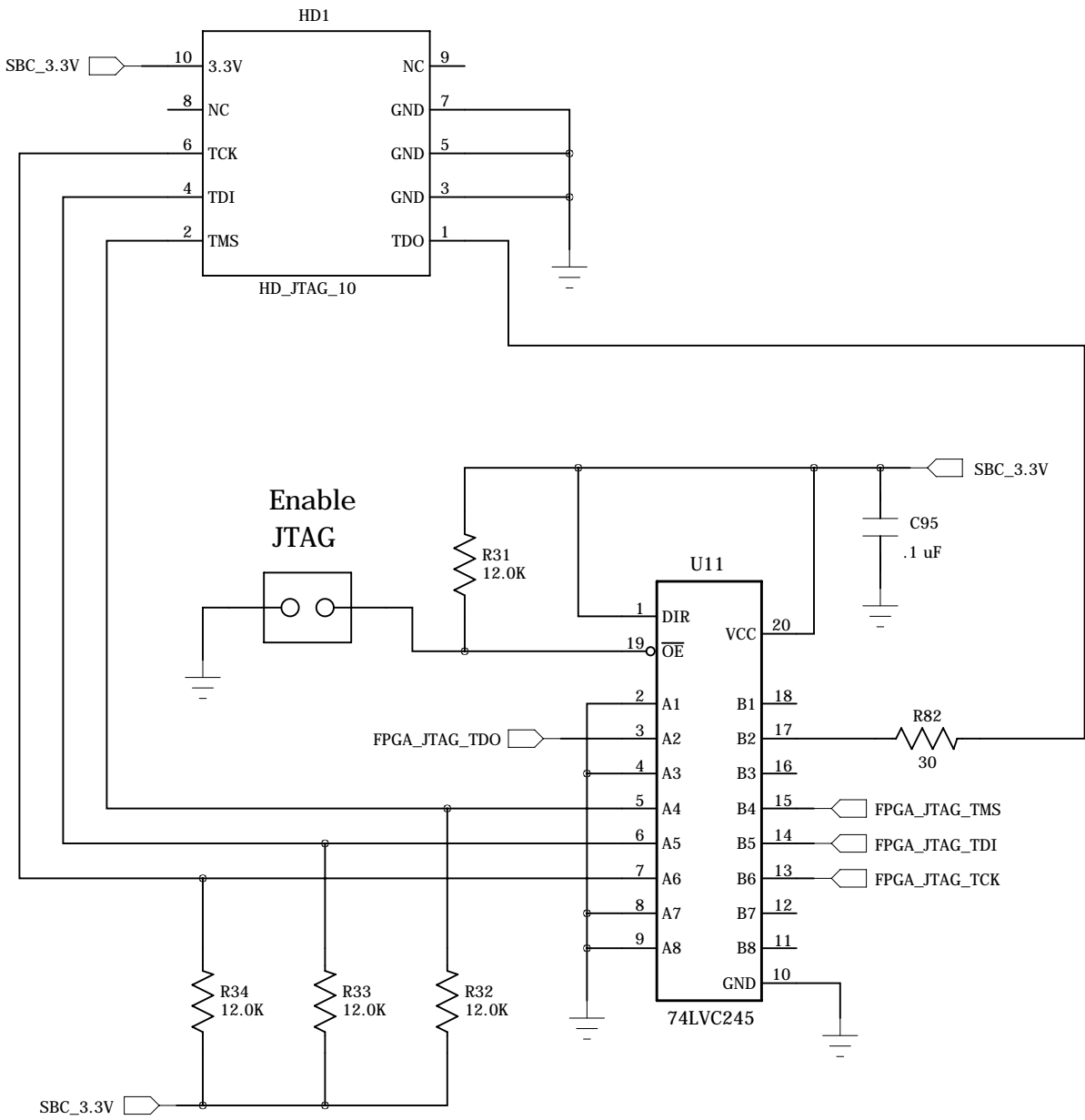
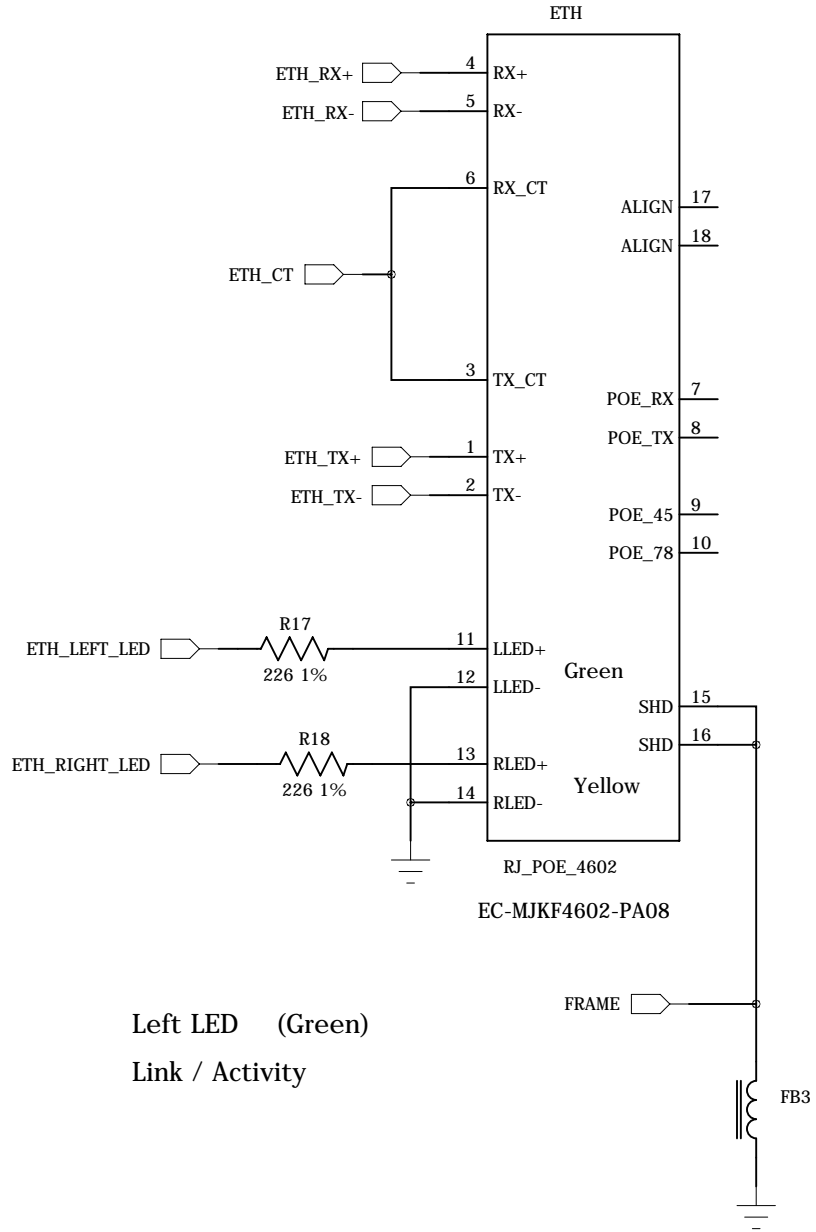


# TS-8500

## FPGA JTAG Header

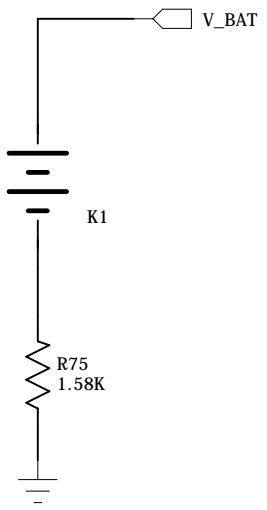


## 10/100 Ethernet

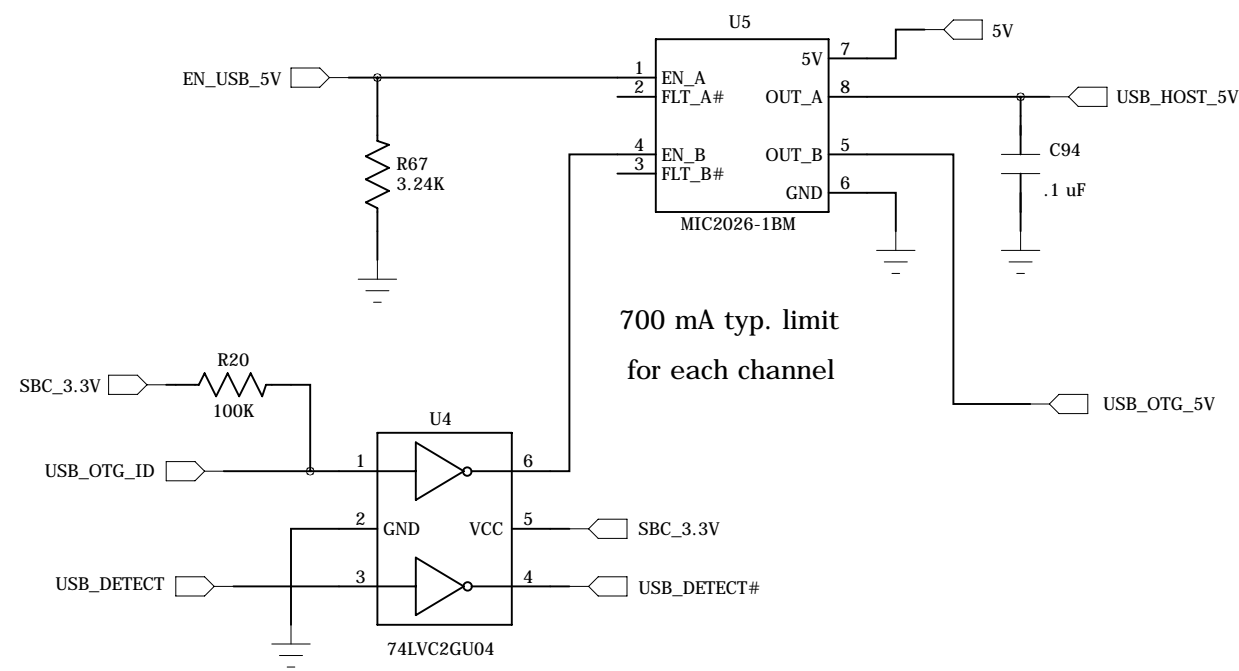


Left LED (Green)  
Link / Activity

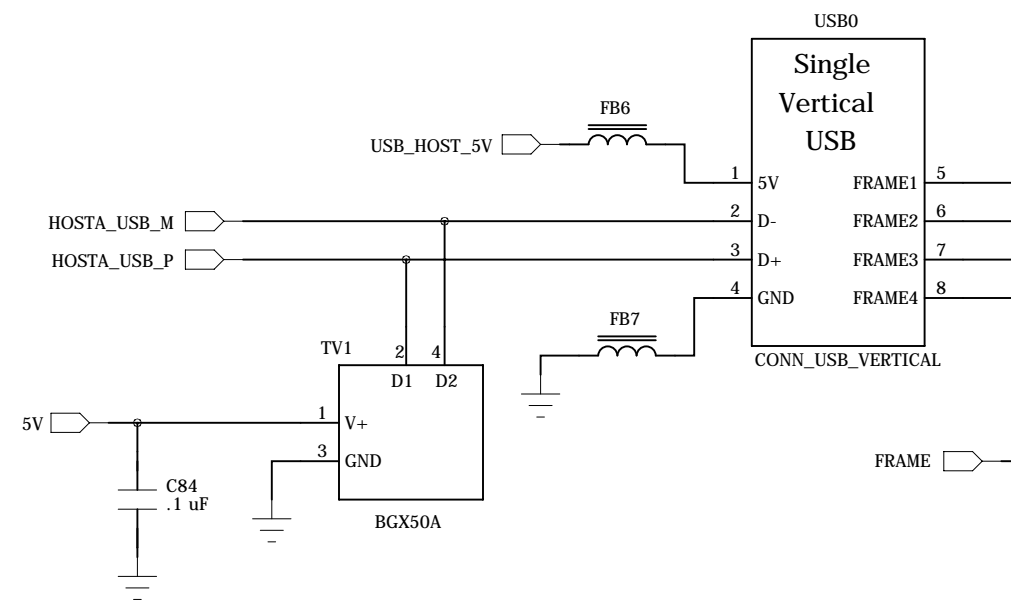
## RTC Battery



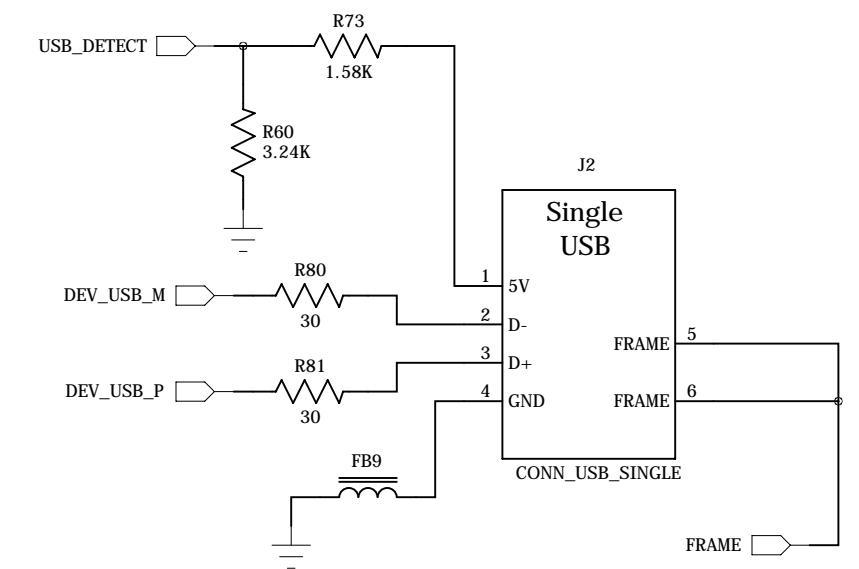
# USB Power Switch



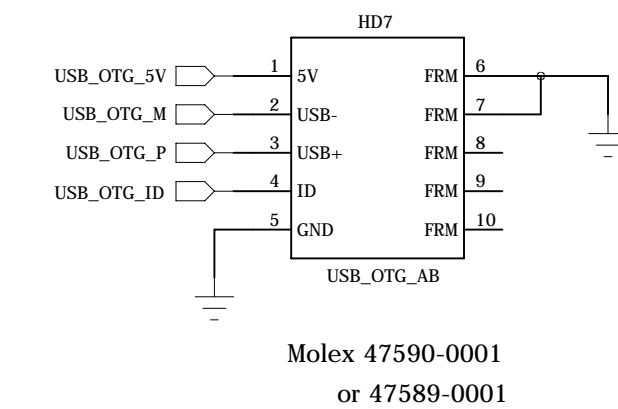
# Host USB



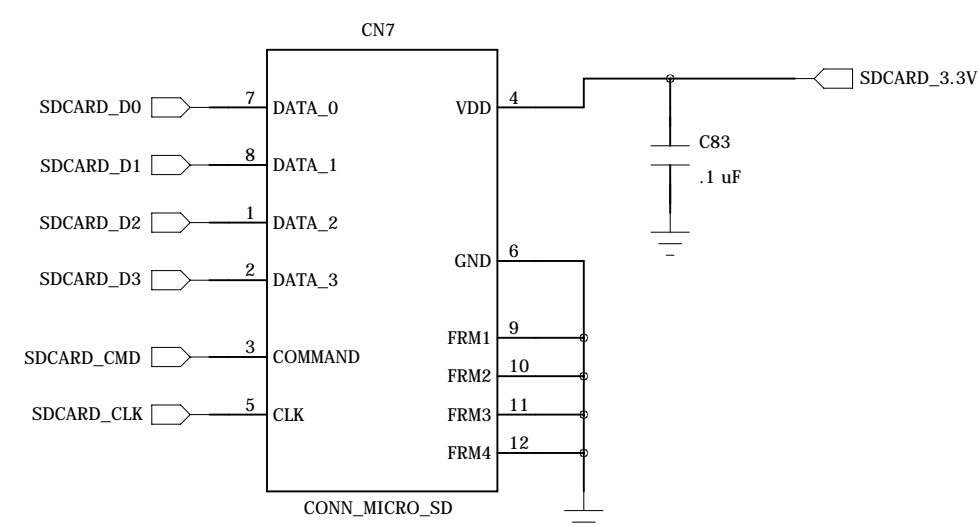
# USB Device



# USB Micro A/B OTG Port



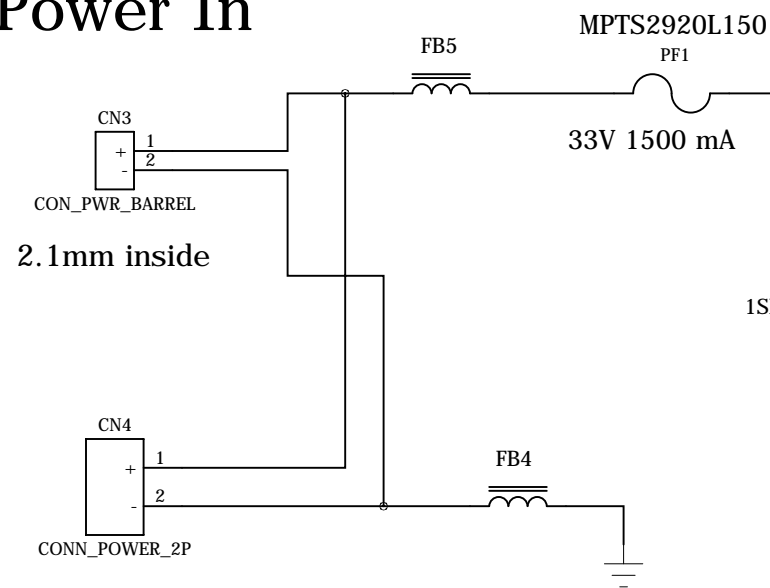
# Micro SD Card Socket



Technologic Systems	Date Aug. 5, 2010
Title: TS-8500 USB, SD socket	
Rev:	Designer
Sheet 2 of 7	

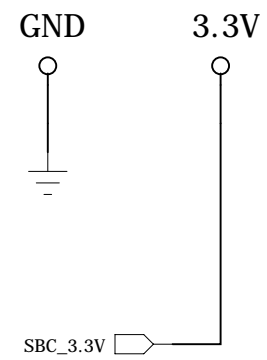
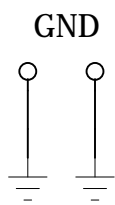
# 5V to 12V

## Power In

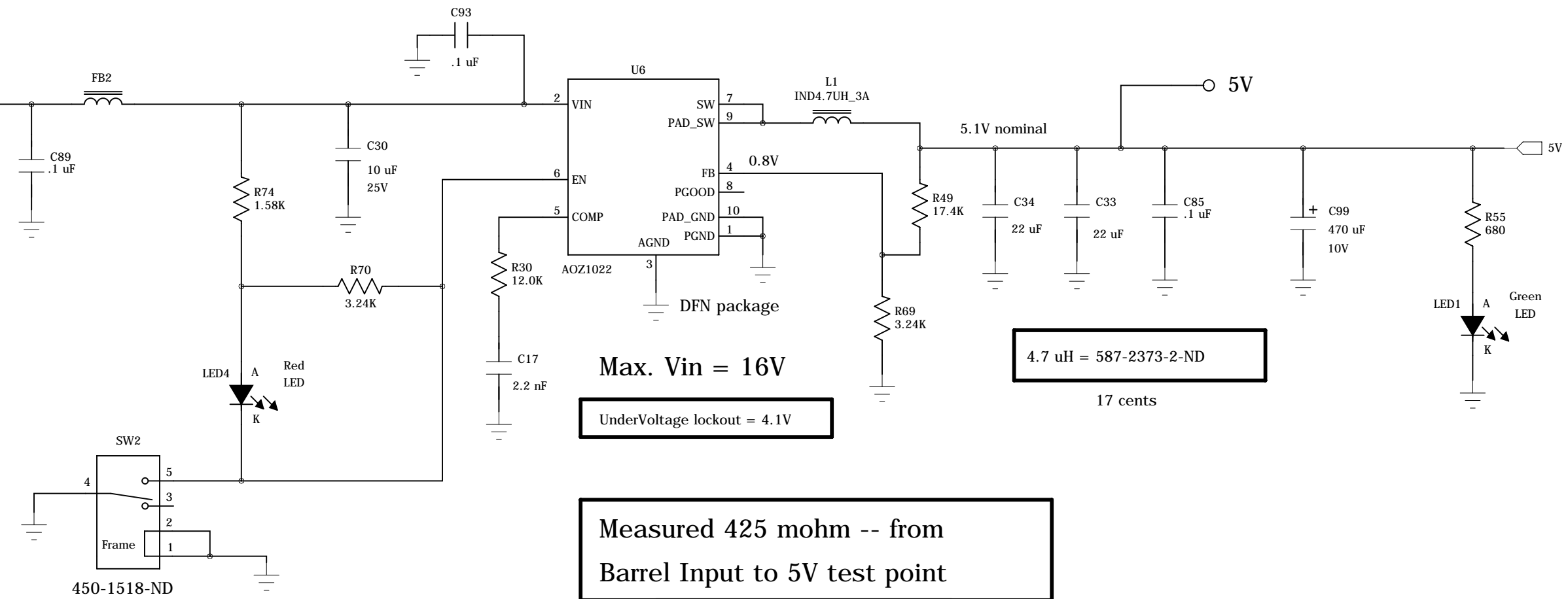


5011K-ND = Black

.063 hole



# 5V Regulator



Max. Vin = 16V

UnderVoltage lockout = 4.1V

Measured 425 mohm -- from Barrel Input to 5V test point

with 5.0V at Input

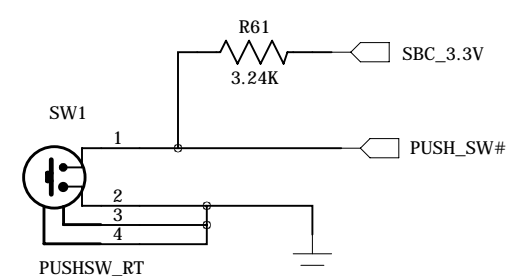
PolyFuse	mohms
1500 mA 33V	122

Ferrite beads = 32 mohm

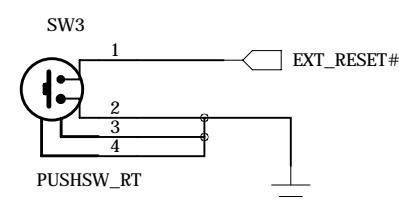
## Power Switch

# Force Boot to SD card

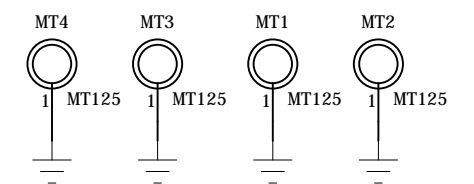
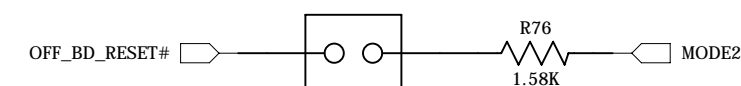
## Push Switch



## Reset Switch



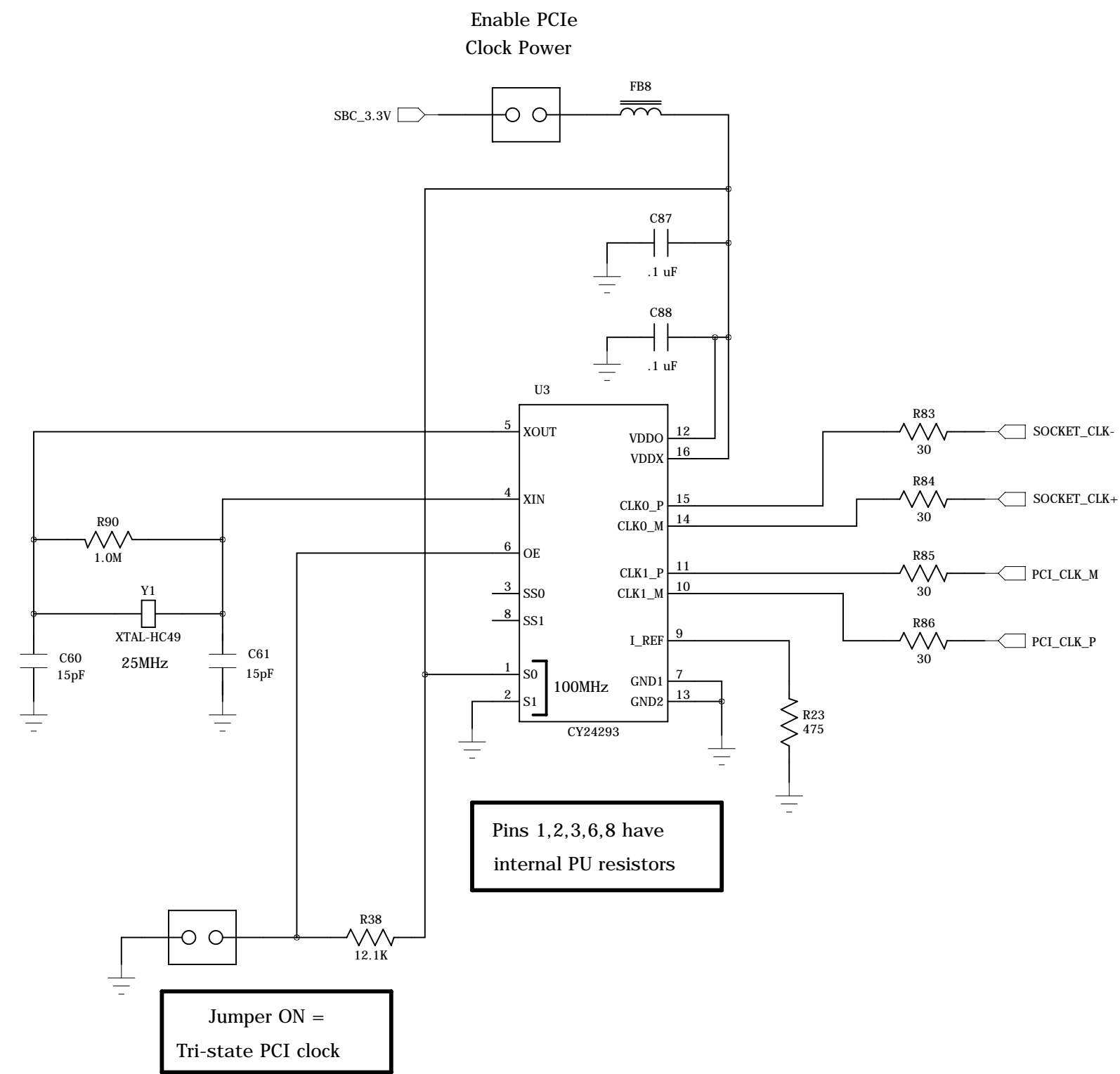
## En. SD Boot



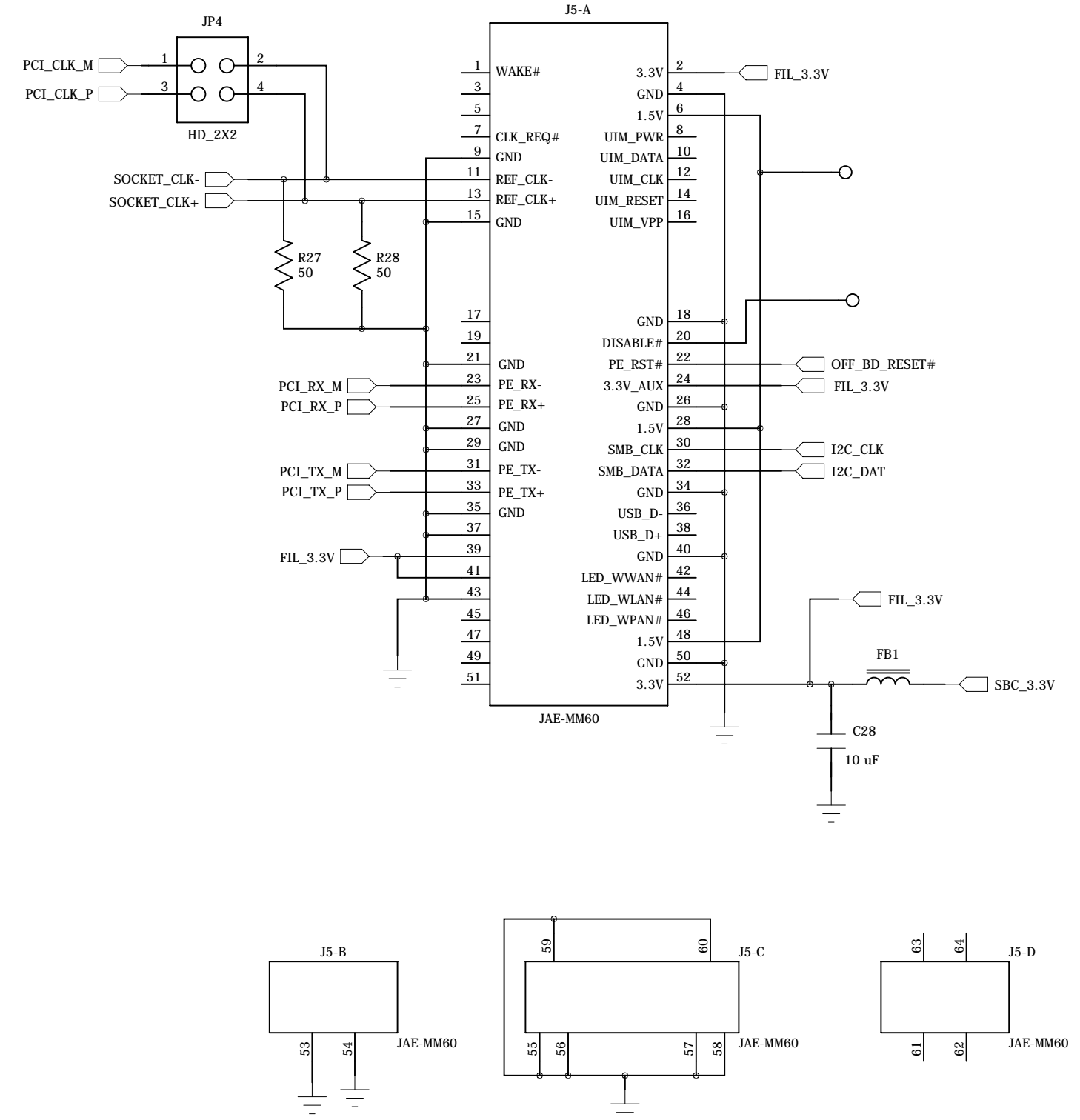
Technologic Systems	Date Aug. 5, 2010
Title: TS-8500 Power IN, Push Sw. Jumpers	
Rev:	Designer RLM Sheet 3 of 7



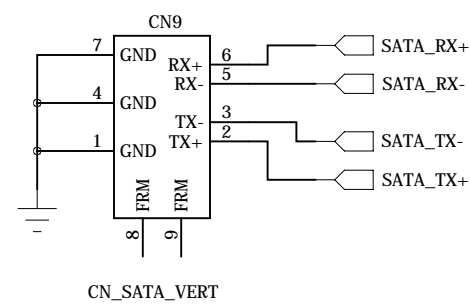
# TS-8210



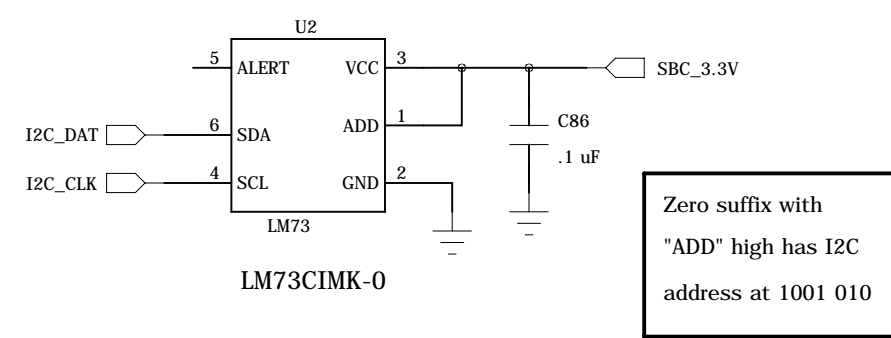
# Mini PCIe Socket



# SATA Port

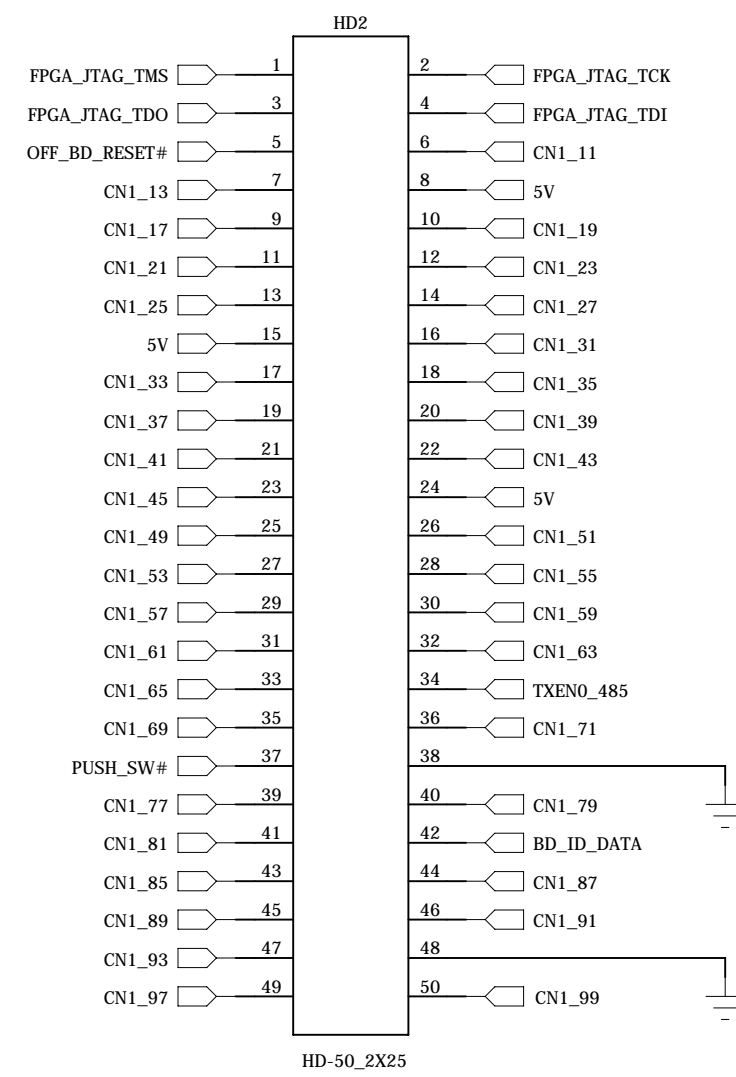


# Temp Sensor

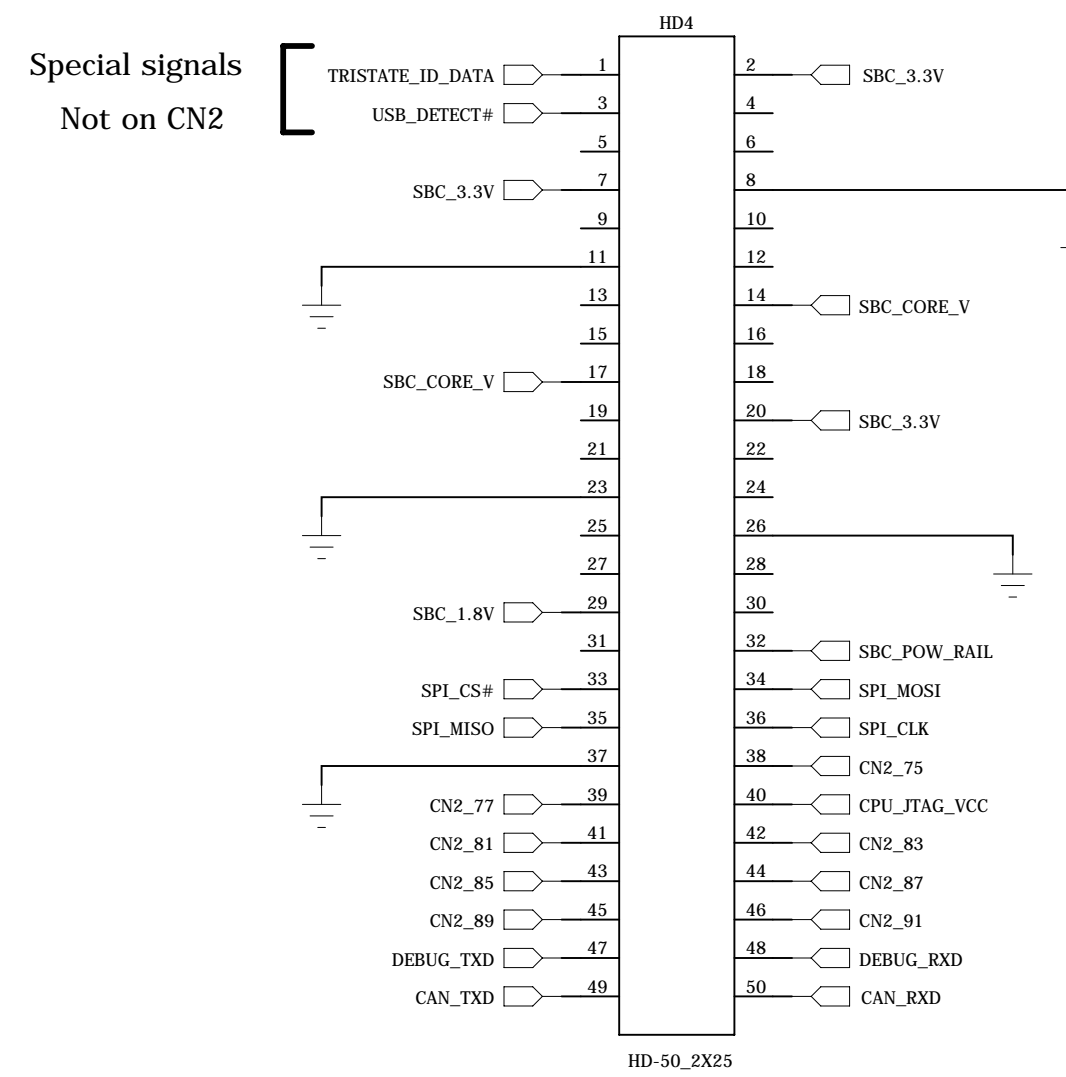


Technologic Systems		Date Aug. 5, 2010
Title: TS-8500 PCIe and SATA		
Rev:	Designer RLM	Sheet 5 of 7

# CN1 Odd Pins



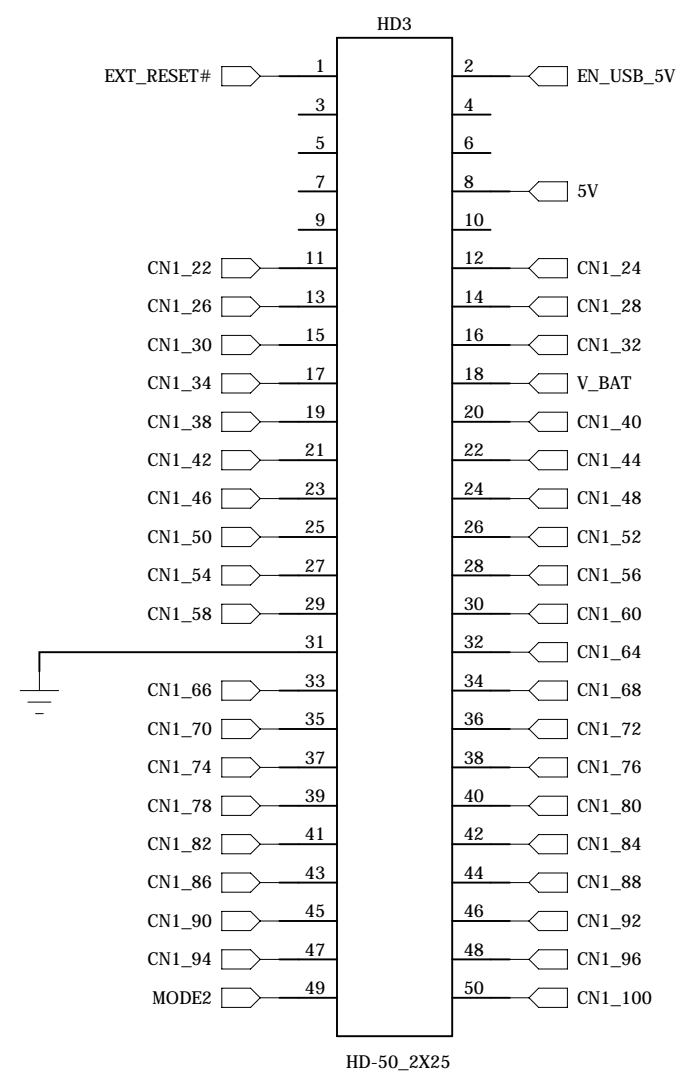
# CN2 Odd Pins



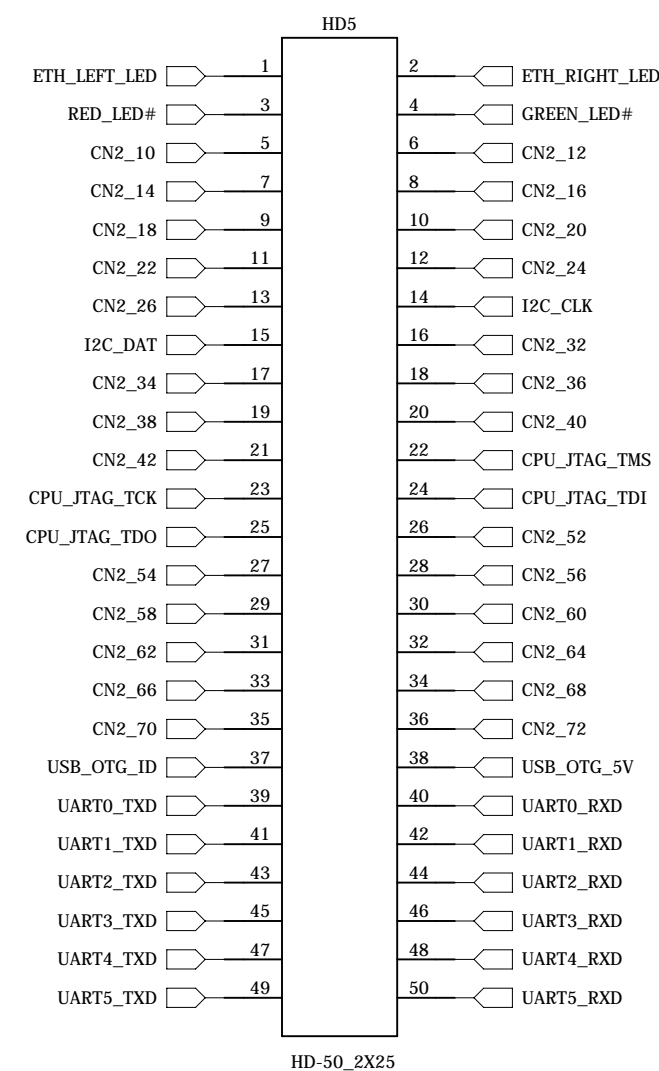
High-speed differential pairs are not routed to these headers

USB, SATA, Ethernet, SD card, PCIe and Ethernet pairs are not connected because this would mismatch the transmission lines.

# CN1 Even Pins



# CN2 Even Pins



# Two 100-pin Module Connectors

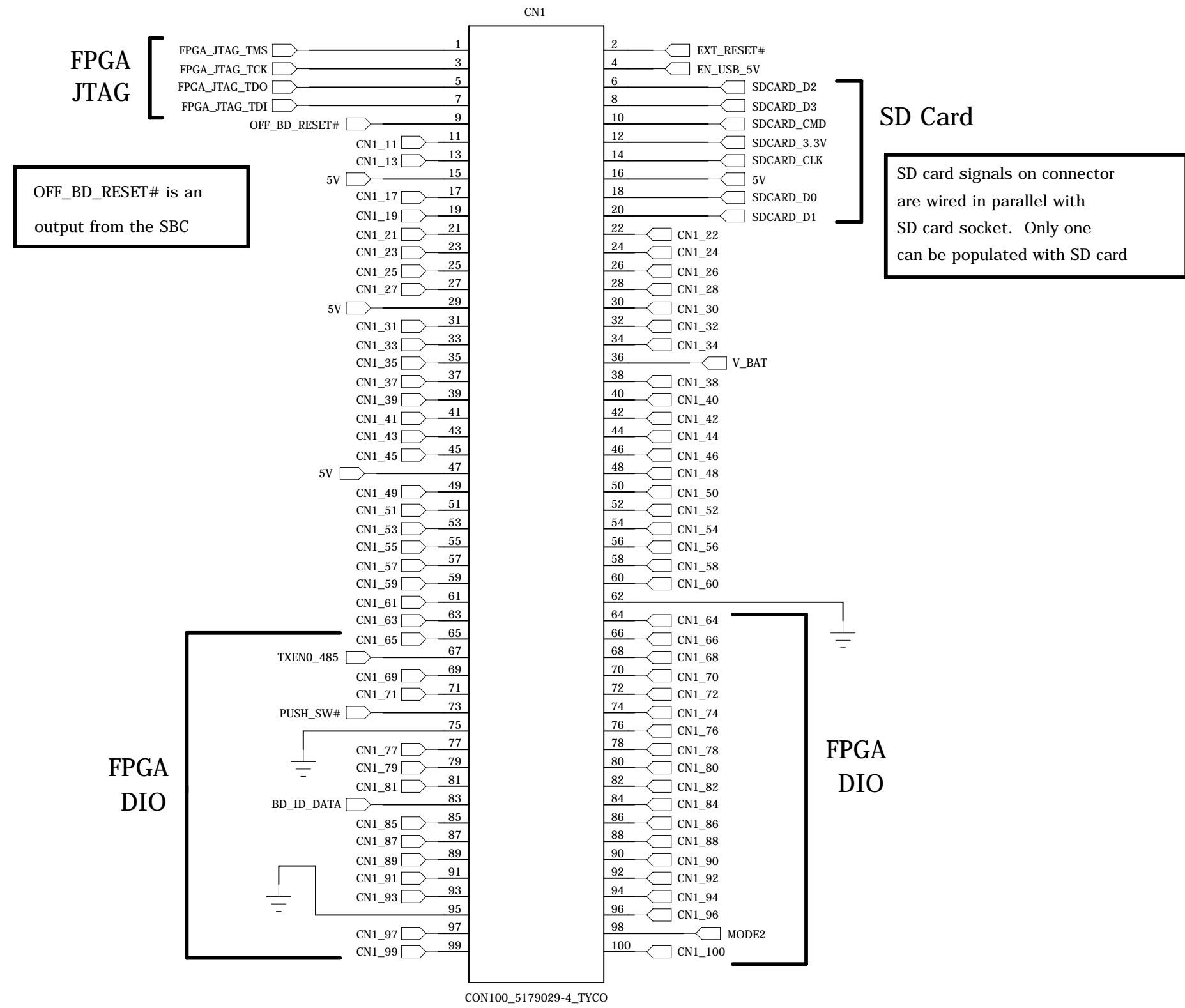
"5V" pins supply all power to the module  
Apply 4.5V to 5.5V to these pins

Current drain is < 600 mA  
(less than 3 Watts)

EXT\_RESET# is an Input to the  
SBC used to reboot the CPU  
  
Do not drive active high  
(use open drain)

Left

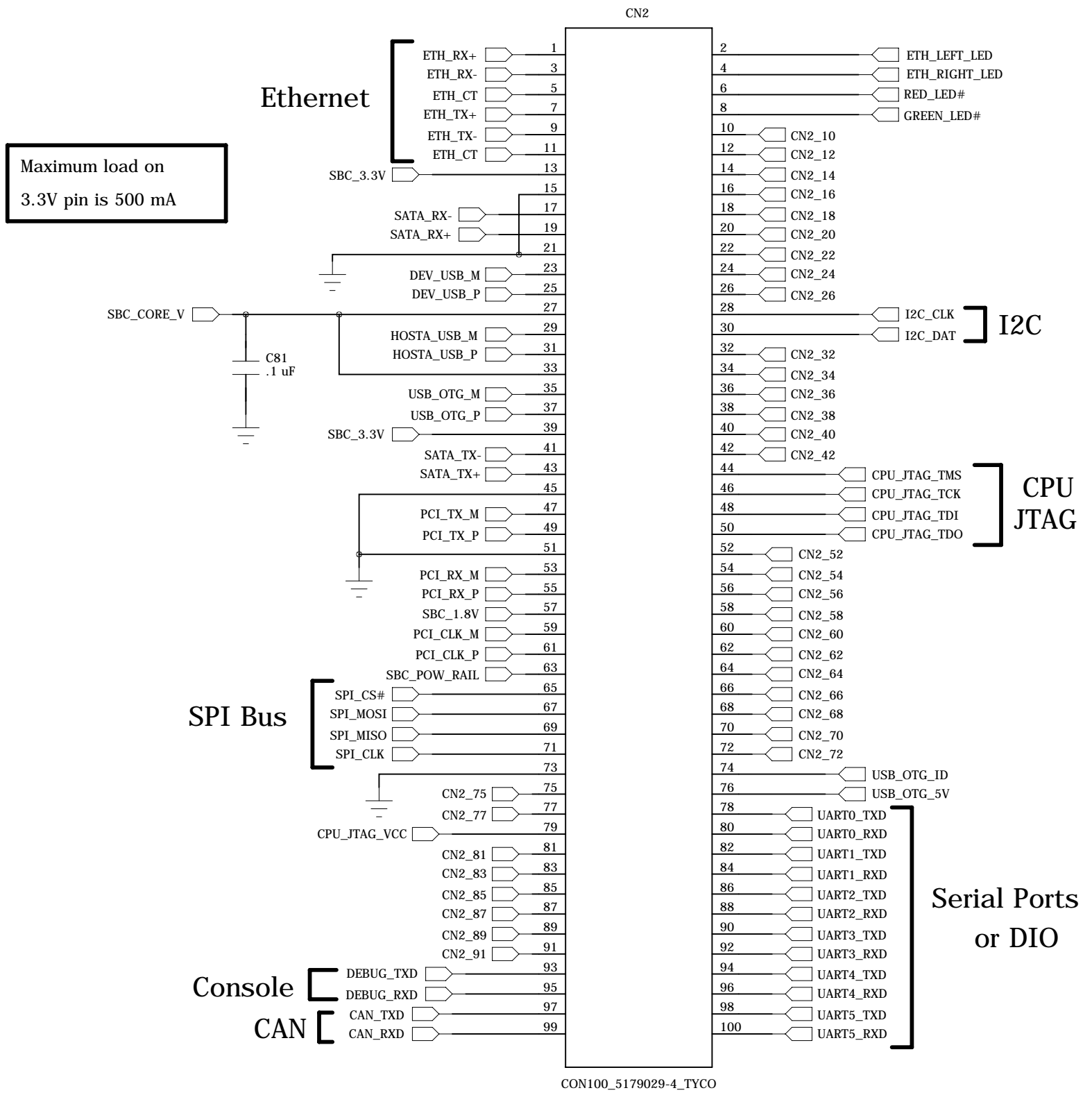
Right



OFF\_BD\_RESET# is an  
output from the SBC

SD Card  
  
SD card signals on connector  
are wired in parallel with  
SD card socket. Only one  
can be populated with SD card

Maximum load on  
3.3V pin is 500 mA



Mode 2	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

Use 1.5K ohm resistor  
to GND to set low