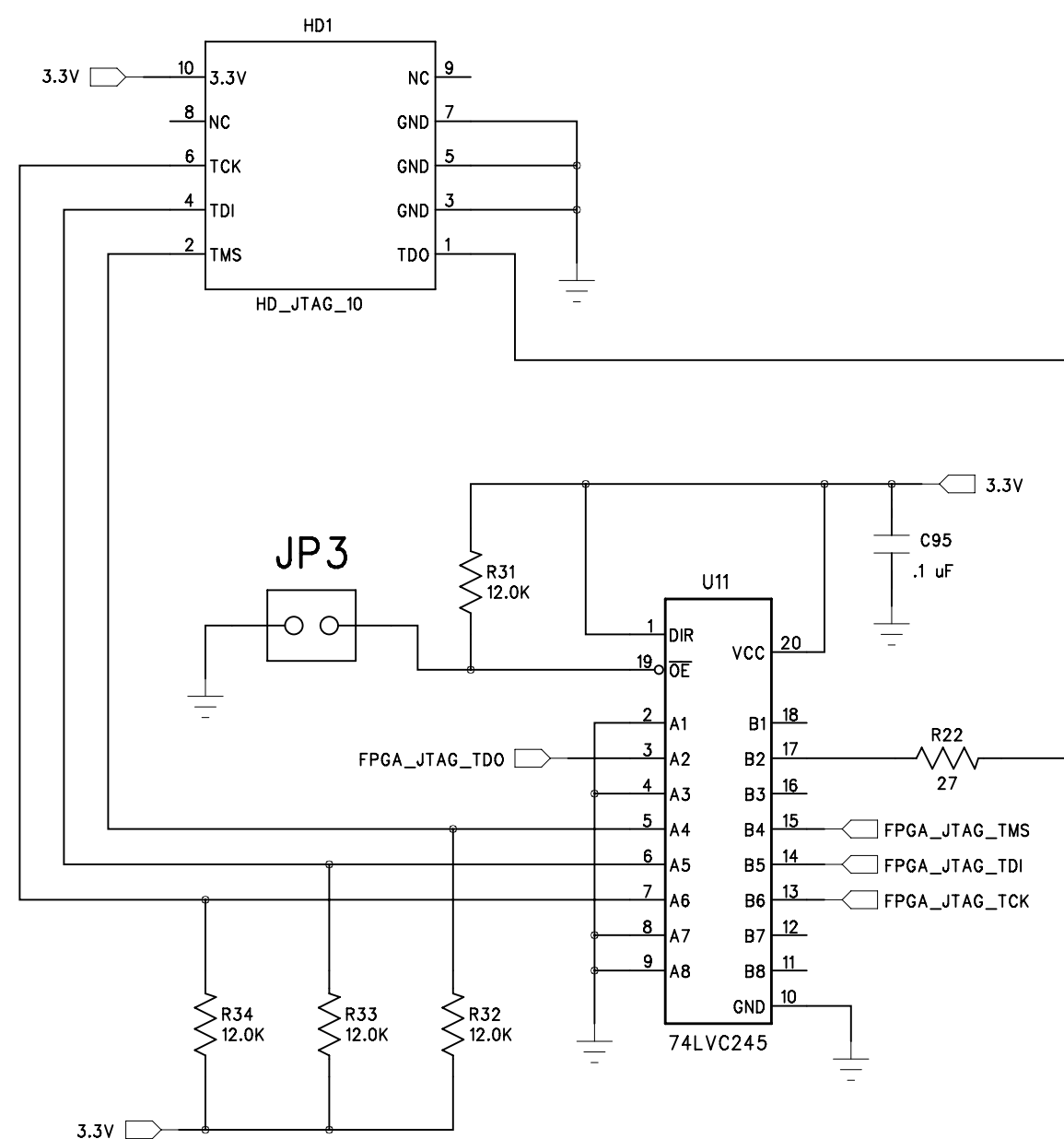
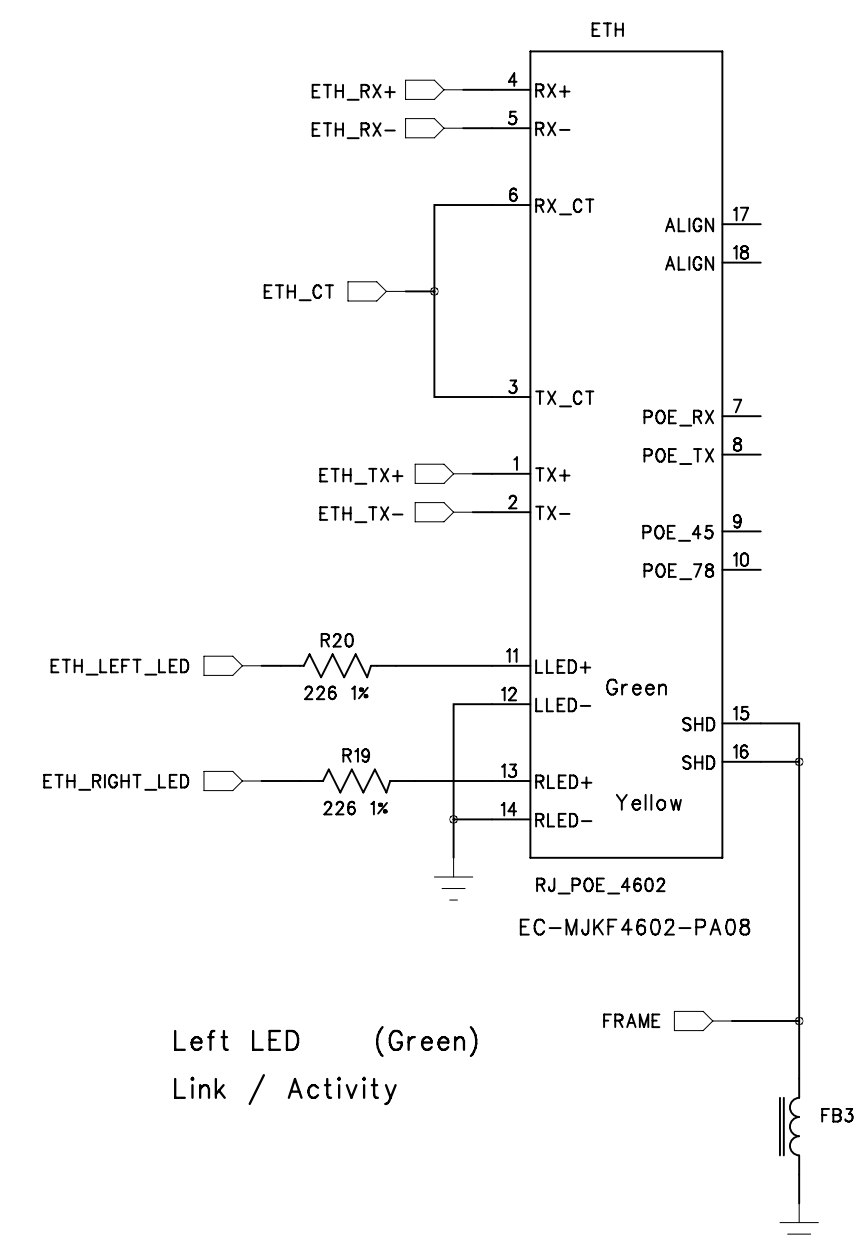


TS-8200

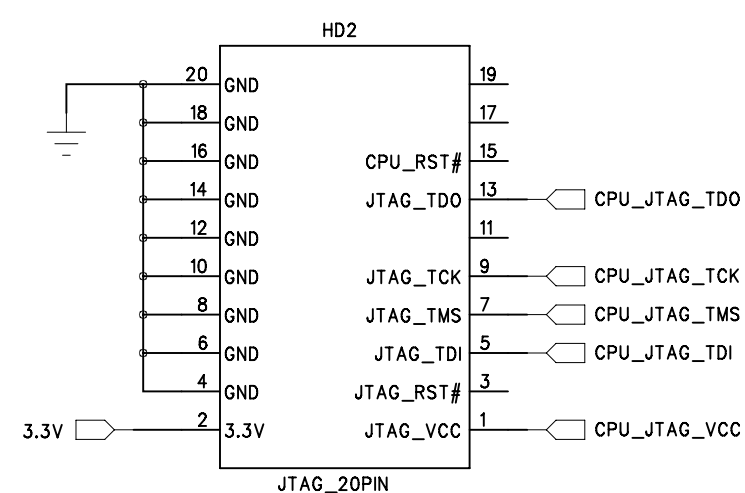
FPGA JTAG Header



10/100 Ethernet



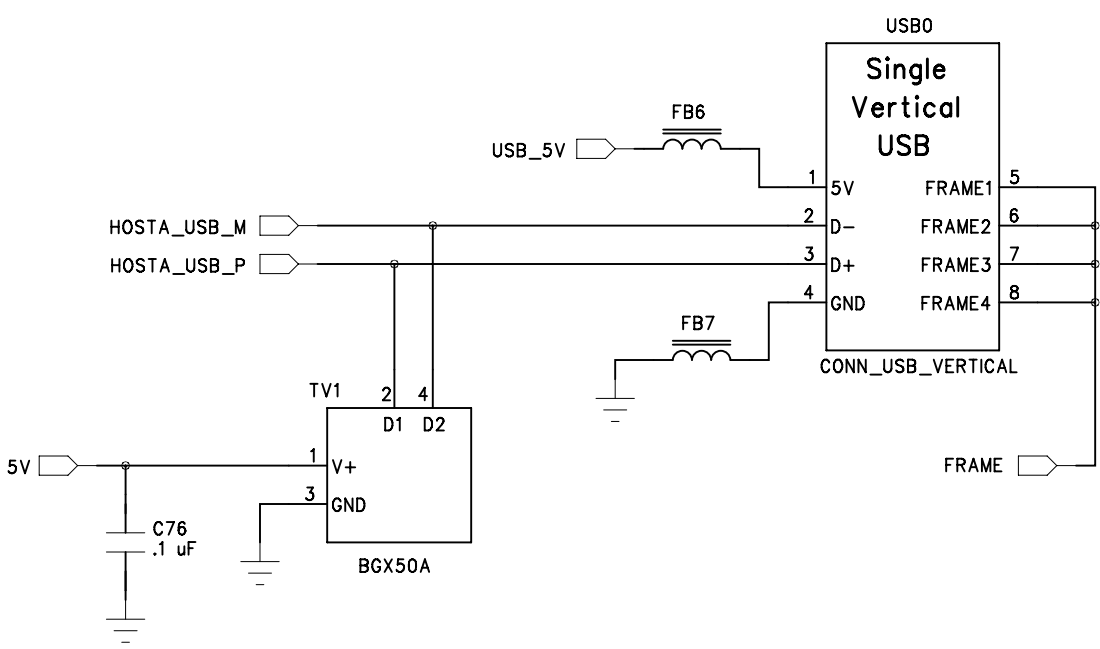
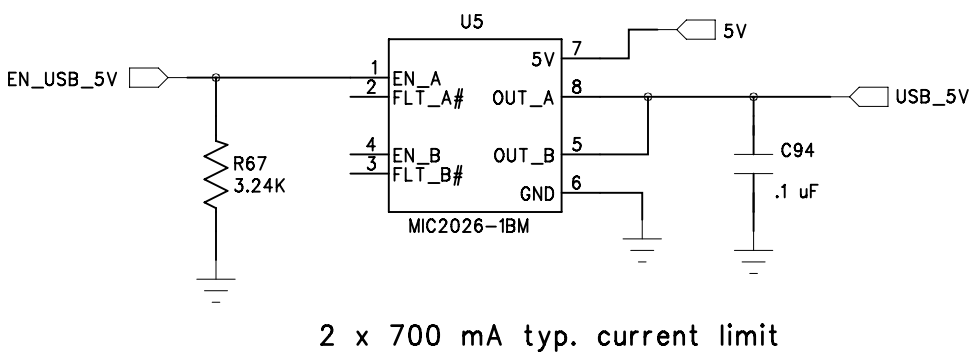
CPU JTAG
Header



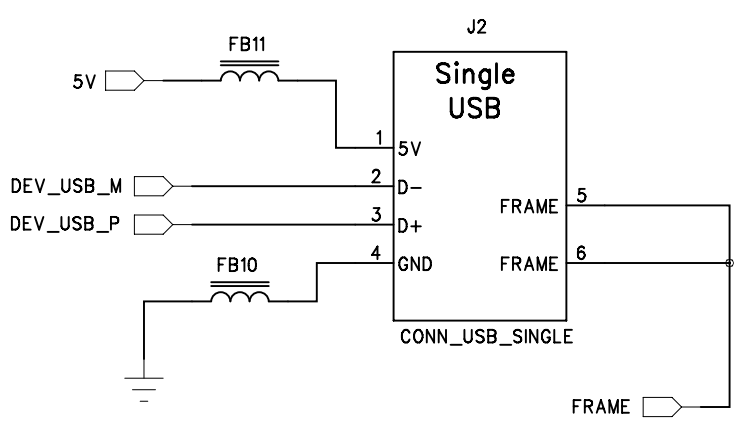
Not Populated

Technologic Systems		Date	March 15, 2010
Title: TS-8200 Ethernet, FPGA JTAG			
Rev:	Designer	Sheet	1 of 6

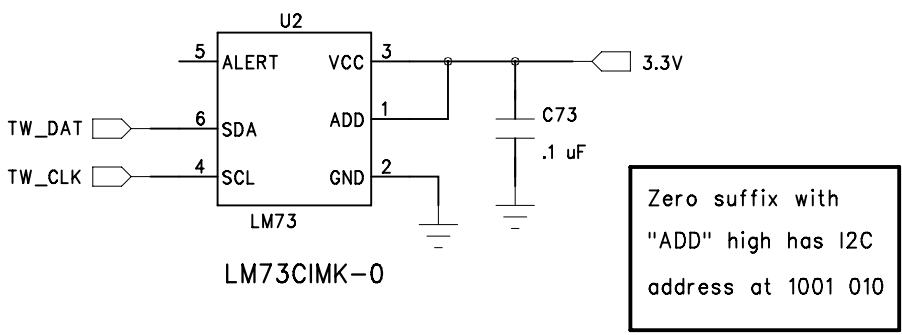
USB Power Switch



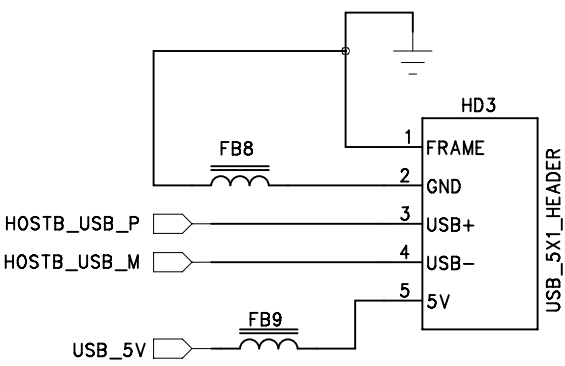
USB Device



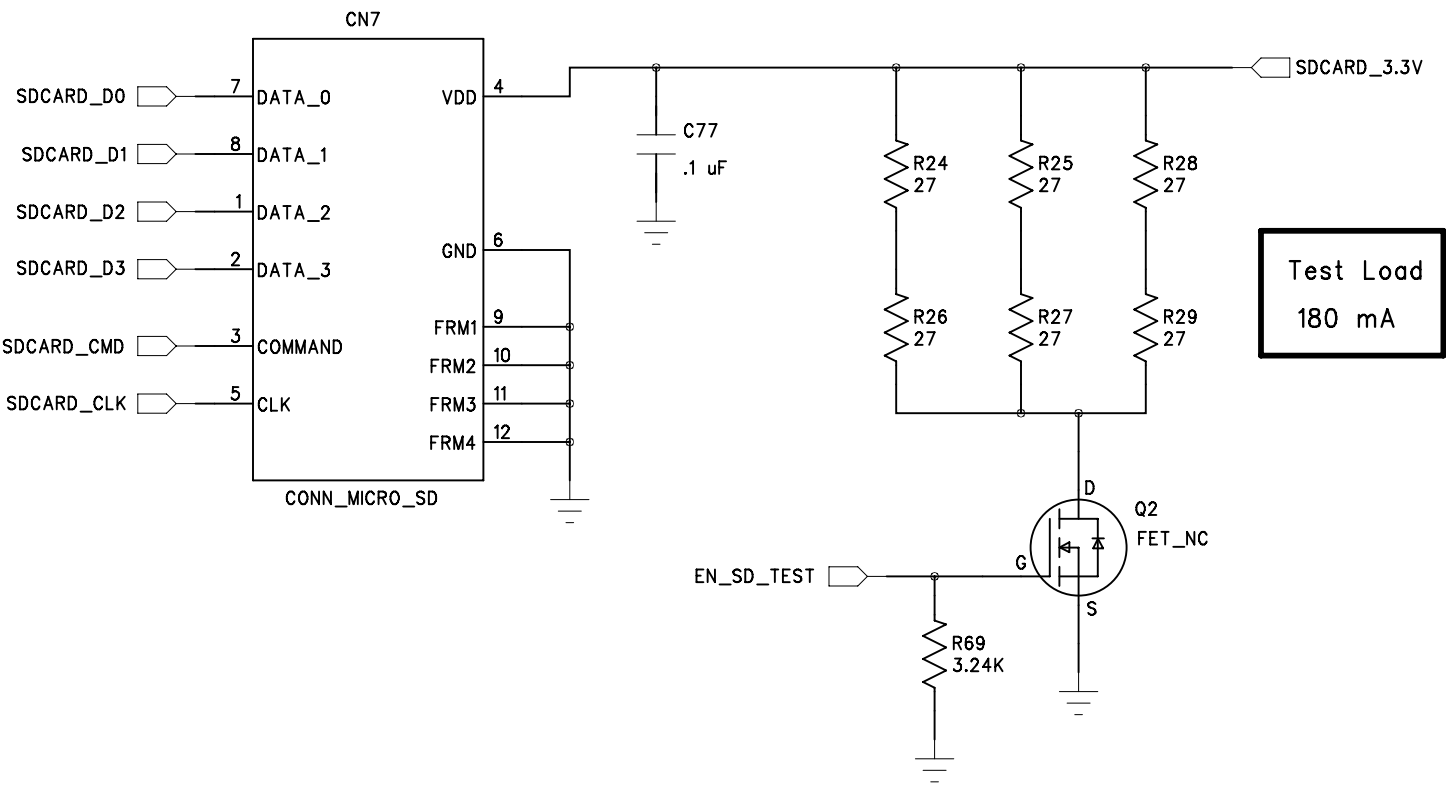
Temp Sensor



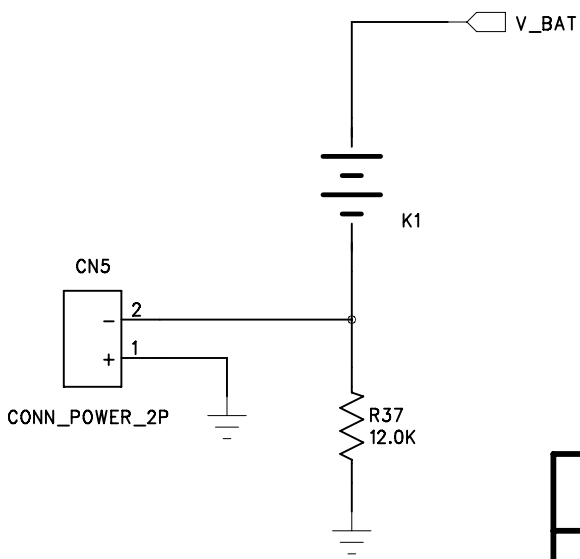
USB_B Header



Micro SD Card Socket

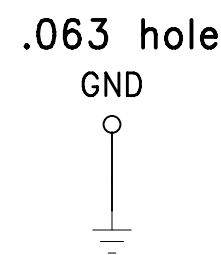


RTC Battery



Power In

5V Regulator



Power Switch
For Production Test
Fixture only

Max. $V_{in} = 16V$

UnderVoltage lockout = 4.1V

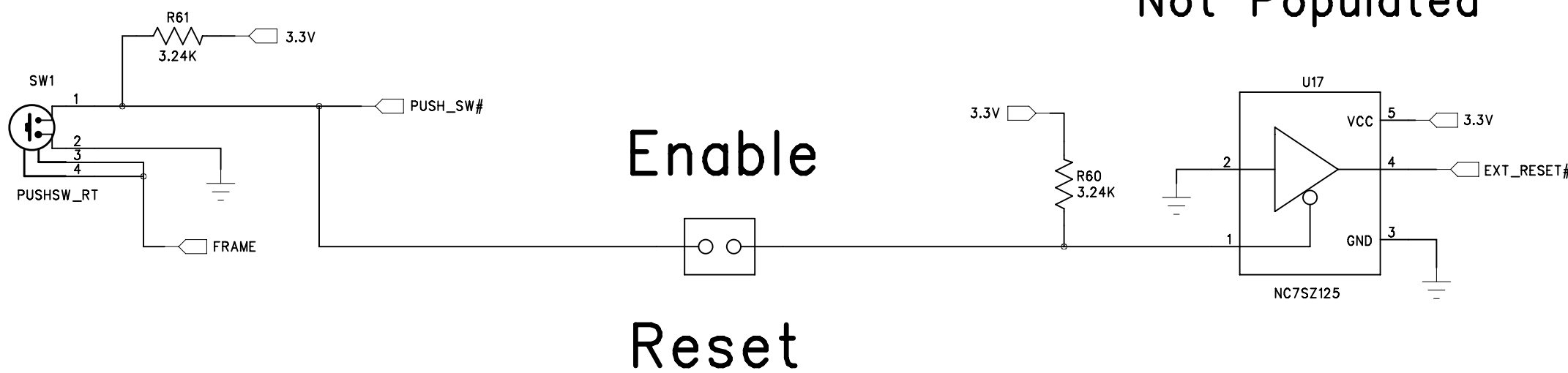
Measured 425 mohm -- from
Barrel Input to 5V test point

with 5.0V at Input

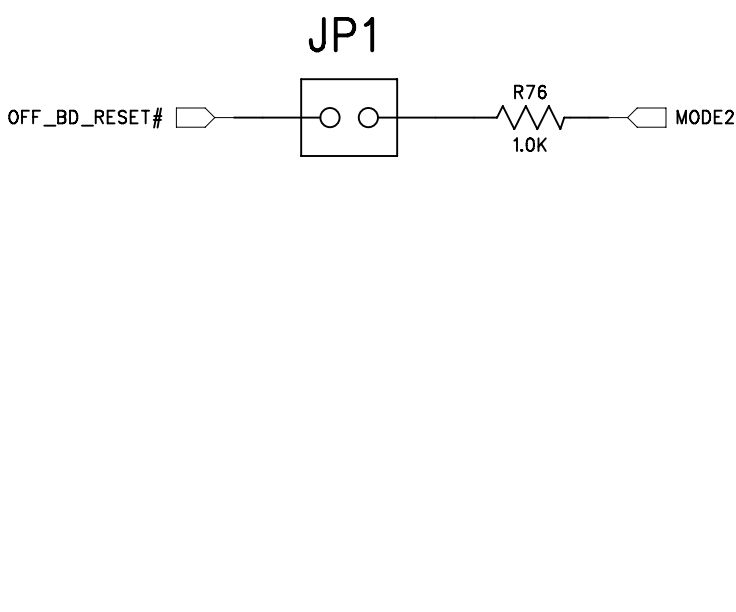
PolyFuse	mohms
1500 mA 33V	122
1100 mA 6V	160
750 mA 13V	212

Ferrite beads = 32 mohm

Push Switch



Not Populated



Technologic Systems		Date March 15, 2010
Title: TS-8200 Power IN, Push Sw. Jumpers		
Rev:	Designer RLM	Sheet 3 of 6

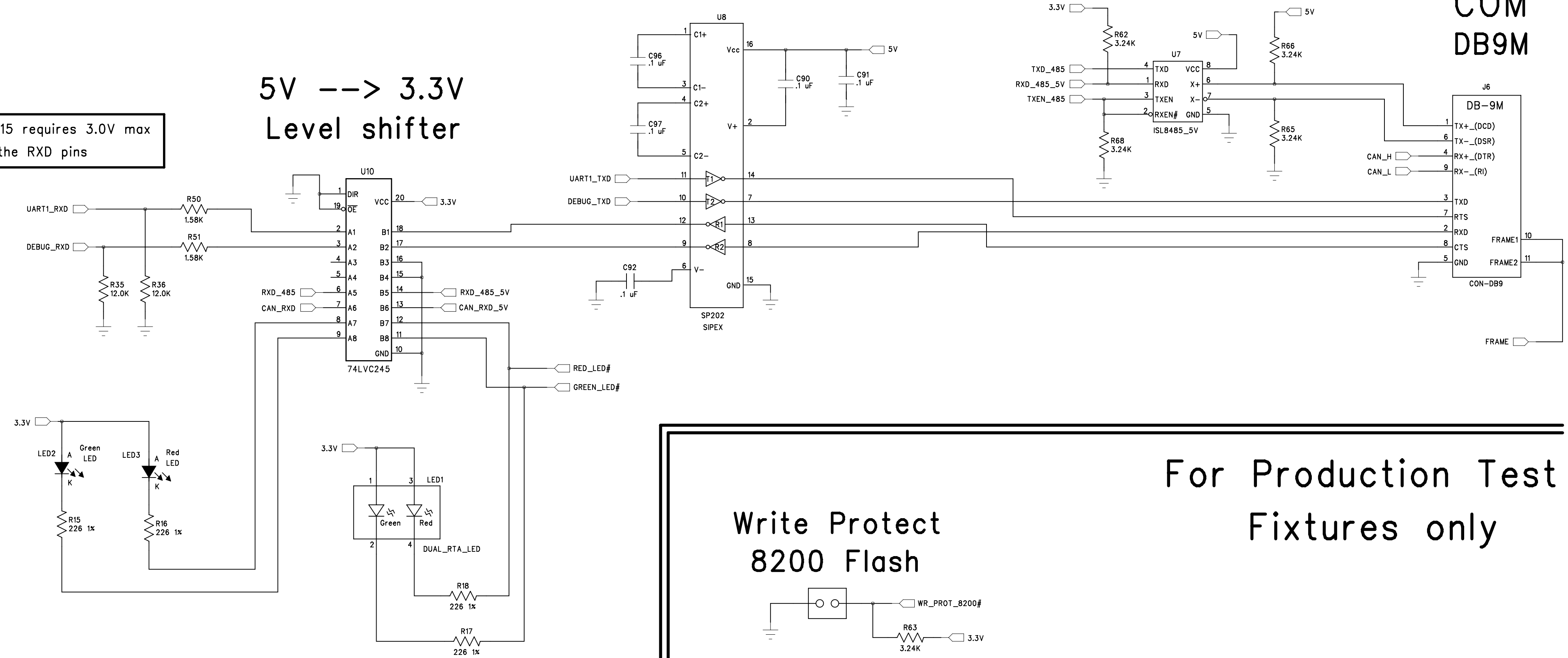
RS-232 Transceiver

RS-485 Driver

COM
DB9M

5V --> 3.3V
Level shifter

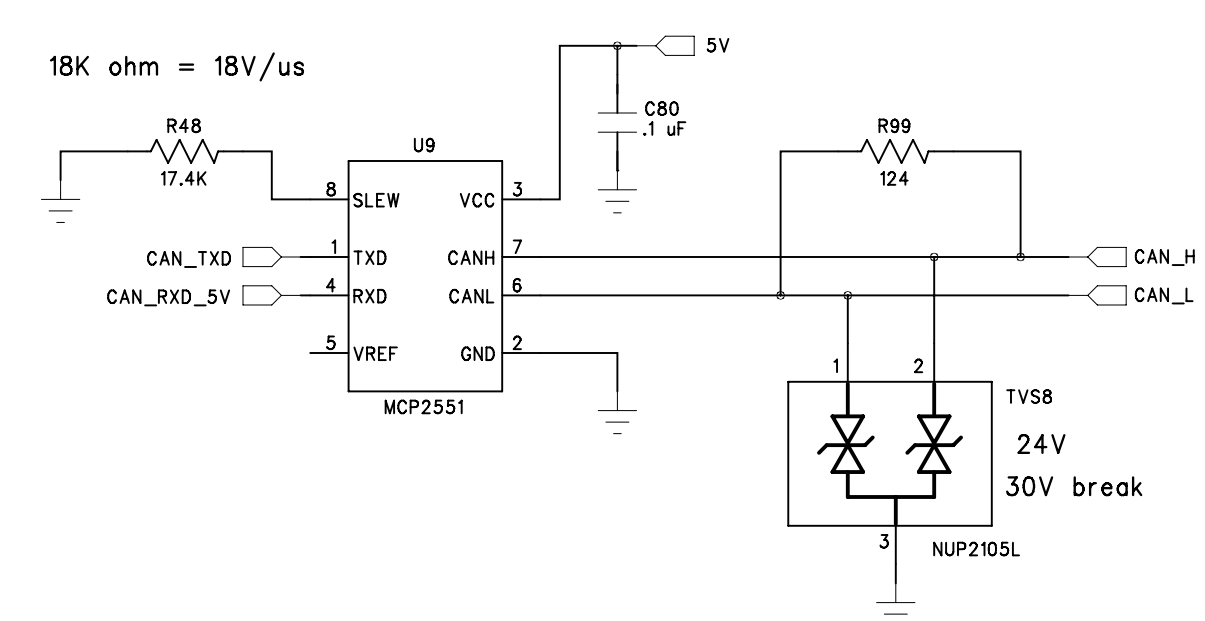
MX515 requires 3.0V max
on the RXD pins



Write Protect
8200 Flash

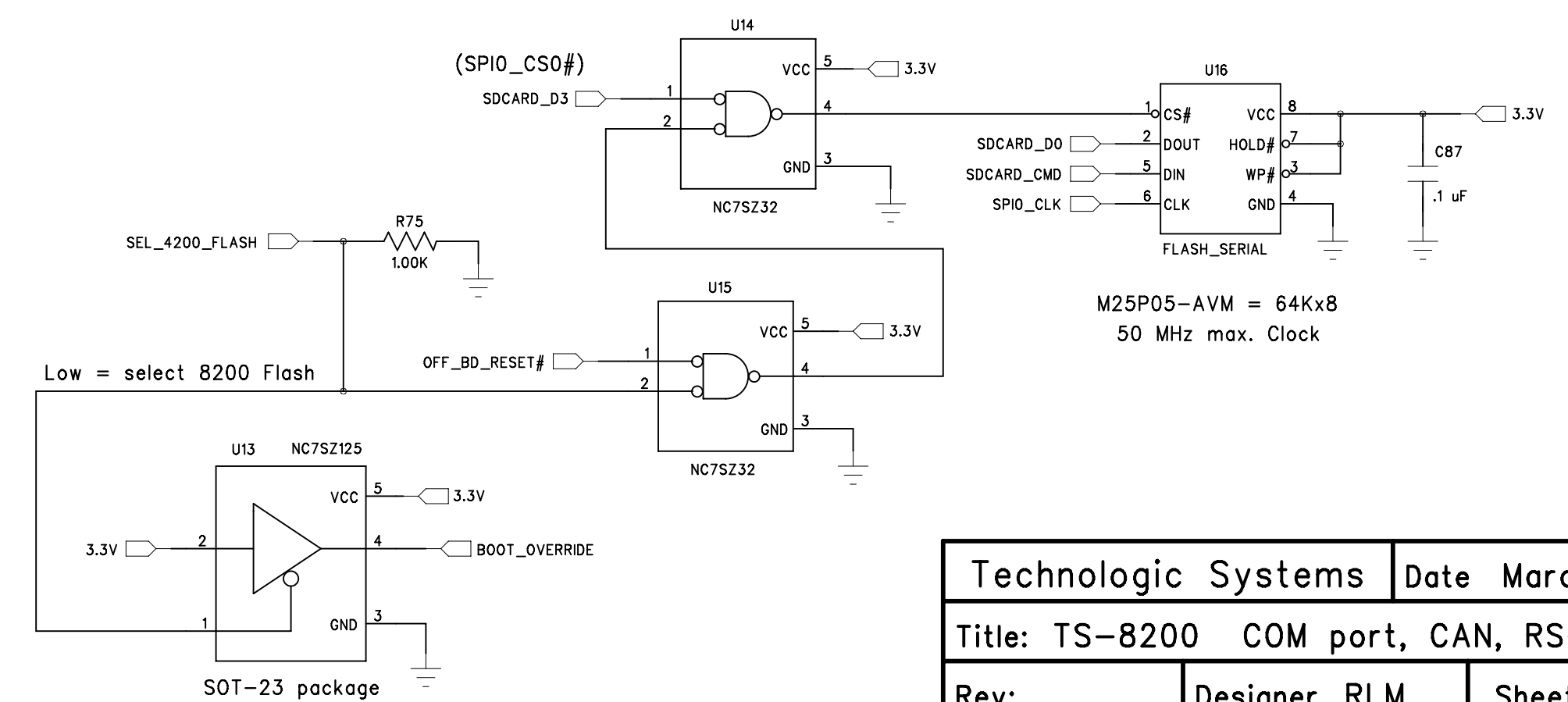
For Production Test
Fixtures only

CAN Transceiver



TS-4200 Boot
using SPI0 Port

64KB Serial
Boot Flash



Technologic Systems		Date March 15, 2010	
Title: TS-8200 COM port, CAN, RS-485			
Rev:	Designer RLM	Sheet 4 of 6	

Two 100-pin Module Connectors

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

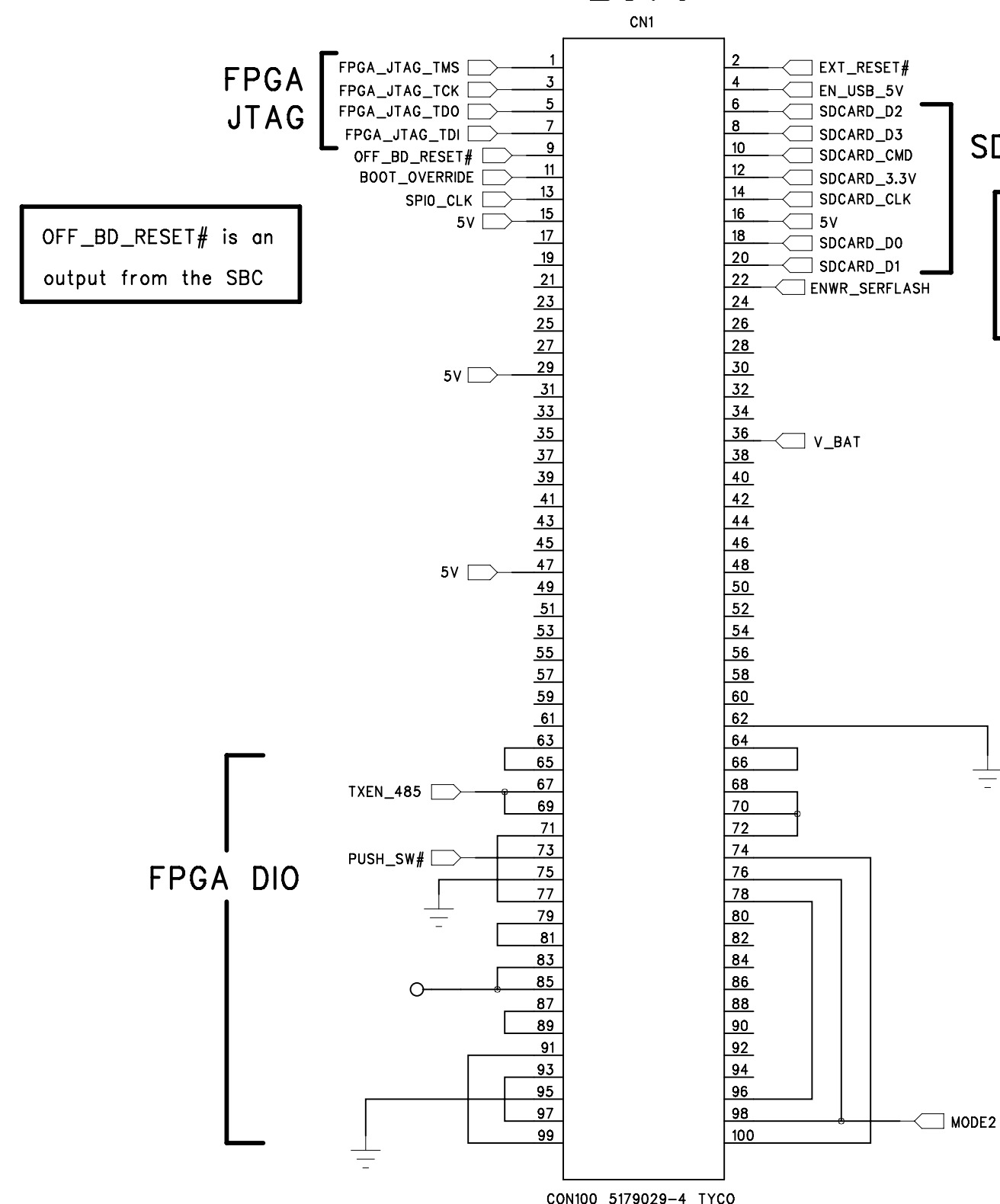
Current drain is < 600 mA
(less than 3 Watts)

EXT_RESET# is an Input to the
SBC used to reboot the CPU

Do not drive active high
(use open drain)

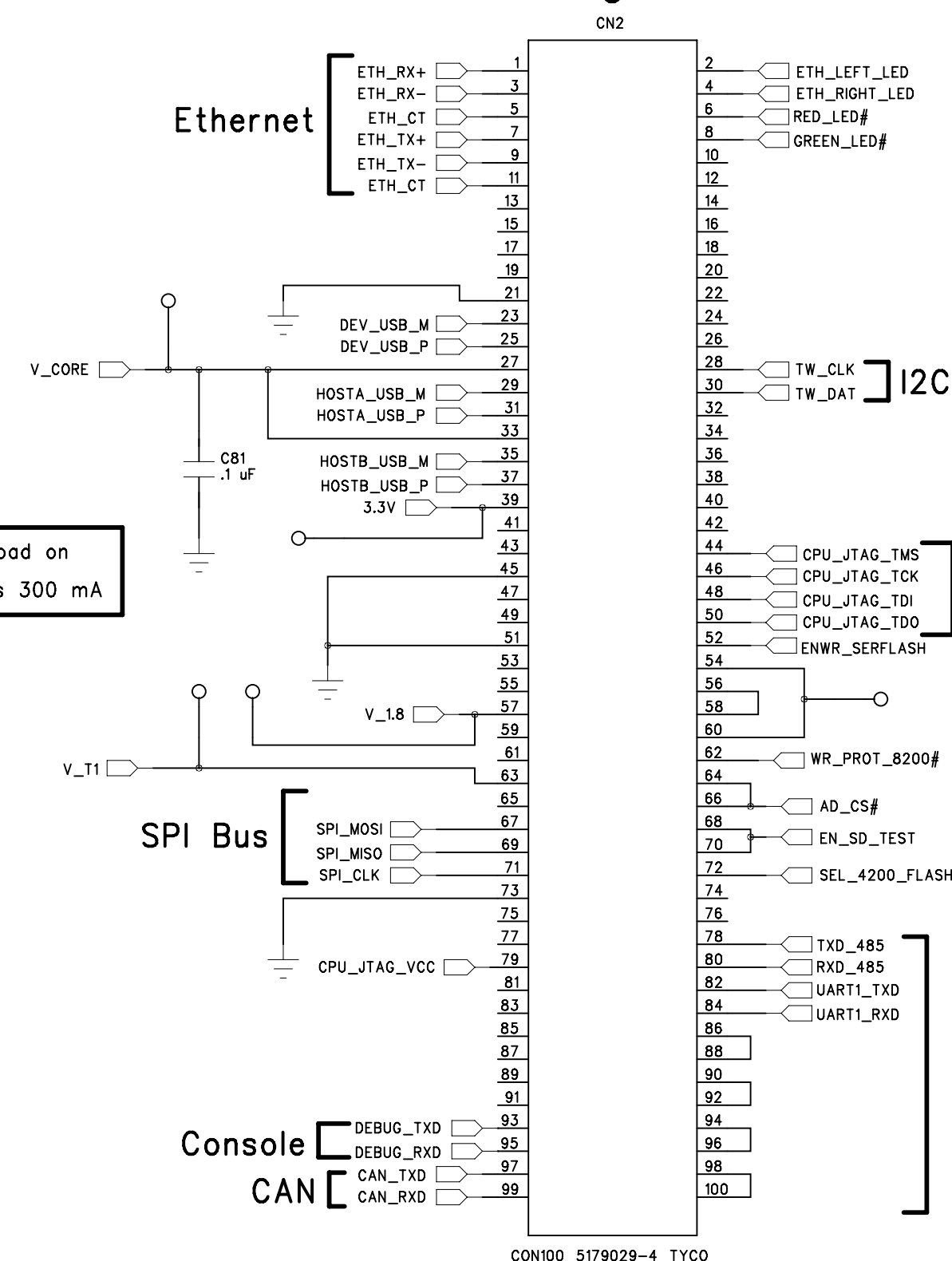
Left

Right



SD Card

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



Ethernet

Maximum load on
3.3V pin is 300 mA

SPI Bus

Console

CAN

CPU JTAG

Serial Ports
or DIO

FPGA DIO

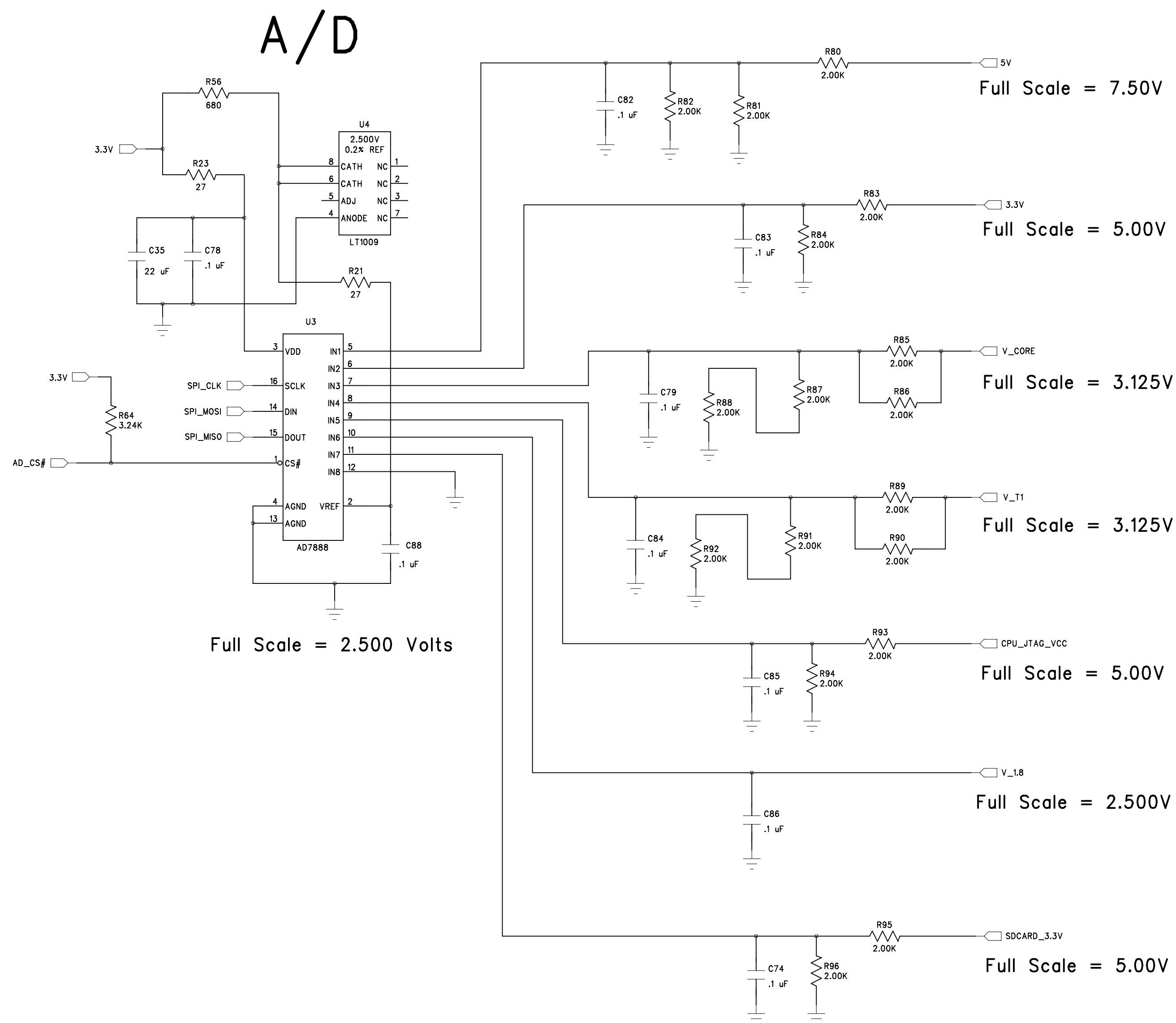
Mode 2	Boots from
1	NAND Flash
0	SD Card

MODE1 and MODE2 states
are latched prior to
OFF_BD_RESET# deasserted

MODE1 and MODE2
have PU resistors
on the SBC module

Use 1.5K ohm resistor
to GND to set low

For Production Test Fixture Only



R80–R96 0.1% tolerance

P2.0KDBDKR–ND = .1% 0603

5K Reel is .05 each