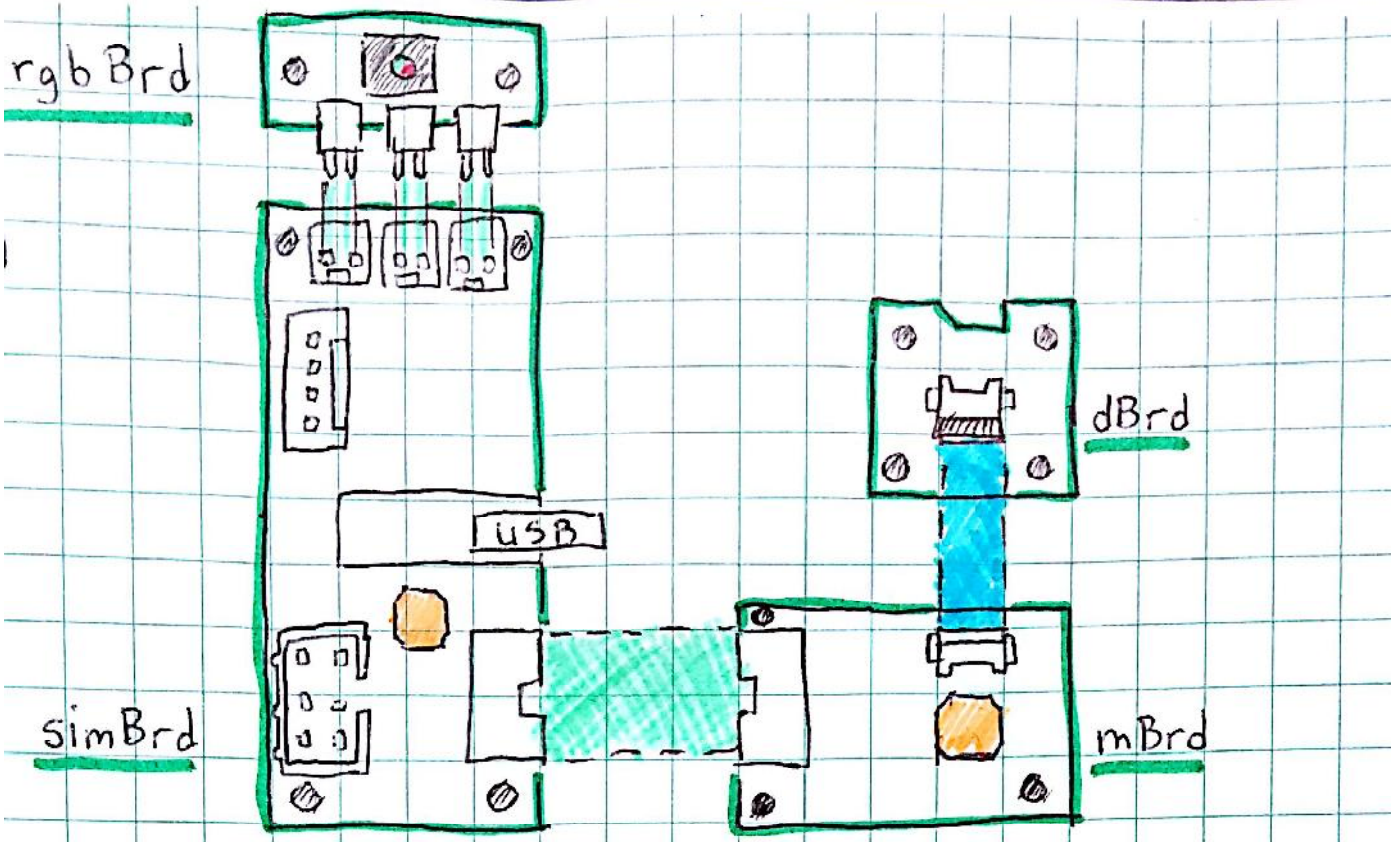
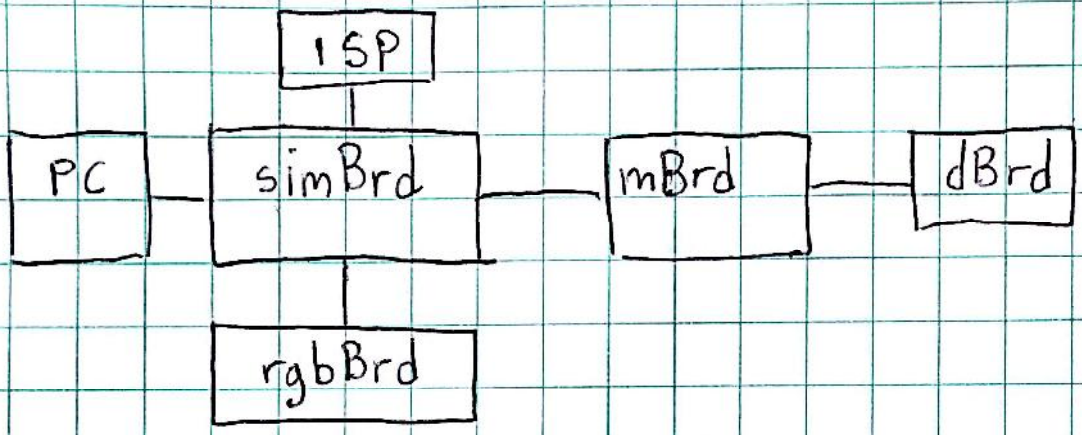
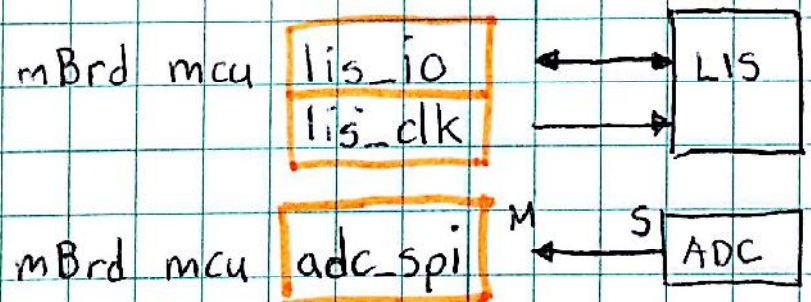
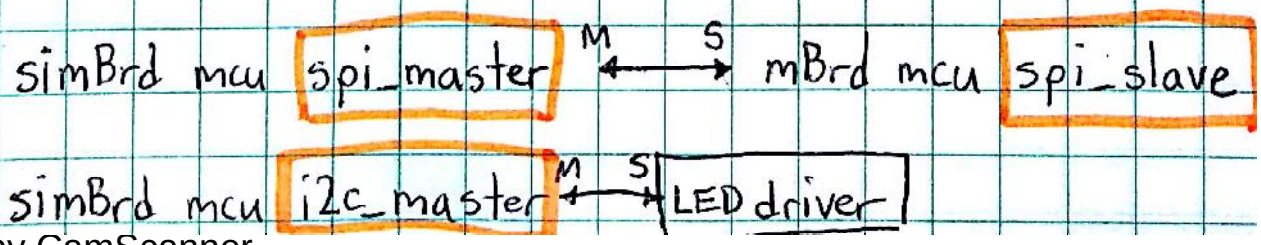
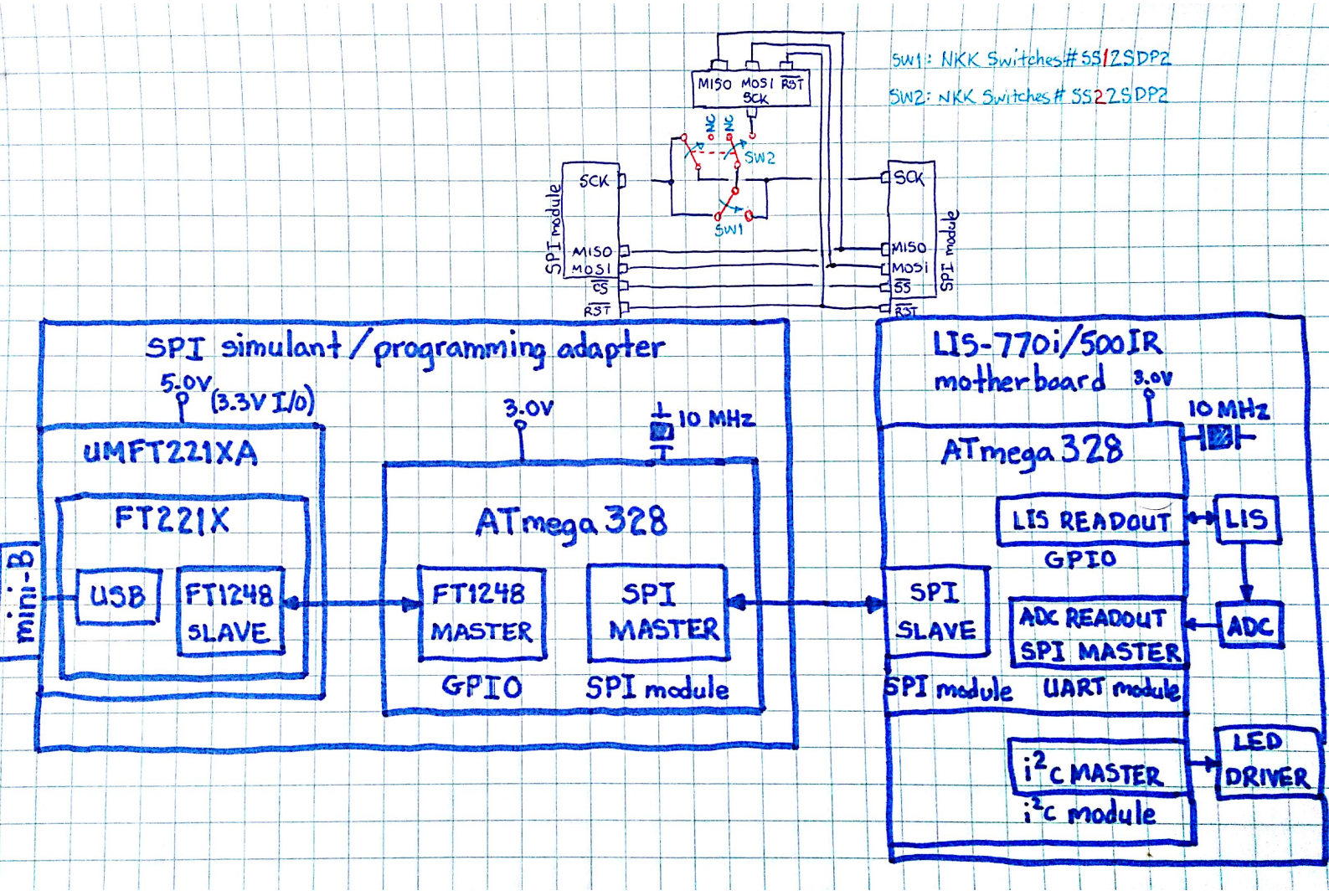
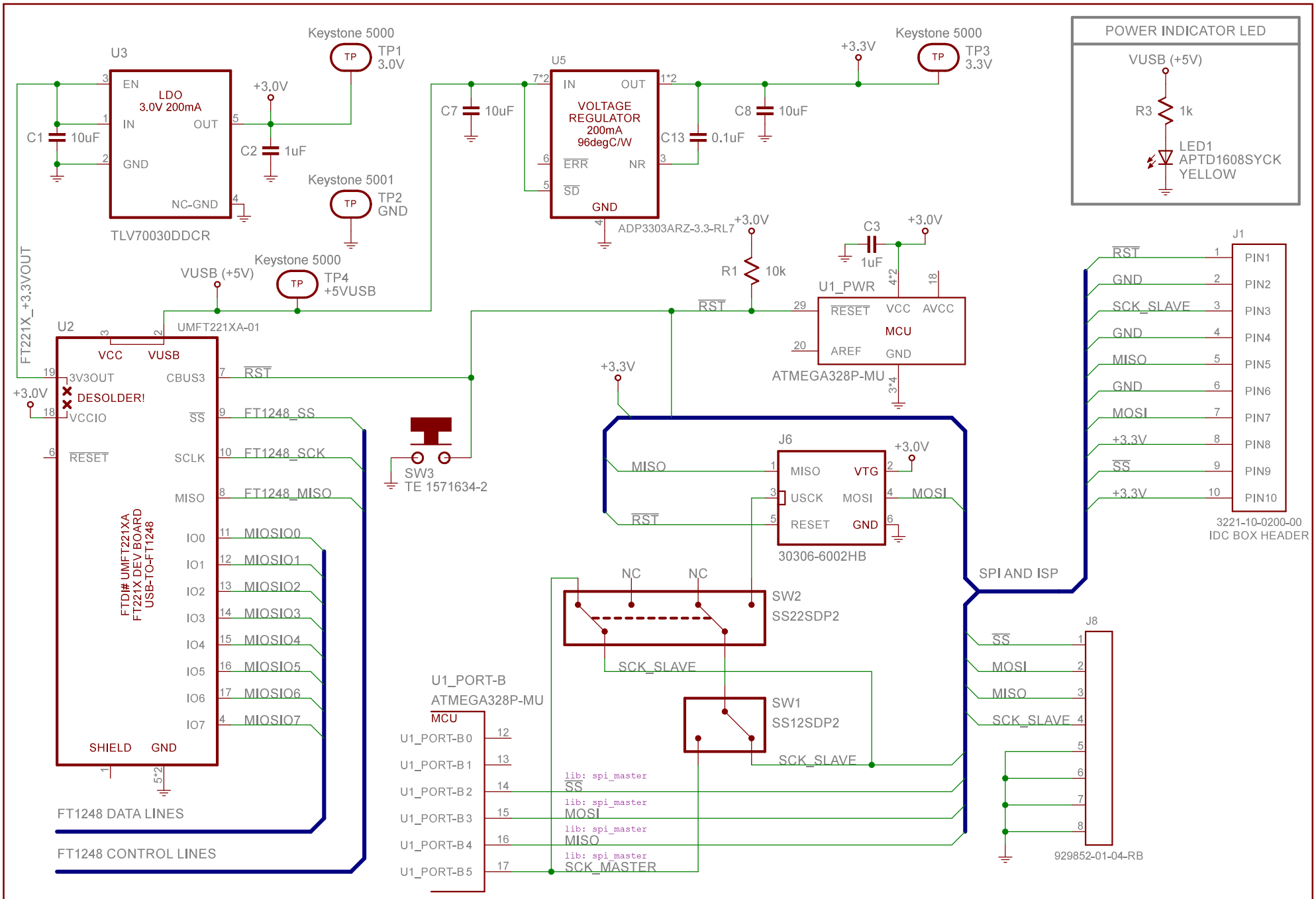


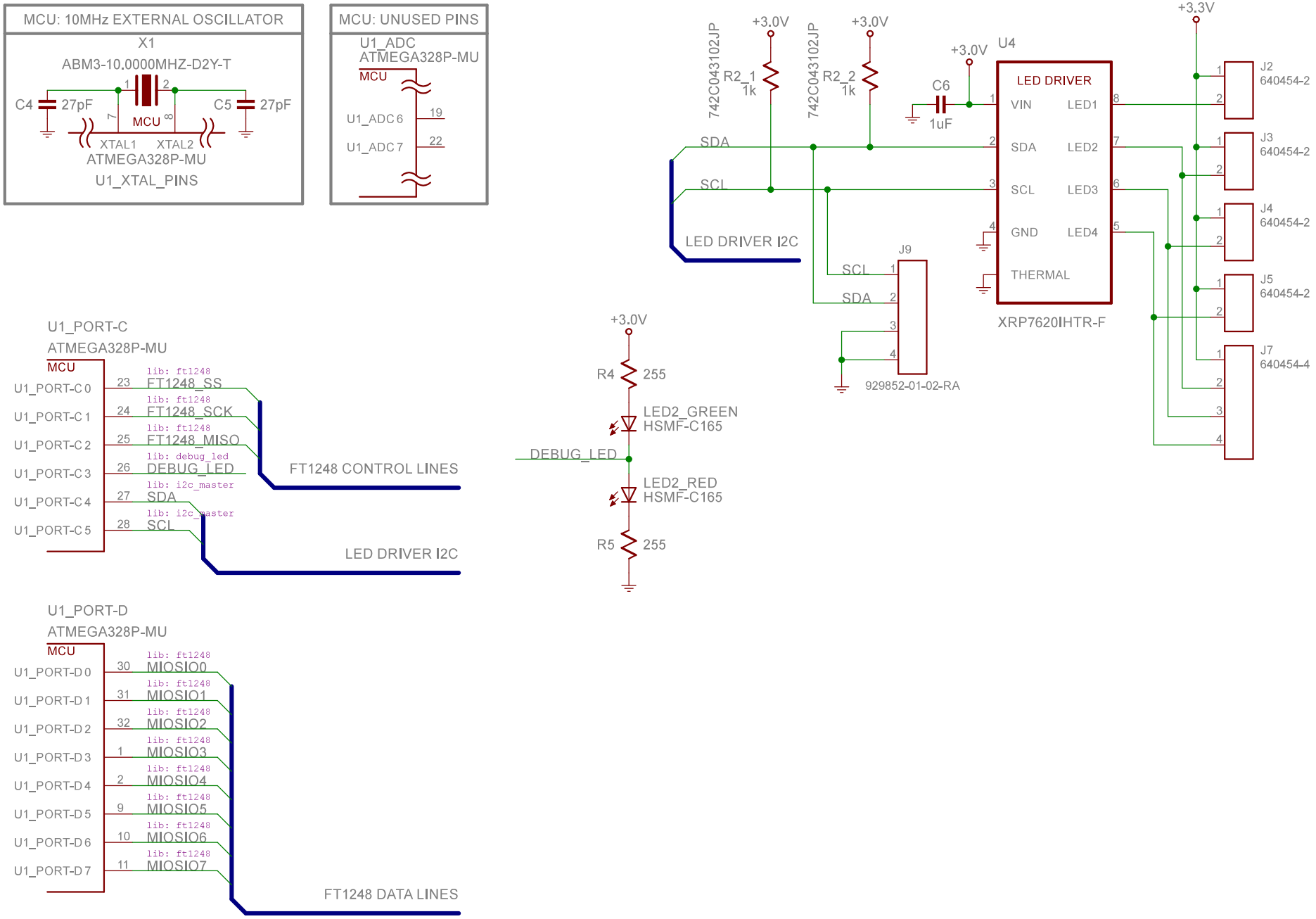









POWER INDICATOR LED
VUSB (+5V)
R3 1k
LED1
APTD1608SYCK
YELLOW
U3
LDO
3.0V 200mA
EN
IN
OUT
GND
NC-GND
C1 10uF
C2 1uF
TLV70030DDCR
Keystone 5000
TP1
3.0V
Keystone 5001
TP2
GND
+3.0V
U5
VOLTAGE
REGULATOR
200mA
96degC/W
ERR
NR
SD
C7 10uF
C8 10uF
C13 0.1uF
ADP3303ARZ-3.3-RL7
+3.3V
Keystone 5000
TP3
3.3V
Keystone 5000
TP4
+5VUSB
VUSB (+5V)
FT221X_+3.3VOUT
U2
UMFT221XA-01
VCC
VUSB
3V3OUT
DESOLDER!
VCCIO
RESET
CBUS3
SS
SCLK
MISO
IO0
IO1
IO2
IO3
IO4
IO5
IO6
IO7
SHIELD
GND
FTDI# UMFT221XA
FT221X DEV BOARD
USB-TO-FT1248
FT1248_SS
FT1248_SCK
FT1248_MISO
MIOSIO0
MIOSIO1
MIOSIO2
MIOSIO3
MIOSIO4
MIOSIO5
MIOSIO6
MIOSIO7
FT1248 DATA LINES
FT1248 CONTROL LINES
SW3
TE 1571634-2
R1 10k
C3 1uF
U1_PWR
MCU
RESET
VCC
AVCC
AREF
GND
ATMEGA328P-MU
J6
MISO
VTG
USCK
MOSI
RESET
GND
30306-6002HB
SPI AND ISP
J1
PIN1
PIN2
PIN3
PIN4
PIN5
PIN6
PIN7
PIN8
PIN9
PIN10
3221-10-0200-00
IDC BOX HEADER
NC
SW2
SS22SDP2
SCK_SLAVE
SW1
SS12SDP2
U1_PORT-B
ATMEGA328P-MU
U1_PORT-B0
U1_PORT-B1
U1_PORT-B2
U1_PORT-B3
U1_PORT-B4
U1_PORT-B5
lib: spi_master
SS
MOSI
MISO
SCK_MASTER
J8
929852-01-04-RB
chromation
SPI SIMULANT AND ISP PROGRAMMING ADAPTER
ISP AND USB->FT1248->SPI
TITLE: 20160711_SPI_simulant
Date: 7/11/2016 3:06:47 PM
Sheet: 3/6



chromation

SPI SIMULANT AND ISP PROGRAMMING ADAPTER

FT1248->SPI AND LED I2C

TITLE: 20160711_SPI_simulant

Date: 7/11/2016 3:06:47 PM

Sheet: 4/6

PCB LAYOUT NOTES:

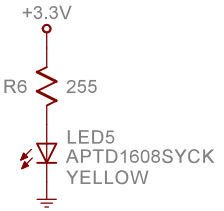
1. Split the ground plane below the voltage regulator to isolate return signals for input and output. See the ground plane layout sketch "LDO voltage regulator ground plane layout.pdf".

2. Pin 1 on the motherboard ZIF maps to pin 8 on the daughterboard ZIF: M1->D8, M2->D7, M3 -> D6, M4 -> D5, etc. See sketch in "LIS-770i_dBrd and mBrd cable.pdf"

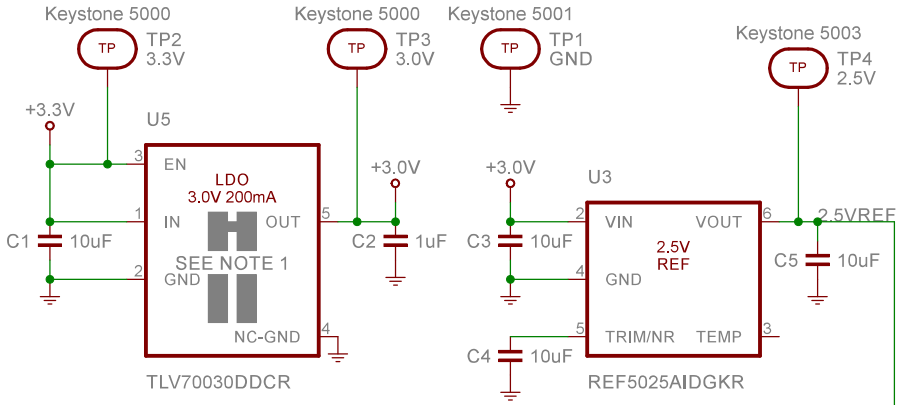
DISCRETE TEST POINT COLOR CODE

RED	=	POS. SUPPLY
BLACK	=	NEG. SUPPLY
YELLOW	=	PIXEL VOLTAGE
WHITE	=	DARK VOLTAGE
ORANGE	=	2.5V REFERENCE

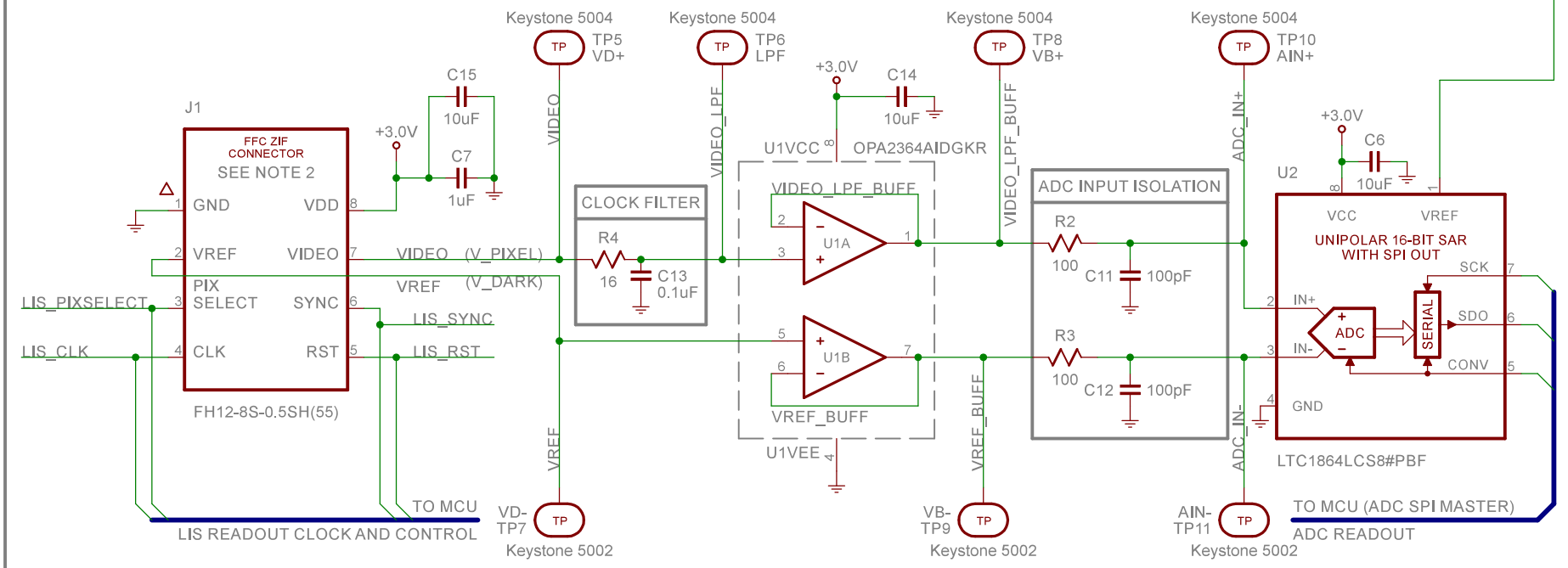
POWER INDICATOR LED



VOLTAGE REGULATOR AND REFERENCE



DETECTOR ANALOG INTERFACE



chromation

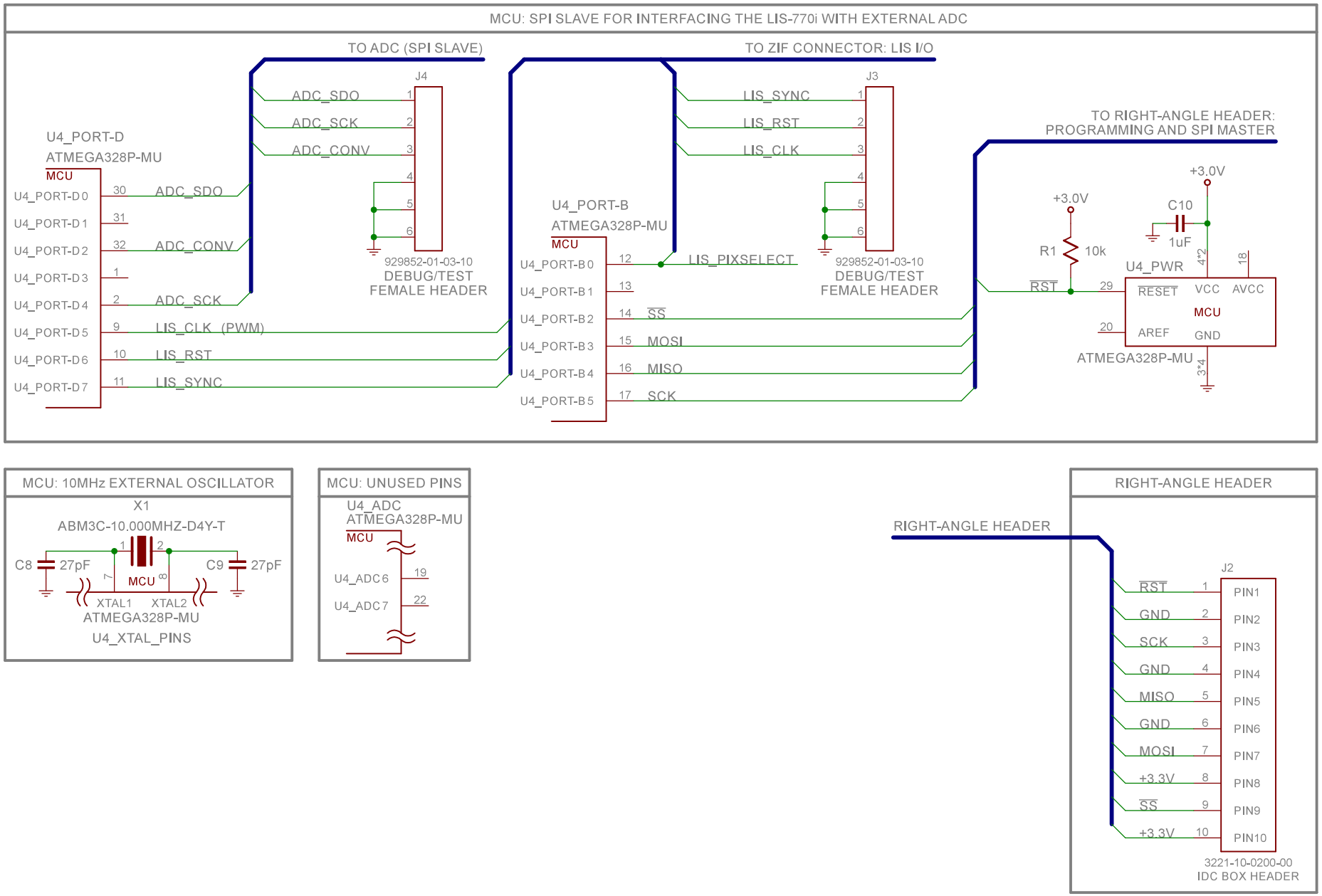
LIS-770i / LIS-500IR MOTHERBOARD

LIS READOUT CIRCUIT (ANALOG)

TITLE: 20151020_LIS-770i_mBrd

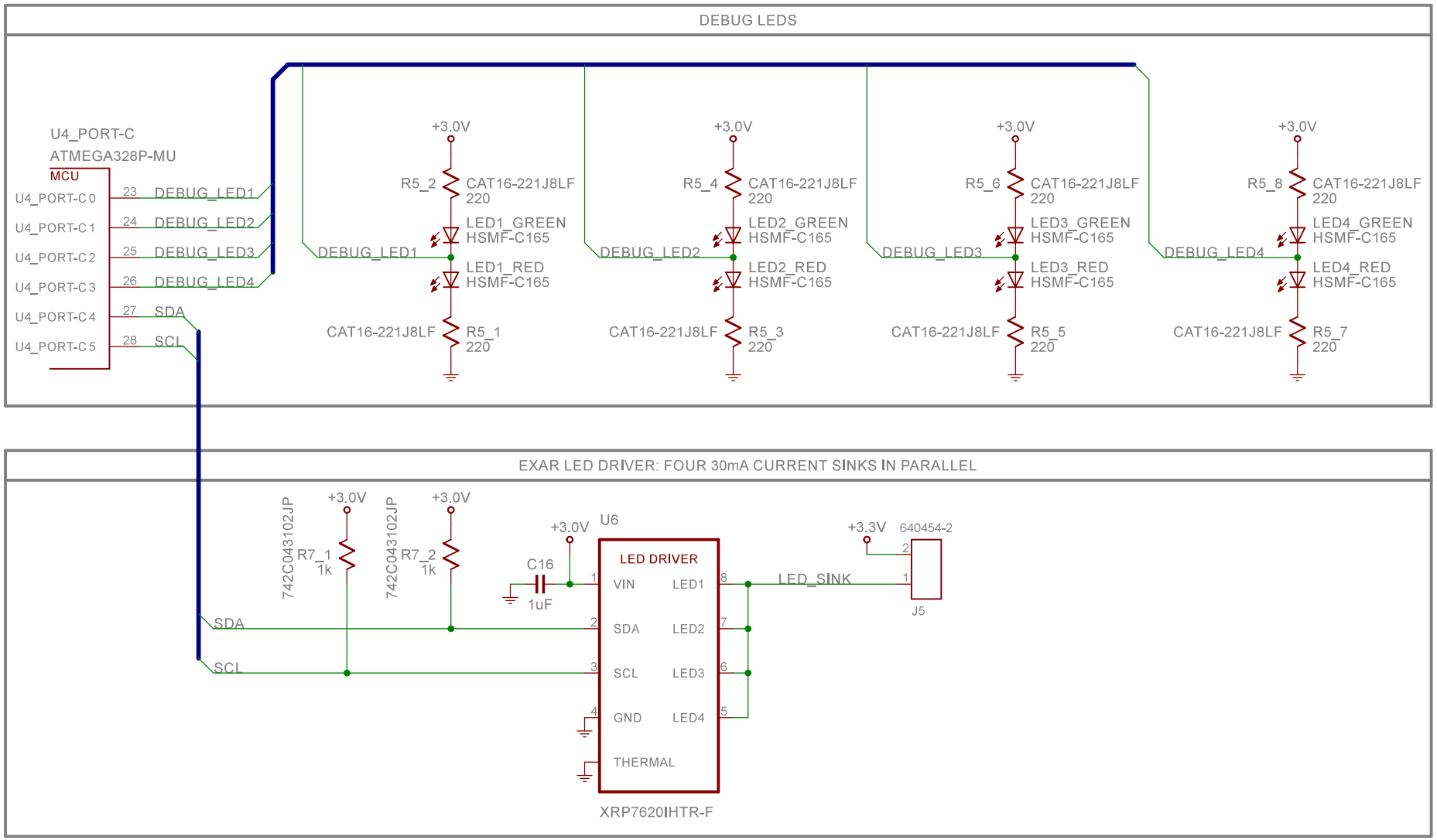
Date: 2/24/2016 1:17:22 PM

Sheet: 3/7



chromation

LIS-770i / LIS-500IR MOTHERBOARD	TITLE: 20151020_LIS-770i_mBrd	
MICROCONTROLLER: ADC, LIS, SPI	Date: 2/24/2016 1:17:22 PM	Sheet: 4/7



chromation

LIS-770i / LIS-500IR MOTHERBOARD

MICROCONTROLLER: LED DRIVER

TITLE: 20151020_LIS-770i_mBrd

Date: 2/24/2016 1:17:22 PM

Sheet: 5/7