

B

A

B

A

12V wall wart

Vin
GND
NC

wall power

TSR1 +5V

in out
GND
VR11

C11
100 nF

C12
100 nF

C13
100 nF

ground

USB-wall

3 B
1 A COM 2

+5V

R11
560

red

power
2025-08-20

2

1

1

2

1

2

1

B

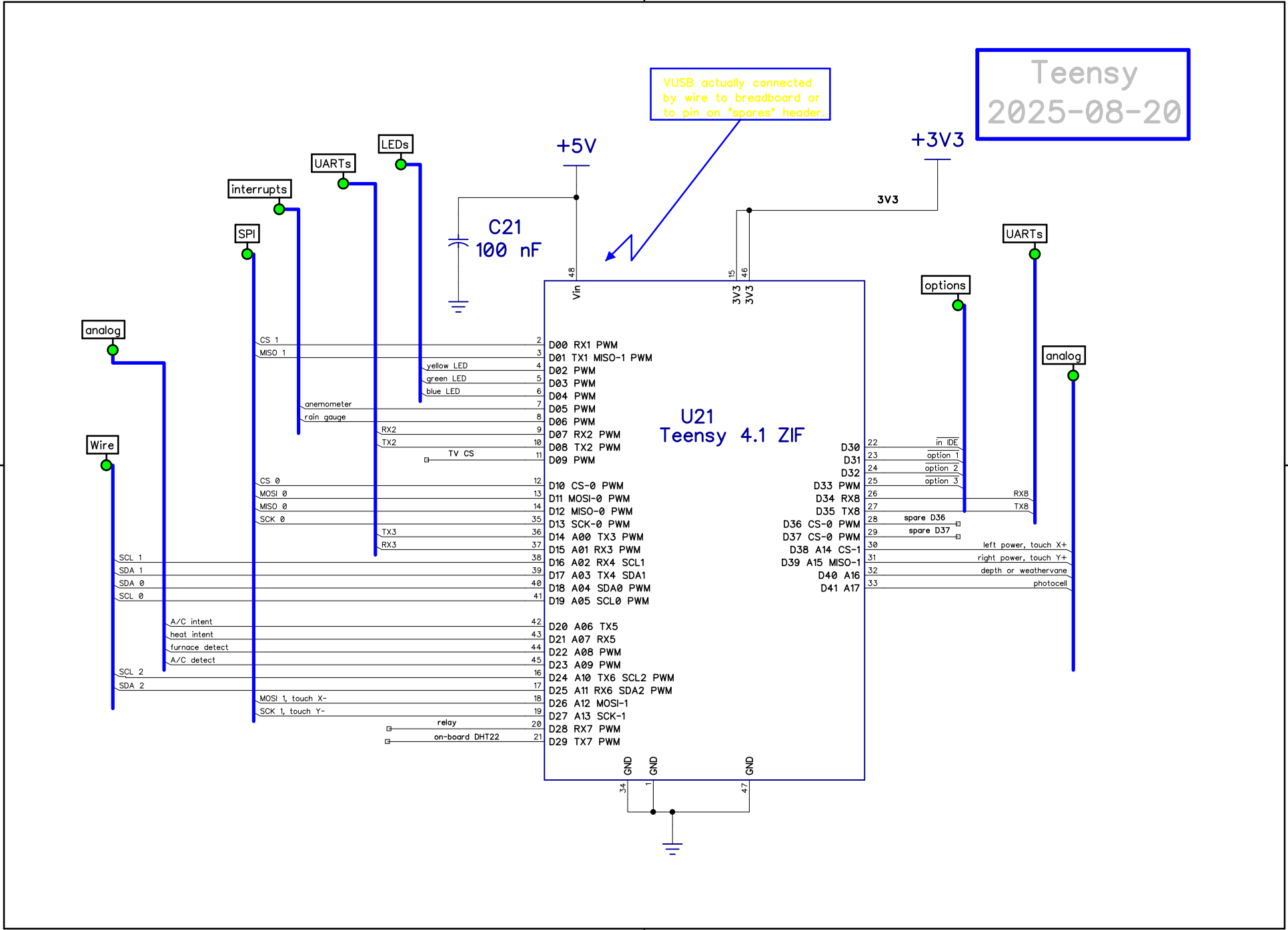
B

A

A

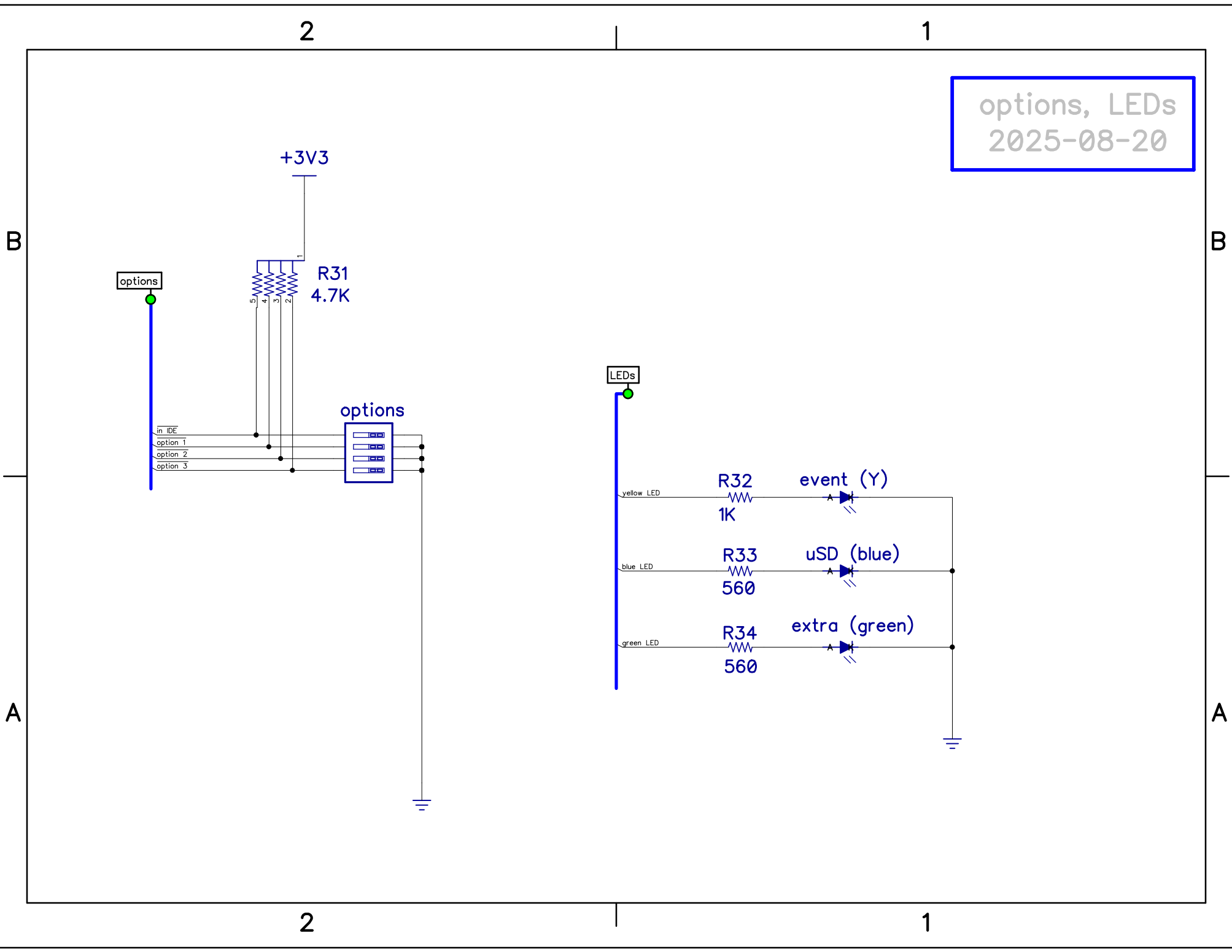
VUSB actually connected
by wire to breadboard or
to pin on "spares" header.

Teensy
2025-08-20



2

1



2

1

B

B

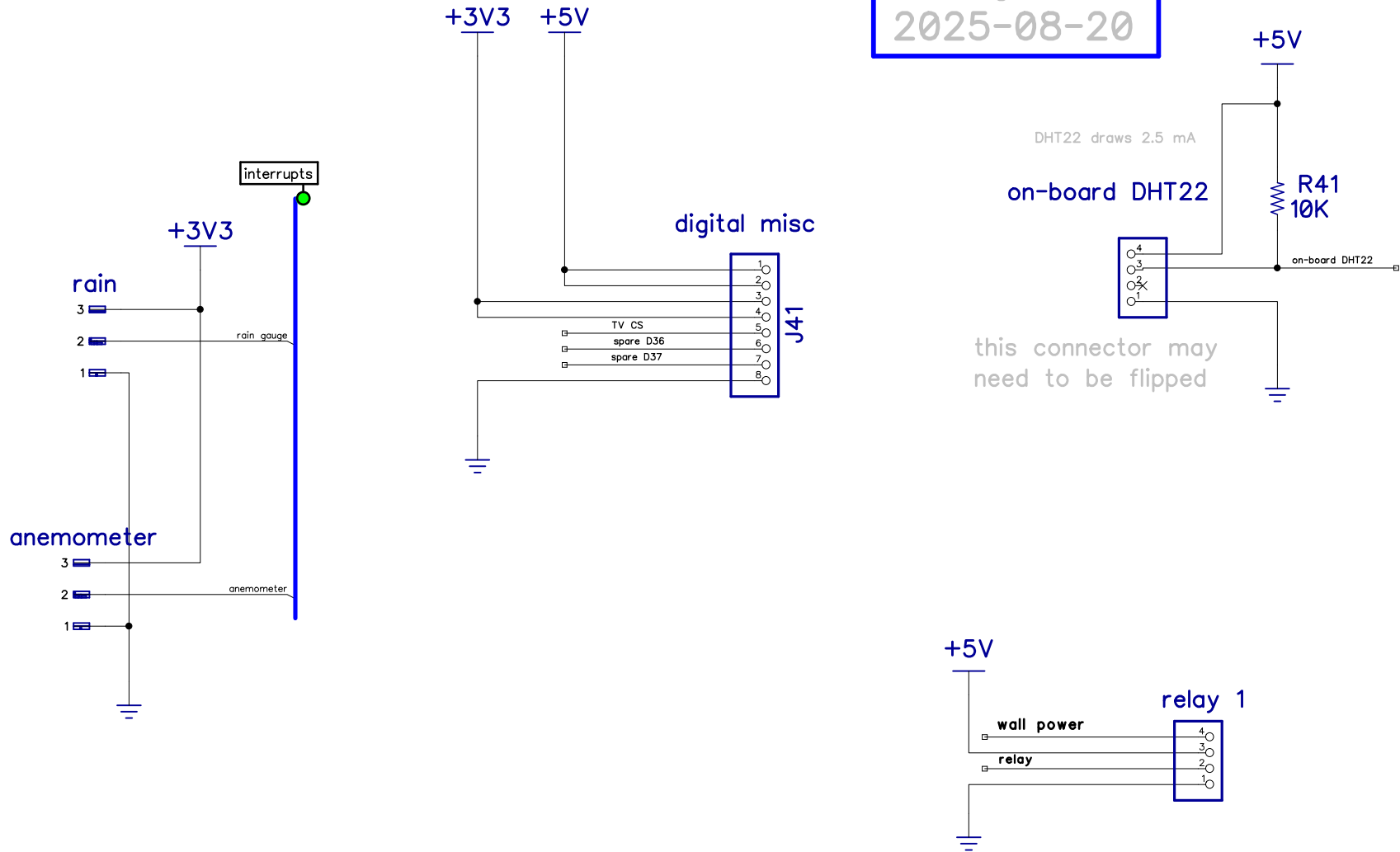
A

A

2

1

digital
2025-08-20



2

1

display
2025-08-20

+3V3

SPI

B

B

TeensyView

Vcc 26

D/C 7

reset 15

data 11

SCLK 13

CS 10

GND 1

SPI 0

1

2

3

4

5

6

7

CS 0

MISO 0

MOSI 0

SCK 0

TV CS

TFT display

GND 1

D/C 8

SCLK 4

MOSI 6

MISO 5

CS 7

Vin 2

touch X- 14

touch Y- 13

touch X+ 12

touch Y+ 11

}

*

SPI 1

7

6

5

4

3

2

1

CS 1

MISO 1

MOSI 1, touch X-

SCK 1, touch Y-

TV CS

SPI

+3V3

A

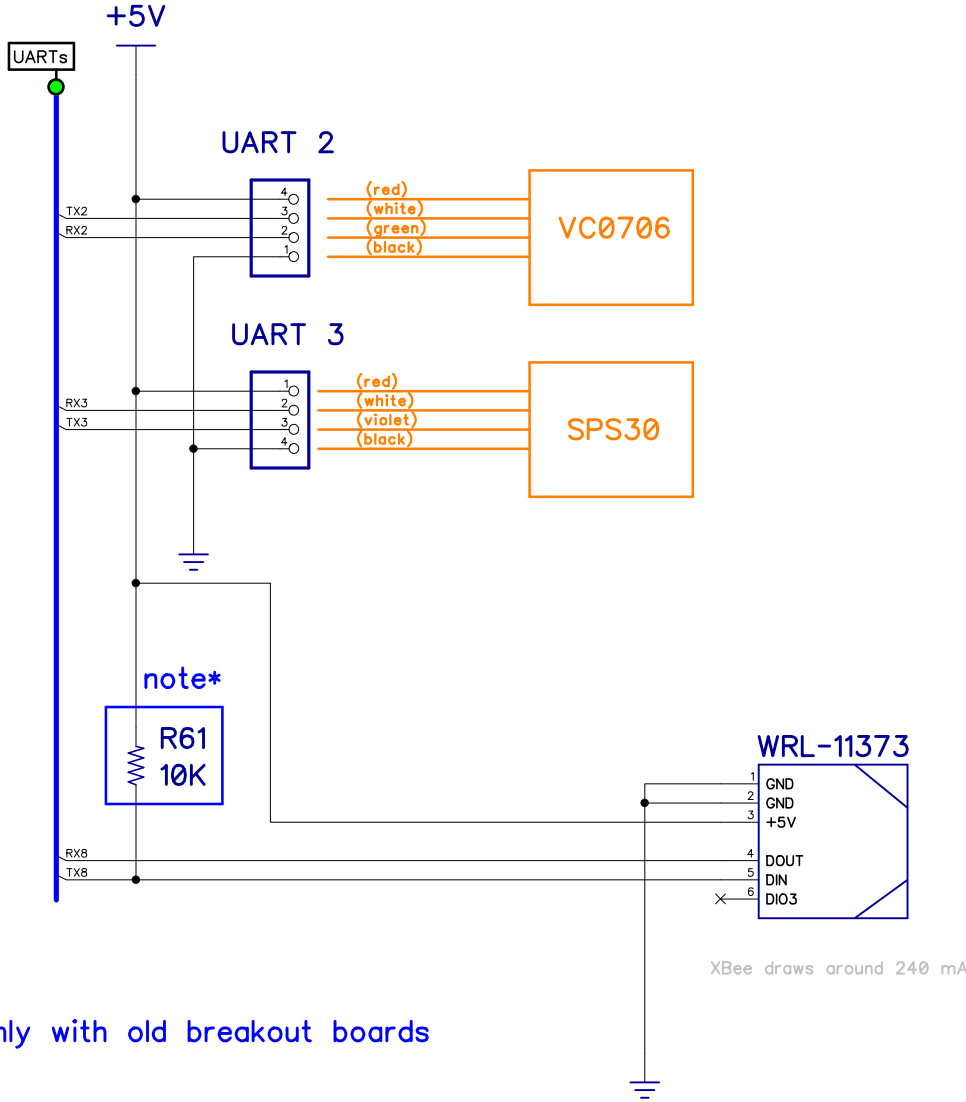
A

* these signals are on the analog connector, available only when power CTs are not in use. The SPI 1 port is semi-reserved for a DHT20.

2

1

UARTs
2025-08-19



*only with old breakout boards

2

1

B

B

A

A

2

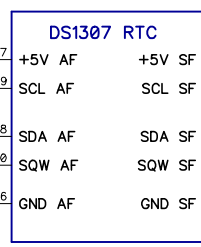
1

Wire

R71
4.7k

R72
4.7k

+5V



SCL 0

SDA 0

Wire (I2C)
2025-08-20

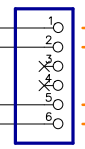
+3V3

needed for some I2C units,
NOT SCD30 or BMP085

R73
4.7K

R74
4.7K

Wire 1



BMP085
or
DHT20

SCL 1

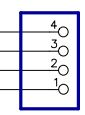
SDA 1

needed for some I2C units,
NOT SCD30 or BMP085

R75
4.7K

R76
4.7K

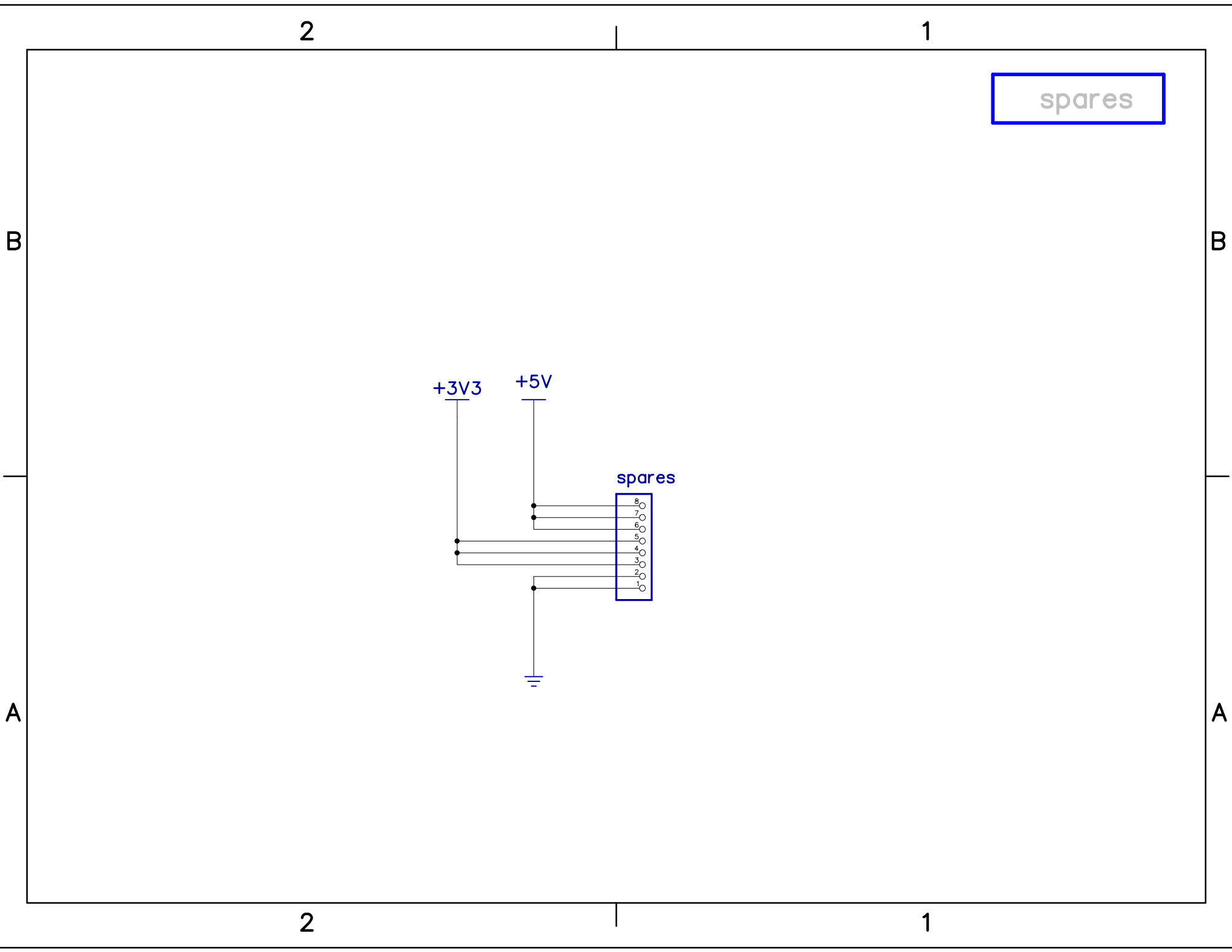
Wire 2



SCL 2

SDA 2





#	Quantity	Value	RefDes	Name	location
1	4	100 nF	C11, C12, C13, C21	cap 1206	
2	1	A/C detect	J1	PhoenixTerminal_3	R03
3	1	furnace detect	J2	PhoenixTerminal_3	R03
4	1	thermostat	J4	PhoenixTerminal_4_w	R03
5	1	rain	J5	PhoenixTerminal_3	R03
6	1	anemometer	J6	PhoenixTerminal_3	R03
7	1	CTs	J7	PhoenixTerminal_4_w	R03
8	1	12V wall wart	J11	barrel_2mm	
9	1	digital misc	J41	PhoenixTerminal_8_w	R04
10	1	on-board DHT22	J42	PhoenixTerminal_4_w	R03
11	1	relay 1	J43	PhoenixTerminal_4_w	R03
12	1	SPI 1	J51	PhoenixTerminal_7_w	R04
13	1	Wire 1	J71	PhoenixTerminal_6_w	R04
14	1	Wire 2	J72	PhoenixTerminal_4_w	R03
15	1	light/res 1	J81	PhoenixTerminal_4_w	R03
16	1	wind dir or depth	J82	PhoenixTerminal_4_w	R03
17	1	spares	J91	PhoenixTerminal_8_w	R04
18	1	red	LED11	LED	
19	1	event (Y)	LED31	LED	
20	1	uSD (blue)	LED32	LED	
21	1	extra (green)	LED33	LED	
22	3	560	R11, R33, R34	resistor 1206	
23	1	4.7K	R31	res array bus 4	5% pouch
24	1	1K	R32	resistor 1206	
25	2	10K	R41, R61	resistor 1206	
26	2	4.7k	R71, R72	resistor 1206	
27	4	4.7K	R73, R74, R75, R76	resistor 1206	
28	1	SPI 0	SPI51	PhoenixTerminal_7_w	R04
29	1	USB-wall	SW11	PCB SPDT on-off-on	
30	1	options	SW31	dipswitch 04	D02
31	1	ground	TP11	testpoint_5mm	
32	1	Teensy 4.1 ZIF	U21	Teensy 4.1 ZIF	
33	1	DS1307 BOB	U71	DS1307	
34	1	UART 2	UART61	PhoenixTerminal_4_w	R03
35	1	UART 3	UART62	PhoenixTerminal_4_w	R03
36	1	TSR1 +5V	VR11	Traco TSR1-5V	E09
37	1	WRL-11373	XB61	XBee BOB (SF)	V1
	47				