

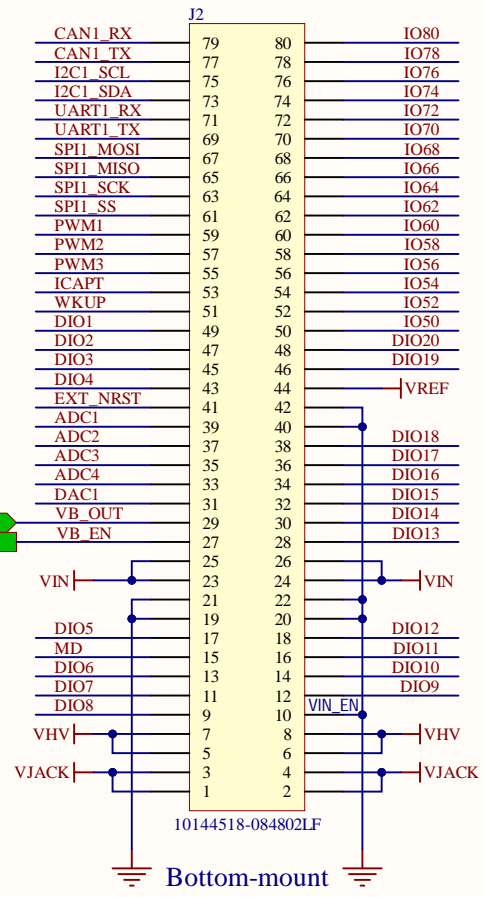
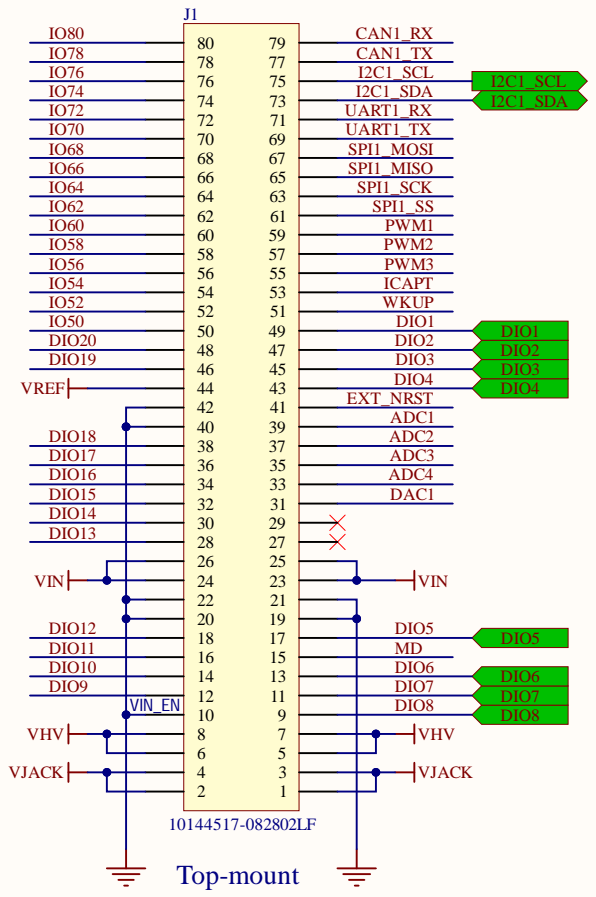


Title: <i>Block Diagram</i>	Version: <i>1.3.1</i>	
Board: <i>Zest_Battery_LiPo</i>	Size: <i>A4</i>	
Project: <i>6TRON</i>	Sheet: <i>1 of 5</i>	
Author: <i>SGA</i>	Date modified: <i>06/12/2021</i>	

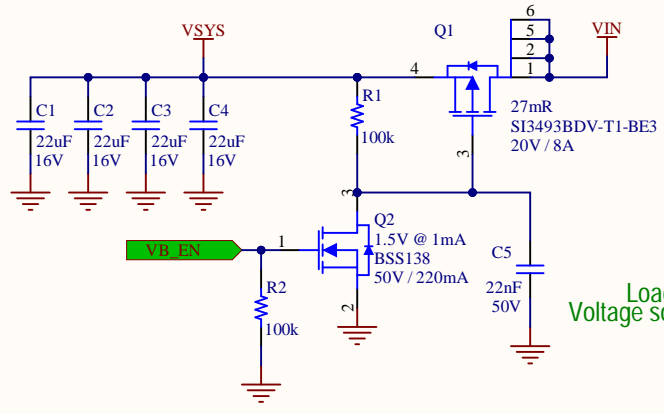


- S1
Logo CATIE
LOGO_CATIE
- S2
Logo 6TRON
LOGO_6TRON
- S3
Logo ESD-Care
LOGO_ESD_CARE

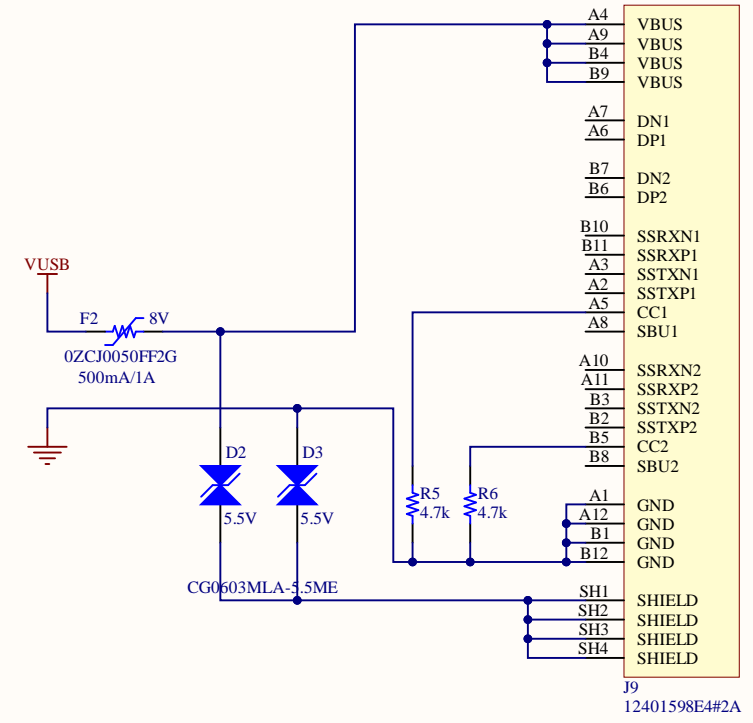
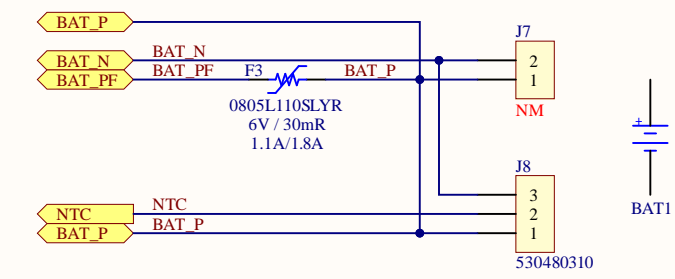
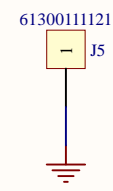
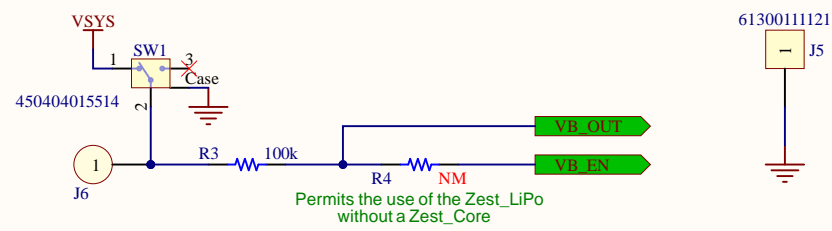
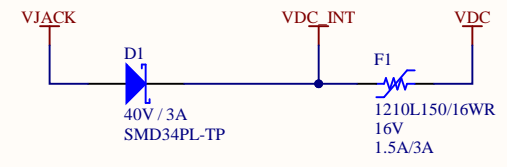
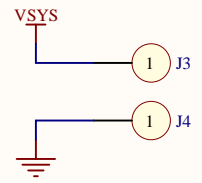


Signal	R22	R20	Pin
nPW_OK	X*		DIO3
		X	DIO5
nCHARGE	X*		DIO4
		X	DIO6
nALERT	X*		DIO1
		X	DIO7
nFAULT	X*		DIO2
		X	DIO8

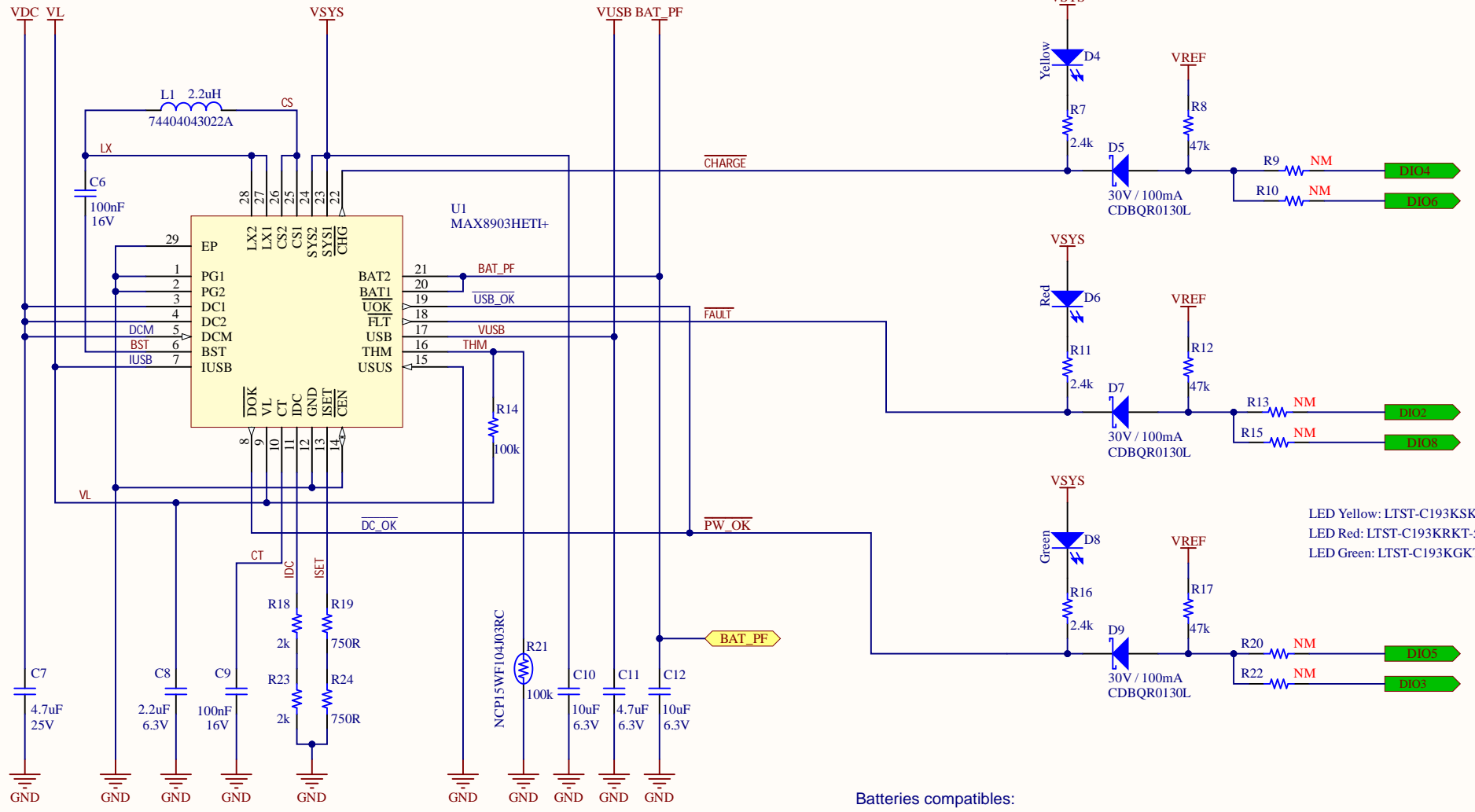
* : By default



Load switch
Voltage source selection



Title: <i>Interface</i>	Version: <i>1.3.1</i>	
Board: <i>Zest_Battery_LiPo</i>	Size: <i>A4</i>	
Project: <i>6TRON</i>	Sheet: <i>3 of 5</i>	
Author: <i>SGA</i>	Date modified: <i>01/02/2023</i>	



LED Yellow: LTST-C193KSKT-5A
 LED Red: LTST-C193KRKT-5A
 LED Green: LTST-C193KGKT-5A

Note for power constraint applications,
 replace the 10K NTC and 10K bridge
 resistor by a 100K resistor and NTC

UOK & DOK are connected together to form
 a univ signal PW_OK (power supply OK)

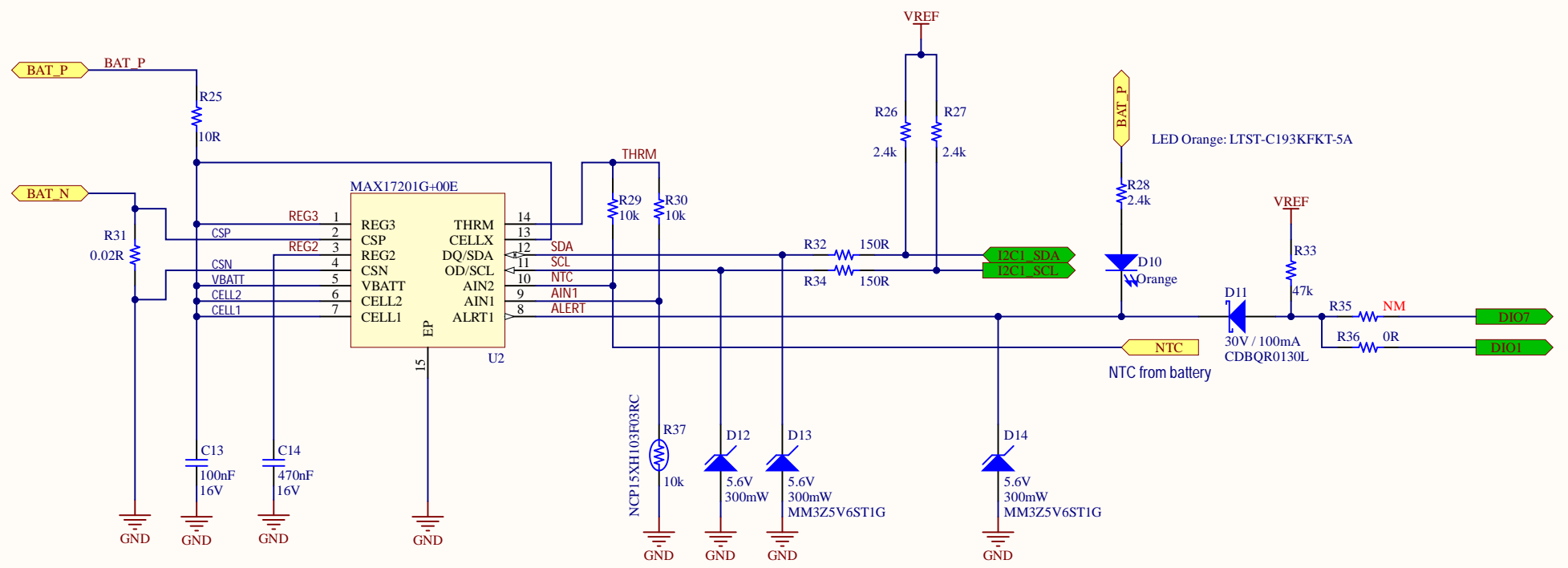
Charger characteristics
 Battery capacity: 800mA.h
 Nominal charge current (DC input): 1C = 800mA
 $R19 + R24 = 1200 / ICH_max$
 DC input current limit: 1.5A $R18 + R23 = 6000 / IDC_max$
 USB input current max: 500mA
 Power Path:
 Minimum system regulation Voltage: 3.3V
 System regulation voltage: 4.4V

Batteries compatibles:

Reference	Capacity	Icharge	Idischarge	R19	R24
LP-402025-1S-3	165mA.h	0.155A	0.310A	3920	3830
LP-402933-1S-3	300mA.h	0.300A	0.600A	2000	2000
LP-443440-1S-3	600mA.h	0.560A	1.120A	1070	1070
LP-573442-1S-3	800mA.h	0.800A	1.000A	750	750
LP-523450P-IS-3	980mA.h	0.930A	1.860A	590	698

Title: Battery charger	Version: 1.3.1	
Board: Zest_Battery_LiPo	Size: A4	
Project: 6TRON	Sheet: 4 of 5	
Author: SGA	Date modified: 21/12/2021	

Sense resistor: (p72) 20mOhm
 Current range: +/-2.56A
 Current precision: 78.125uA
 NRSENSE register value: (p59) 0x07D0
 I2C: Slave mode - 400kHzmax
 Thermistor: 10k beta = 3380k
 Slave address: 6Ch or 16h



Title: <i>Interconnect</i>	Version: <i>1.3.1</i>	
Board: <i>Zest_Battery_LiPo</i>	Size: <i>A4</i>	
Project: <i>6TRON</i>	Sheet: <i>5 of 5</i>	
Author: <i>SGA</i>	Date modified: <i>13/01/2022</i>	