

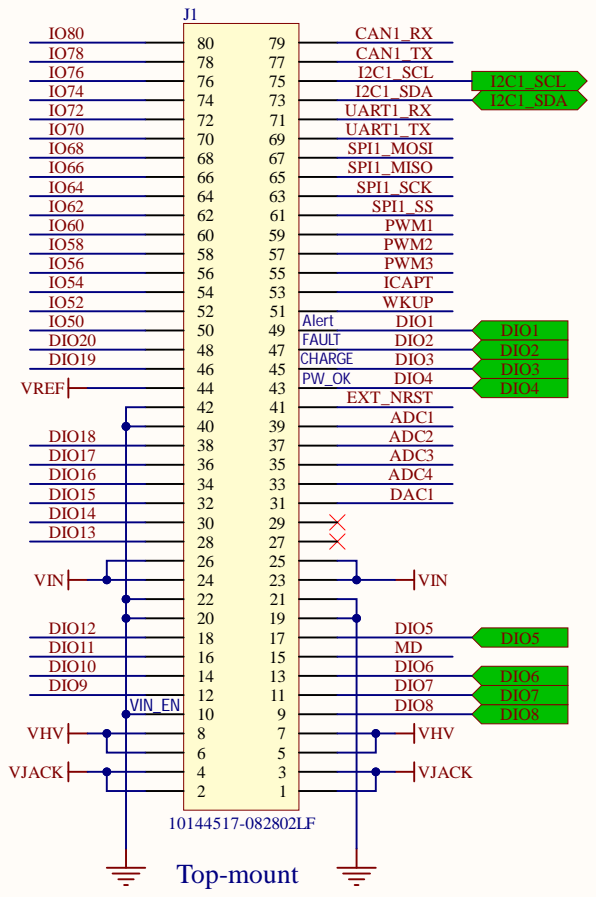
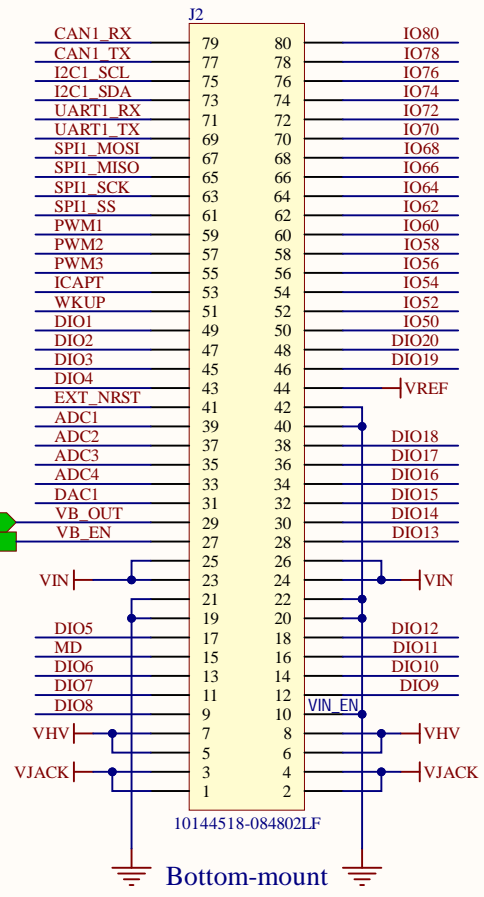


Title: <i>Block Diagram</i>	Version: <i>1.3.0</i>	
Board: <i>Zest_Battery_LiPo</i>	Size: <i>A4</i>	
Project: <i>6TRON</i>	Sheet: <i>1 of 5</i>	
Author: <i>SGA</i>	Date modified: <i>06/12/2021</i>	



10144517-082802LF

Top-mount



10144518-084802LF

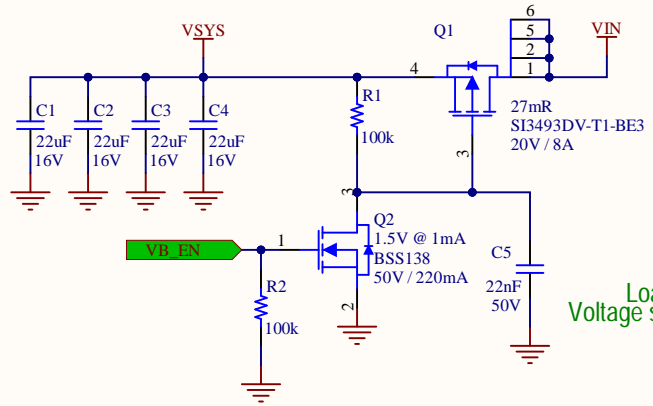
Bottom-mount

- S1  
Logo CATIE  
LOGO\_CATIE
- S2  
Logo 6TRON  
LOGO\_6TRON
- S3  
Logo ESD-Care  
LOGO\_ESD\_CARE

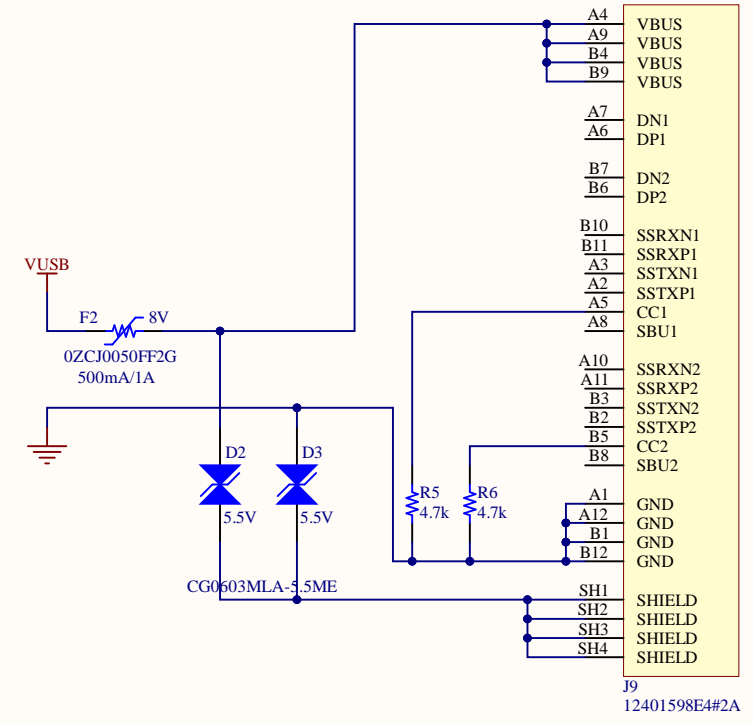
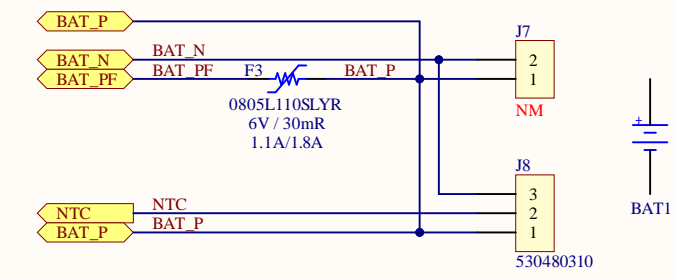
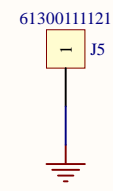
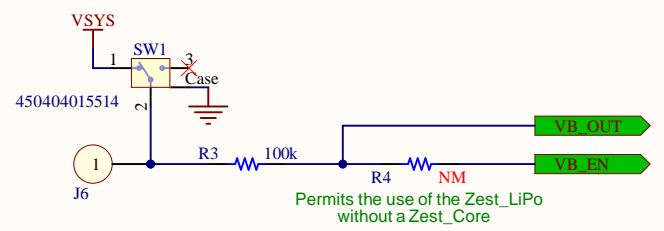
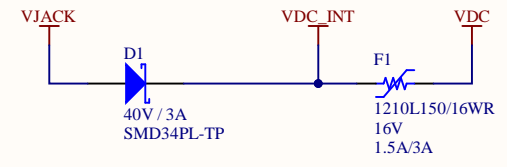
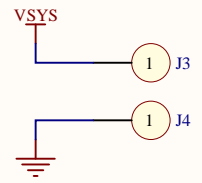


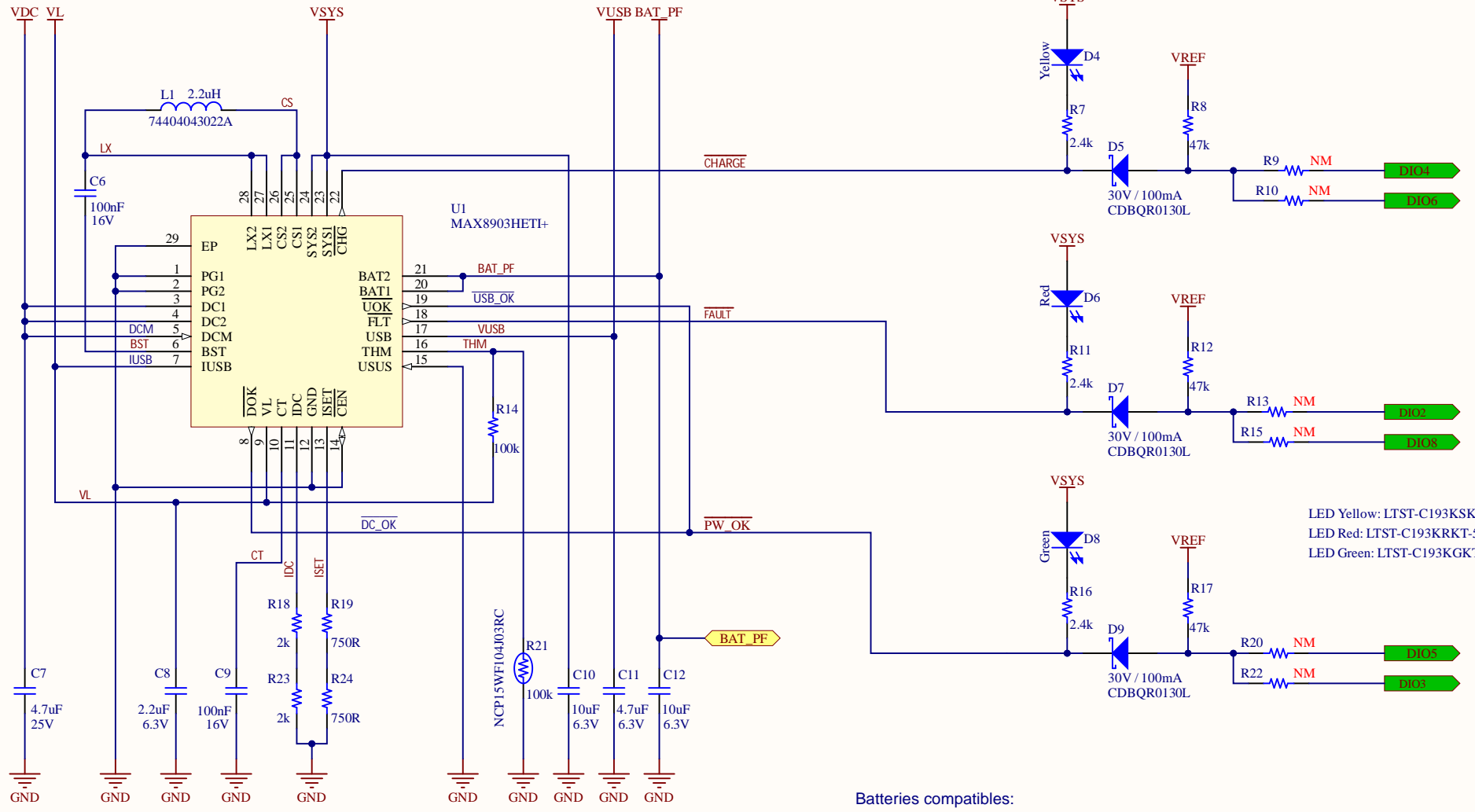
Signal	R22	R20	Pin
nPW_OK	X*		DIO3
		X	DIO5
Signal	R9	R10	Pin
nCHARGE	X*		DIO4
		X	DIO6
Signal	R36	R35	Pin
/ALERT	X*		DIO1
		X	DIO7
Signal	R13	R15	Pin
FAULT	X*		DIO2
		X	DIO8

\* : By default



Load switch  
Voltage source selection





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

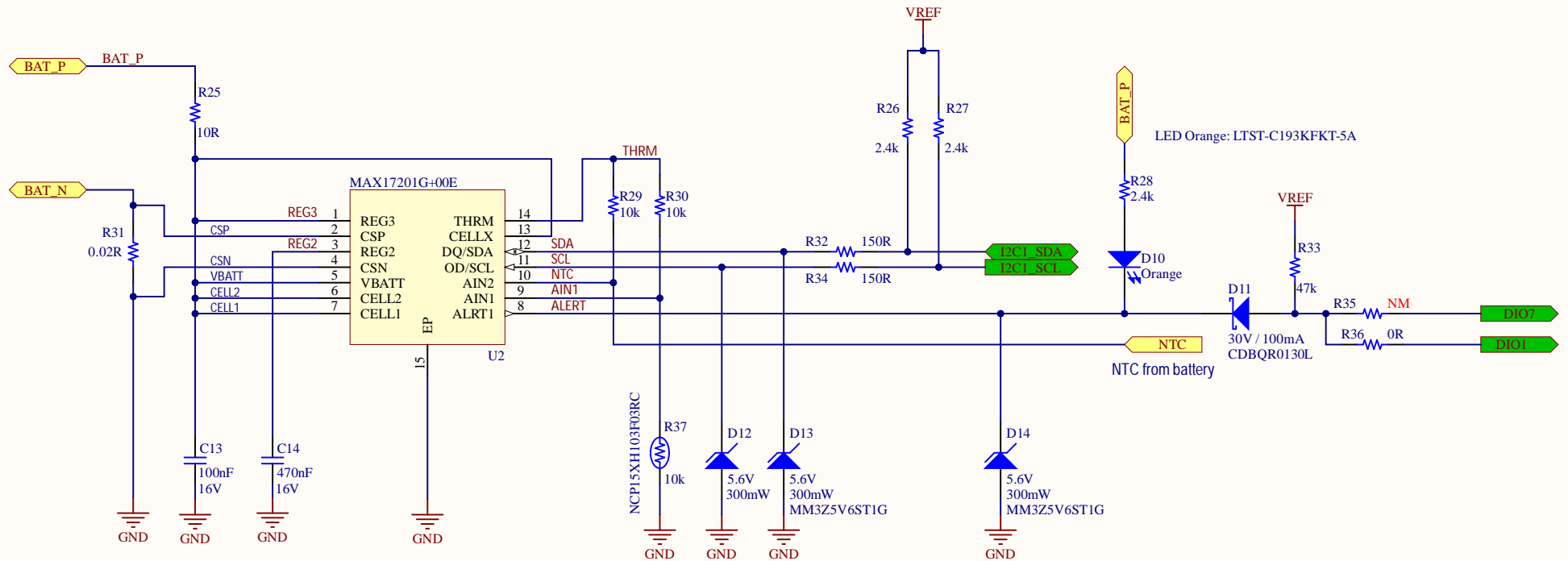
**Batteries compatibles:**

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: 1.3.0	
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>1.3.0</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>06/12/2021</i>	