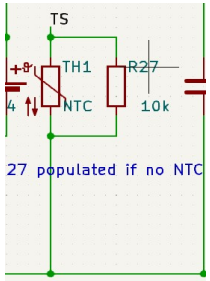
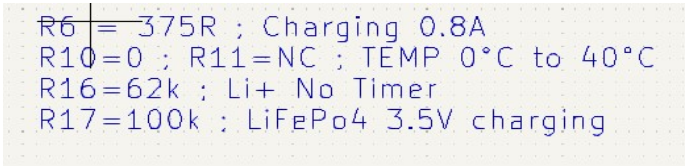
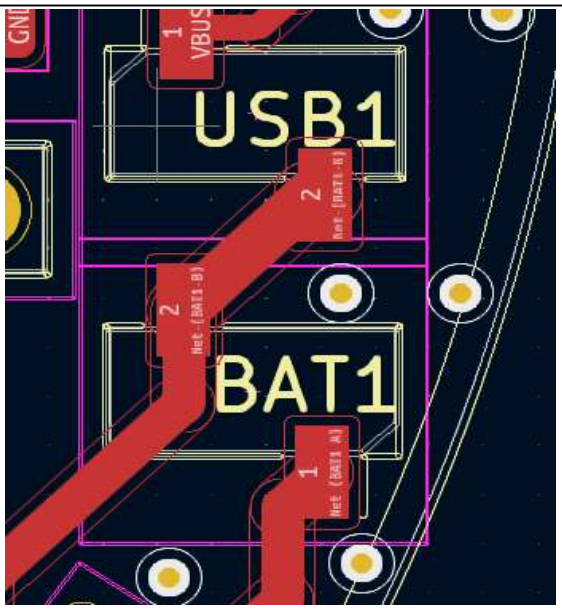
Review	
Project	LaCarrielle
Revision	Stage1
Reviewer	olli_1990
Date	13.11.2023

Found items	
Schematics:	9
PCB layout:	5

Nr.	Category	Sub-category	Schematic page	Review Items	Notes	Date
1	Power	Supply	1	VBUS	ESD protection at J1 is recommended, e.g. C2827693 from LCSC	13.11.2023
2	Components	Temperature	1	TH1, R27	 TH1 and R27 are both populated. One should be set to DNP	13.11.2023
3	Communication	I2C	1	BUS I2C	Missing pullup resistors for I2C	13.11.2023
4	Components	Supply	1	U2	 Designators are not compatible with U2 resistors	13.11.2023
5	Power	Supply	1	U8, U9, U10	Each LDO and the dcdc converter should have 1 own capacitor for debouncing	13.11.2023
6	Power	Supply	1	L1	Inductor component size could be reduced. U8 is only capable to provide ca. 100mA but inductor XEL4030-222ME_ is for more than 5A-6A.	13.11.2023
7	Power	Supply	1	U13, U15	Bosch recommends to use 2x100nF for debouncing for each BMP280	13.11.2023
8	Connector	Camera interface	1	U12, U14, U16	Same interface for cameras? Only PWDN_x is different. Could work if the cameras are activated separatly.	13.11.2023
9	Connector	Camera interface	1	U12, U14, U16	 The Pins MP1, MP2 are used to align the connector on the PCB. Connect the pins to GND	13.11.2023

Nr.	Category	Layer	Date	
				
1	Miscellaneous	Top	13.11.2023	Description is below the component. Better move silkscreen "USB" and "BAT"
2	Miscellaneous	Top	13.11.2023	Mostly 0805 components used. Here are some potential space savings possible if choosing 0402 or 0603 components
3	J1	Top	13.11.2023	Could be necessary to move J1 more towards the PCB edge.
4	J1	Top	13.11.2023	Shield can be connected to GND for ESD optimization
5	Via	Top/Bottom	13.11.2023	Annular ring is at 0,1mm. Mostly 0,15mm is used because of production tolerances. Better use Via hole of 0,2mm and minimum 0,5mm (or 0,6mm) instead. JLCPCB has a description here: https://jlcpcb.com/capabilities/Eagle%20PCB%20to%20gerber%20files