

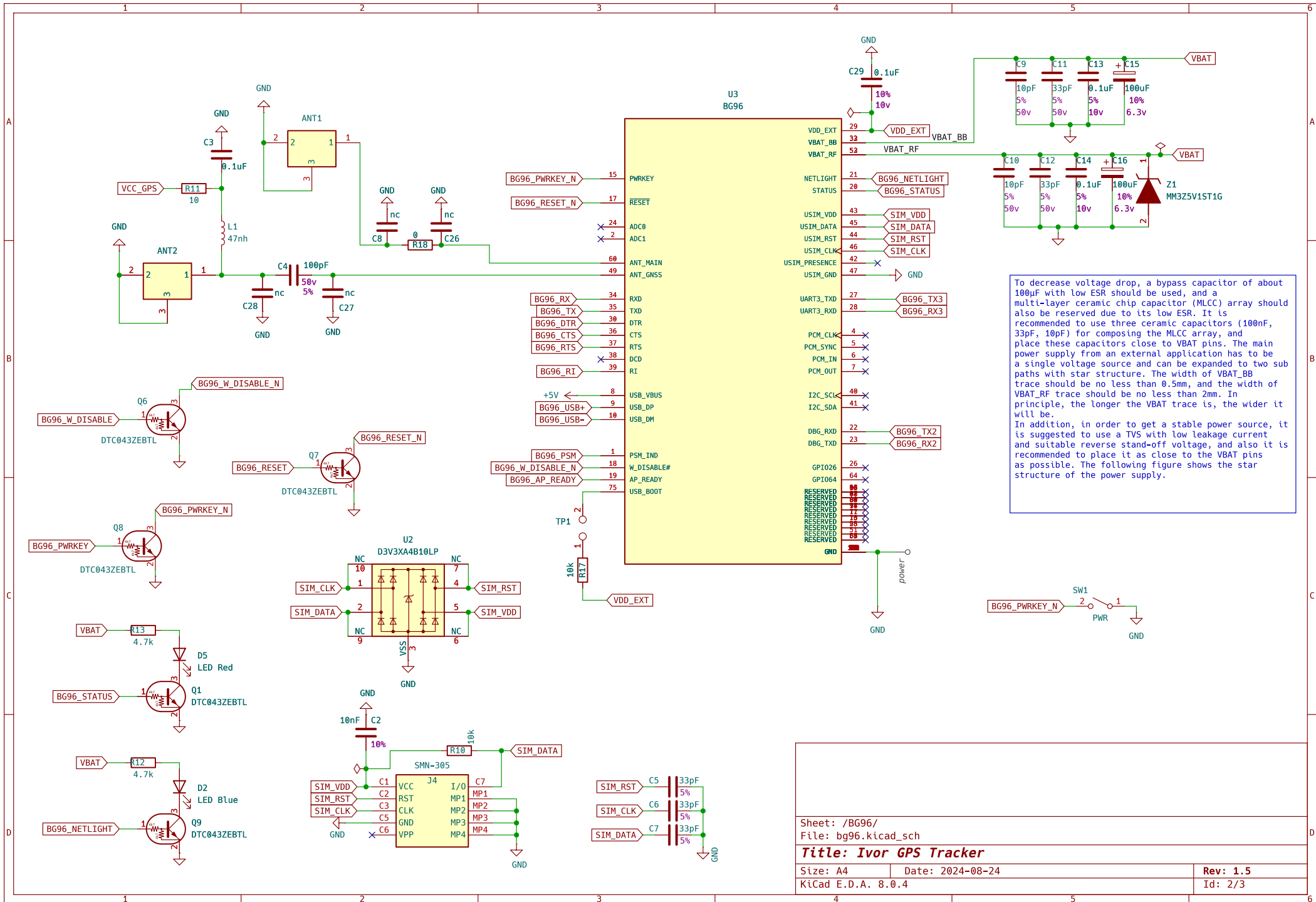
Power  
File: power.kicad\_sch

BG96  
File: bg96.kicad\_sch

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File: tracker.kicad\_sch

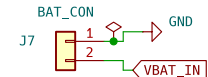
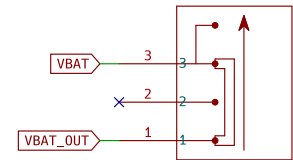
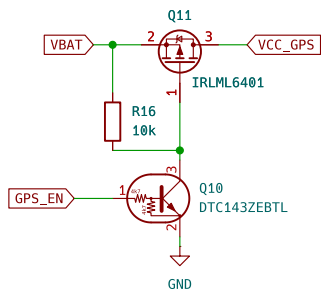
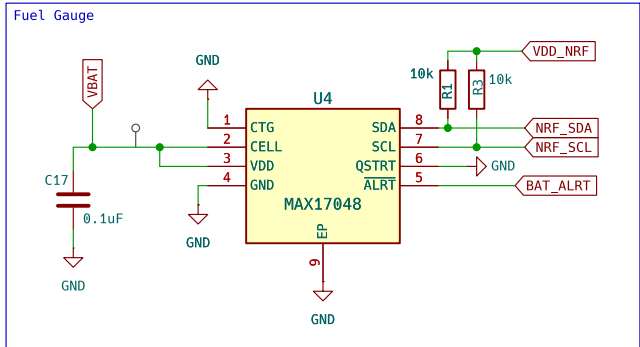
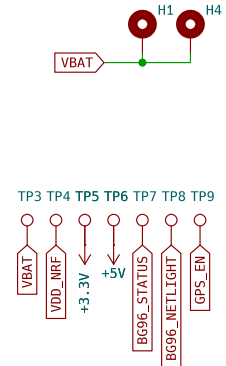
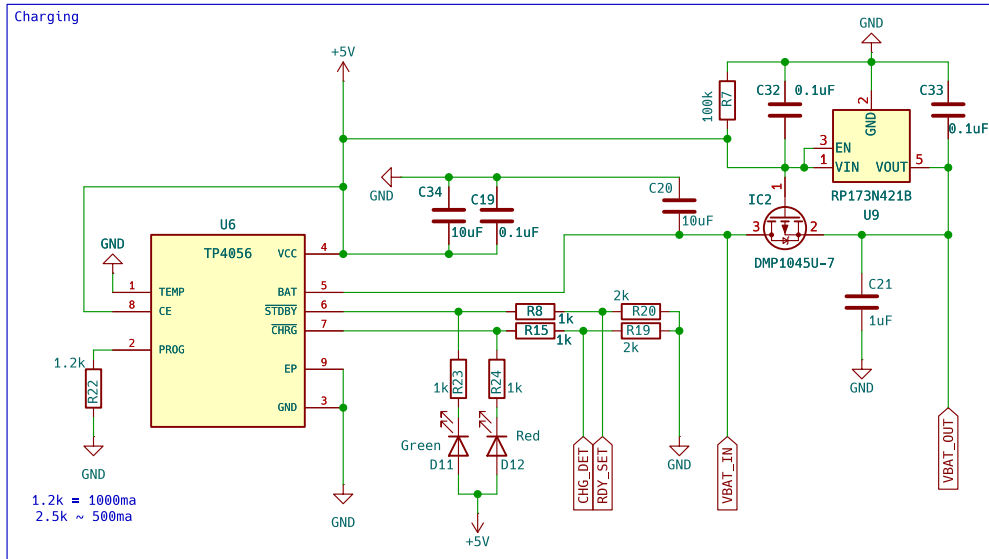
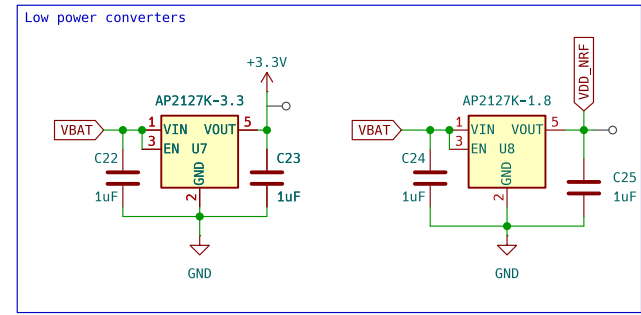
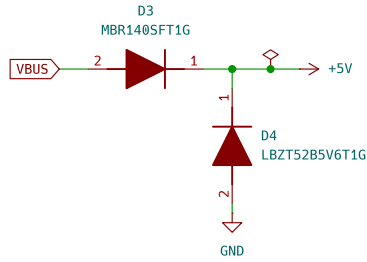
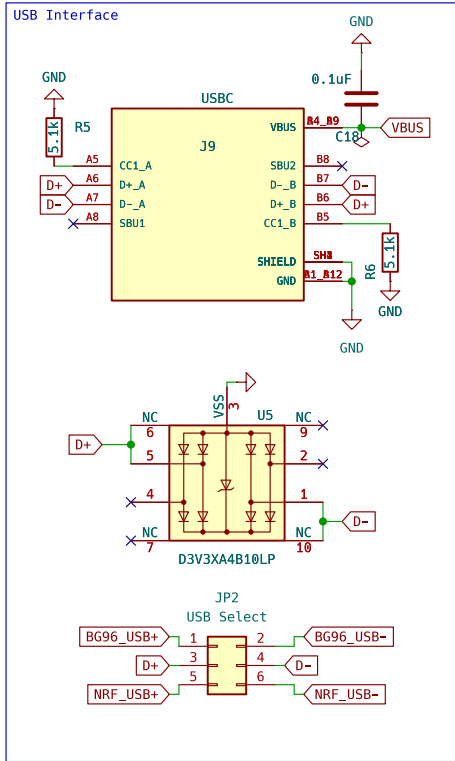
**Title: Ivor GPS Tracker**

Size: A4	Date: 2024-08-24	Rev: 1.5
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To decrease voltage drop, a bypass capacitor of about 100µF with low ESR should be used, and a multi-layer ceramic chip capacitor (MLCC) array should also be reserved due to its low ESR. It is recommended to use three ceramic capacitors (100nF, 33pF, 10pF) for composing the MLCC array, and place these capacitors close to its low ESR. The main power supply from an external application has to be a single voltage source and can be expanded to two sub paths with star structure. The width of VBAT\_BB trace should be no less than 0.5mm, and the width of VBAT\_RF trace should be no less than 2mm. In principle, the longer the VBAT trace is, the wider it will be. In addition, in order to get a stable power source, it is suggested to use a TVS with low leakage current and suitable reverse stand-off voltage, and also it is recommended to place it as close to the VBAT pins as possible. The following figure shows the star structure of the power supply.

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File: power.kicad_sch		Rev: 1.5	
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