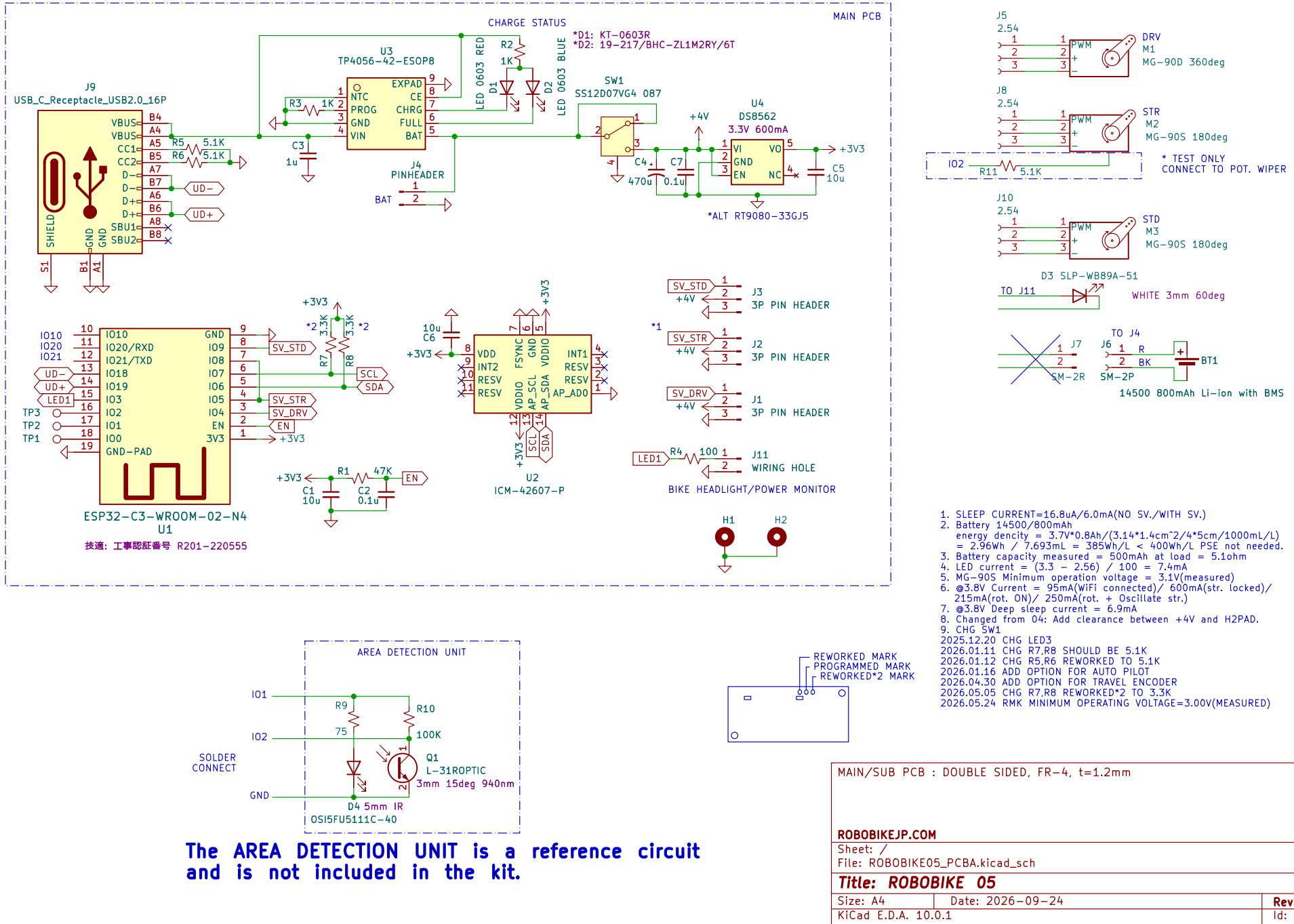


1. SLEEP CURRENT=16.8uA/6.0mA(NO SV./WITH SV.)
2. Battery 14500/800mAh
   energy dencity = 3.7V*0.8Ah/(3.14*1.4cm^2/4*5cm/1000mL/L)
   = 2.96Wh / 7.693mL = 385Wh/L < 400Wh/L PSE not needed.
3. Battery capacity measured = 500mAh at load = 5.1ohm
4. LED current = (3.3 - 2.56) / 100 = 7.4mA
5. MG-90S Minimum operation voltage = 3.1V(measured)
6. @3.8V Current = 95mA(WiFi connected)/ 600mA(str. locked)/
   215mA(rot. ON)/ 250mA(rot. + Oscillate str.)
7. @3.8V Deep sleep current = 6.9mA
8. Changed from 04: Add clearance between +4V and H2PAD.
9. CHG SW1

2025.12.20 CHG LED3
2026.01.11 CHG R7,R8 SHOULD BE 5.1K
2026.01.12 CHG R5,R6 REWORKED TO 5.1K
2026.01.16 ADD OPTION FOR AUTO PILOT
2026.04.30 ADD OPTION FOR TRAVEL ENCODER
2026.05.05 CHG R7,R8 REWORKED*2 TO 3.3K
2026.05.24 RMK MINIMUM OPERATING VOLTAGE=3.00V(MEASURED)

The AREA DETECTION UNIT is a reference circuit and is not included in the kit.

MAIN/SUB PCB : DOUBLE SIDED, FR-4, t=1.2mm

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Title: ROBOBIKE 05

Size: A4	Date: 2026-09-24	**Rev: 20251205**
KiCad E.D.A. 10.0.1		Id: 1/1