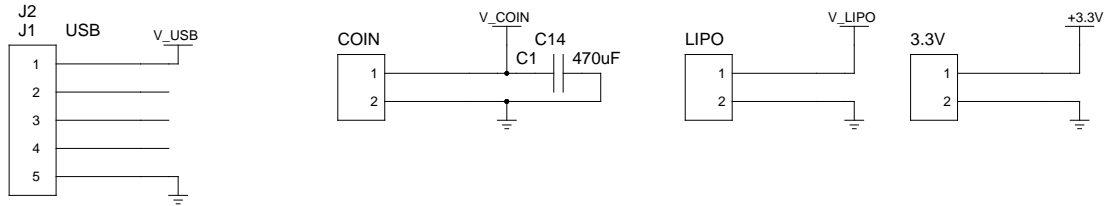


## Connectors

The image displays four circuit diagrams for different power connectors:

- USB:** A 5-pin connector (J1) with pins 1, 2, 3, 4, and 5. Pin 1 is connected to V\_USB, and pin 5 is connected to ground.
- COIN:** A 2-pin connector (J2) with pins 1 and 2. Pin 1 is connected to V\_COIN, and pin 2 is connected to ground. A capacitor C14 (470uF) is connected between the two pins.
- LIPO:** A 2-pin connector (J3) with pins 1 and 2. Pin 1 is connected to V\_LIPO, and pin 2 is connected to ground.
- 3.3V:** A 2-pin connector (J4) with pins 1 and 2. Pin 1 is connected to +3.3V, and pin 2 is connected to ground.



# LiPo charger

re-do sym

V\_USB min V 3.75 U7

MCP73831 U1

V\_LiPo C13

4.7uF C3

4.7uF

C10 C2

BAT\_STAT

4 1

VCC VBAT PROG GND

3 5 2

R1 10k

R12

Icharge (mA) = 1M/RProg

10k → 100mA

2k → 500mA

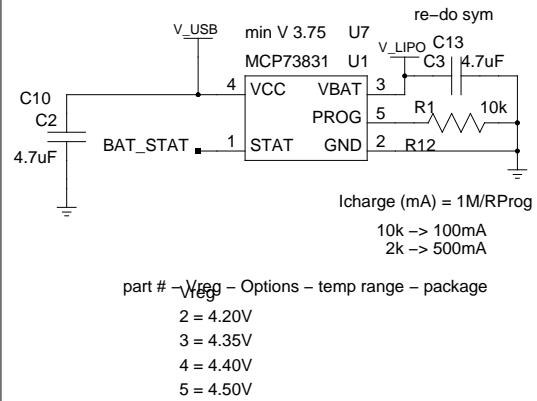
part # - Vreg - Options - temp range - package

2 = 4.20V

3 = 4.35V

4 = 4.40V

5 = 4.50V



### Power Control

The circuit diagram for Power Control includes the following components and connections:

- U10 (BD48K35G\_TL):** A voltage detector with VDD connected to V\_LIPO and VOUT connected to U11.
- U11 (TPS27082L):** A programmable precision centrer with VIN connected to V\_LIPO through R2 (10k) and R3 (10k), and R21. VOUT is connected to U12. ON\_OFF is connected to ground.
- U12 (ICL7673):** A comparator with Vp connected to V\_USB and Vs connected to U11. VOUT is connected to SBAR. NC pins are connected to ground.
- U13 (74AHC1G02):** A NOR gate with inputs A and B connected to V\_USB and V\_LIPO respectively. The output Y is connected to /LDO\_EN (push-pull).
- U4 (TPS77033):** A low-dropout regulator with IN connected to V\_USB through C4 (1uF). /EN is connected to ground. OUT is connected to U6.
- U6 (TPS2101DBVR):** A low-dropout regulator with IN connected to U4. EN is connected to ground. OUT is connected to U7.
- U7 (TPS2101DBVR):** A low-dropout regulator with IN connected to U6. EN is connected to ground. OUT is connected to +3.3V.

Legend:

- open drain. active low, 3.5
- push-pull

outputs high when both inputs are low

