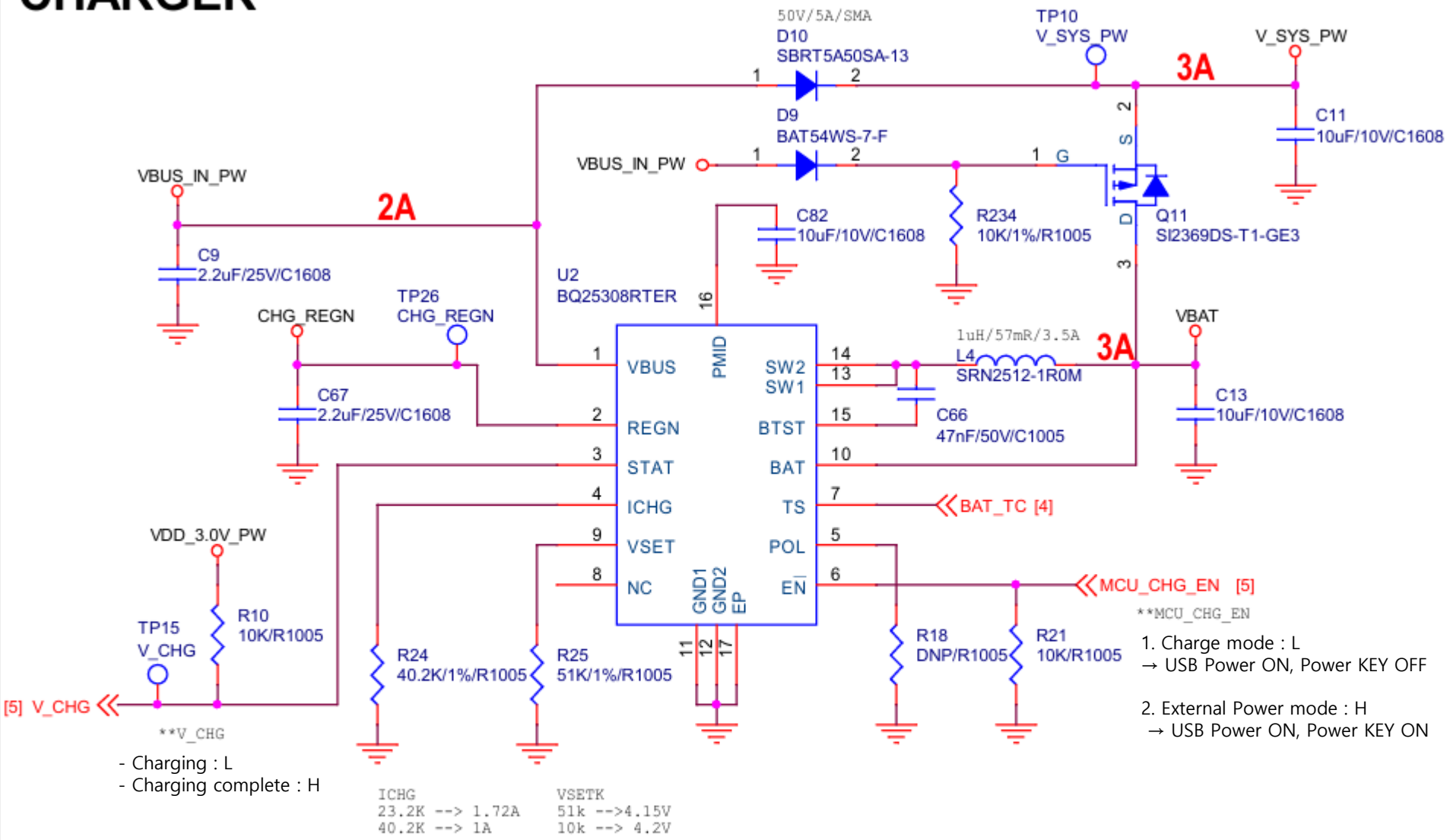
CHARGER



- Charging : L
- Charging complete : H

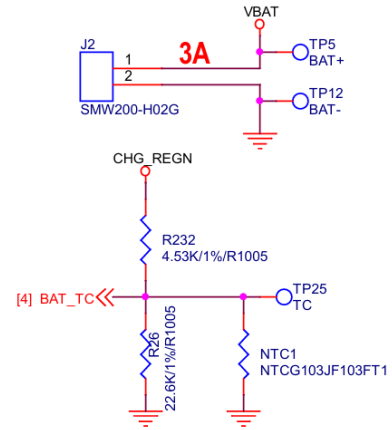
ICHG
23.2K --> 1.72A
40.2K --> 1A

VSETK
51k -->4.15V
10k --> 4.2V

1. Charge mode : L
→ USB Power ON, Power KEY OFF

2. External Power mode : H
→ USB Power ON, Power KEY ON

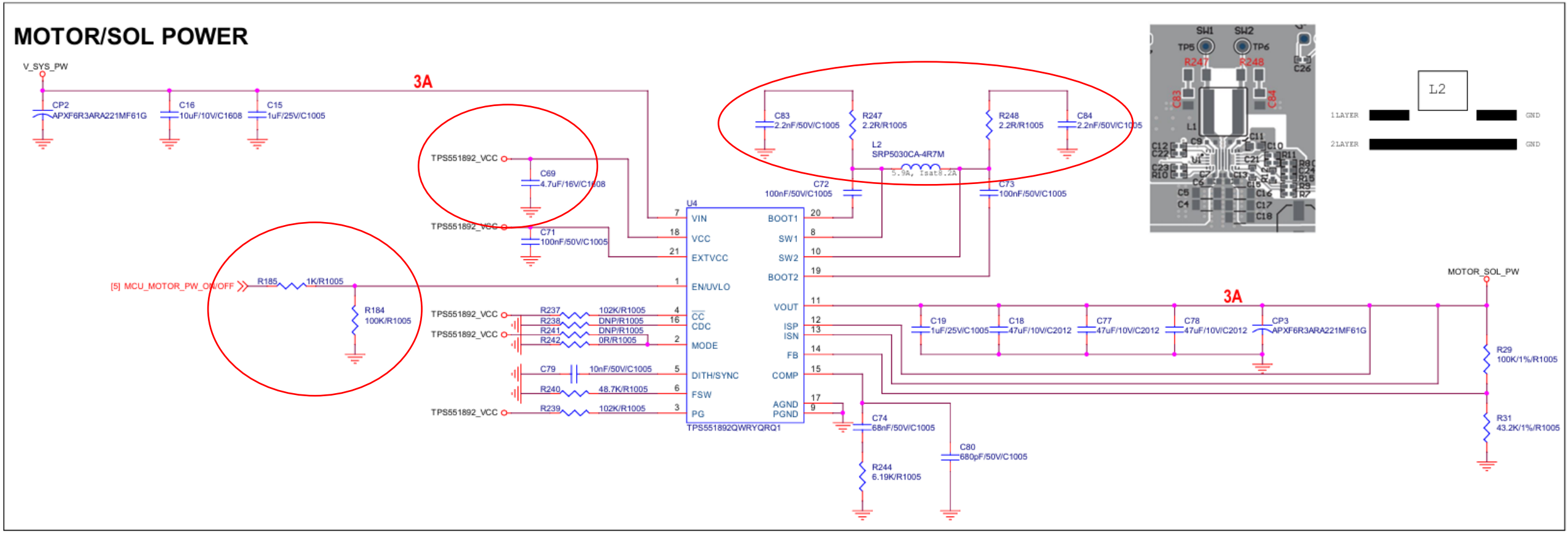
BATTERY CONNECTOR



I see there was a change to include the addition of power path to the final schematic.
While figure 9-7 in the datasheet shows this use case, we are in the process of trying to remove this.
Connecting a powerpath to PMID pin is not recommended on this device.
Instead it is recommended to connect VSYS to VBUS and add an external reverse blocking FET.
-> Add reverse diode (50V / 5A / SMA)

The newest schematic does not show resistor selection at TS, so I cannot verify whether it is acceptable.
-> Add NTC circuit

As clarification since POL pin has been connected to GND /EN pin will need to be pulled to logic high to enable charging with the BQ25308
-> DNP applied



-If the MCU_MOTOR_PW_ON/OFF signal is higher than 1.23V, customer can directly use this signal to enable EN pin. Just add a 100kohm pull down resistor.
→ Since the MCU output voltage is 3V, delete the existing circuit and connect the MCU directly.

-Change C69 to 16V rated to ensure 2uF effective capacitance with DC derating.
→ C69: 4.7uF voltage change from 10V to 16V

-Change L2 to 4.7uH with 8A Isat
-Recommend to reserve RC snubber in SW1 and SW2
➔ 4.7uH/rated 5.9A/Isat 8.2A, SRP5030CA-4R7M change
➔ Add RC snubber circuit

-If customer doesn't use the output current limit function, remove R245 and directly connect ISN and ISP to Vout.
-->Short after deleting R245