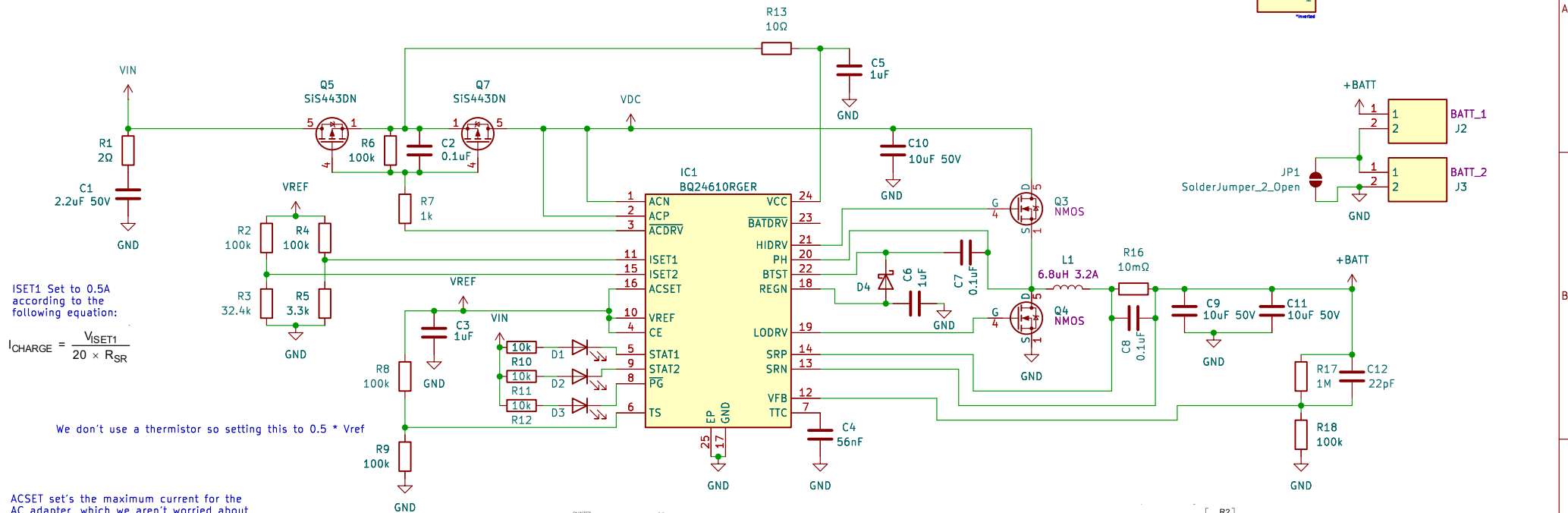


Battery Charger



ISET1 Set to 0.5A according to the following equation:

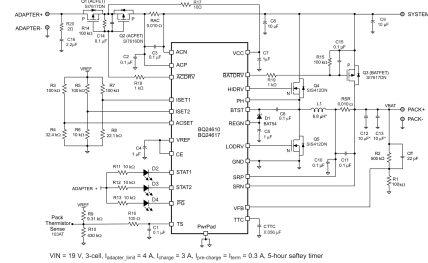
$$I_{CHARGE} = \frac{V_{ISET1}}{20 \times R_{SR}}$$

We don't use a thermistor so setting this to 0.5 * Vref

ACSET set's the maximum current for the AC adapter, which we aren't worried about so connecting to VREF

Table 2. STAT Pin Definition for BQ2461x

CHARGE STATE	STAT1	STAT2
Charge in progress	ON	OFF
Charge complete	OFF	ON
Charge suspend, timer fault, overvoltage, sleep mode, battery absent	OFF	OFF



VIN = 19 V, 3-cell, I_{adapter_max} = 4 A, I_{charge} = 3 A, I_{system} = 0.3 A, 5-hour safety timer

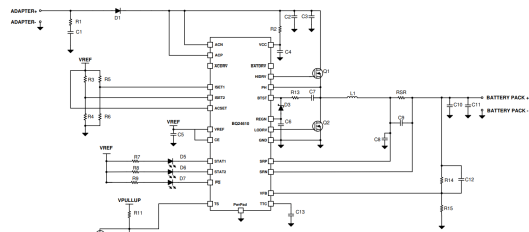
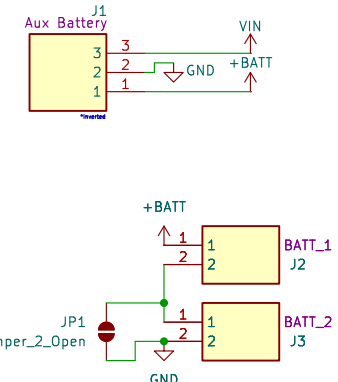


Figure 24. Simplified System Schematic without Power Path or DPM



$$V_{BAT} = 2.1 V \times \left[1 + \frac{R2}{R1} \right]$$

Setting the battery voltage to 23.5V (cell voltage of 3.9V) for longevity
See this article: [how to prolong lithium based batteries](#)