This is an updated outline for the power management board. This is assuming that only one BLDC motor will be used, and we will use the Amazon “Arm 2”. Let me know if there is anything that needs to be changed or feel free to make updates to this doc, if you could just make sure to make it clear where you have made changes to I make sure to see and address them. Thanks!

*\*\*****Changed*** *items are highlighted in green, changed are detailed in bold\*\**

*\*\*****Removed*** *items are highlighted in red, details bolded\*\**

*\*\*items where* ***I need information*** *are highlighted yellow\*\**

| **Voltage and Current** | **Equipment Using Voltage** |
| --- | --- |
| 3.3V, 500mA  -300mA | MCU   * 61mA * 1 terminal block spot * *If for whatever reason I need to make 2x MCU board, can we just connect two wires to your board terminal block 3v3 and 2 wires to GND that split into 2 wires for two different boards?*   ESP   * 250mA * 1 terminal block spot |
| 5V, 1A  **Changing power converter to accommodate new design’s current demands**  **1.5A** | Motor Encoder Boards   * 180mA * 1 terminal block spot **(reduced from 2 to reflect motor design changes)**   Pre-Made Robot’s Servo Motors   * 250mA * 4 terminal block spots * **Added based on new design plans** |
| 6V  **This will be removed and there will no longer be 6V output** | Robot Pincher   * **Removing the 6V power output; this is the robot pincher we were going to buy, but the Amazon robot has a pincher and this is no longer needed** |
| 12V, 1A  **Power converter changing to LM5164DDAT to better accommodate application** | Motor Driver   * ?A * 1 terminal block spot **(changing from 12 to reflect reduction in BLDC motors)** |
| 24V  **This will be removed; motor 4 needing 24V is removed from design** | Motor 4   * **Removed; new design does not use this motor** |
| 48V | BLDC Motor Power Stage   * ?A * 1 terminal block spot **(reduced from 2 to 1 to reflect only one motor being used)** |