Power Board

Power Pads

VBAT+ PAD GND PAD

Motor Pads



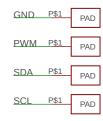
Interface between top and bottom board

GND PHASE A PHASE B PHASE_C TEMP ADC VCC5V

GND GND VCC5V CURRENT_ADC PWM_AH PWM_AL PWM_BH PWM_BL PWM_CH PWM_CL VBAT GND

Logic Board

Control Interface



Interface between top and bottom board

GND PHASE A PHASE B PHASE_C TEMP_ADC VCC5∇

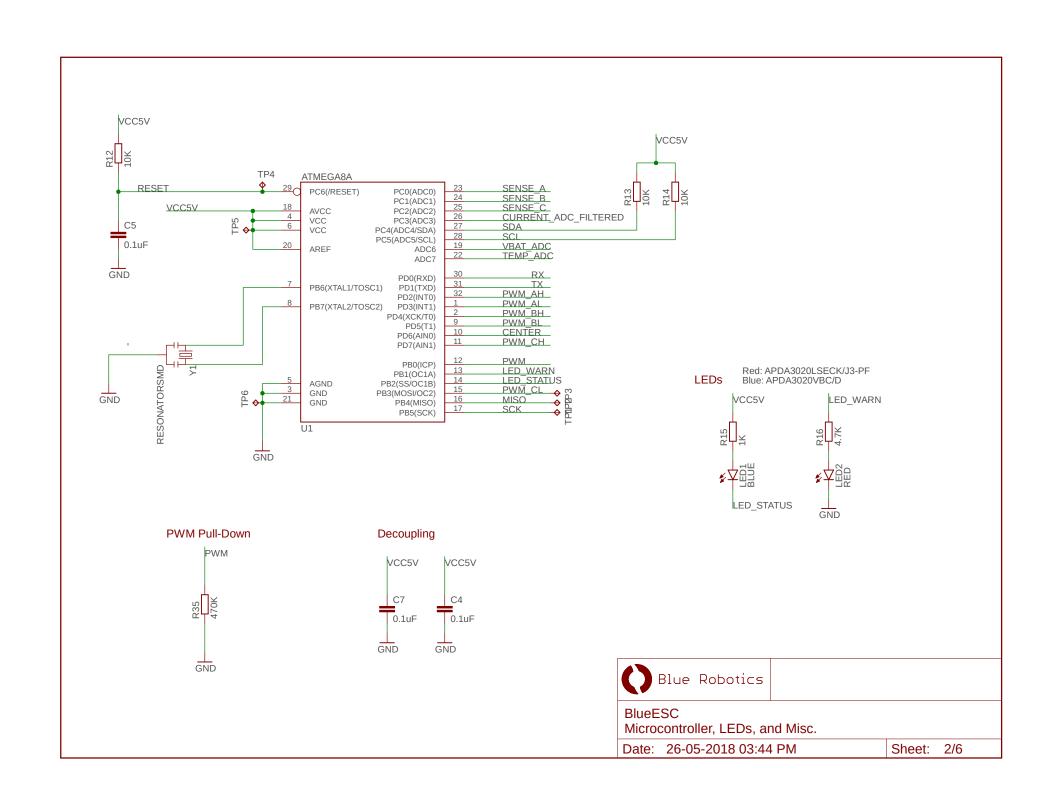
GND GND VCC5V CURRENT_ADC PWM_AH PWM_AL PWM_BH PWM_BL PWM_CH PWM_CL VBAT GND



BlueESC Connectors & Interfaces

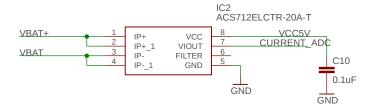
Date: 26-05-2018 03:44 PM

Sheet: 1/6

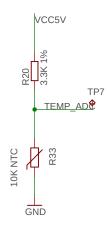


Power Board

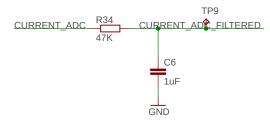
Current Sense



Temperature Sense

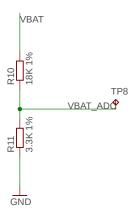


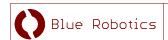
Logic Board



Current-sense low-pass filter, cutoff at 3.4 Hz

Voltage Sense

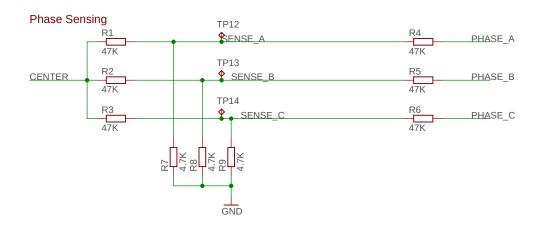


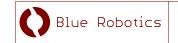


BlueESC Current/Voltage/Temp Sensing

Date: 26-05-2018 03:44 PM Sheet: 3/6

Logic Board Power Board Power Decoupling 5V Power IC1 7805DT TP11 TP10 **VBAT** VCC5V VBAT+ GND TPS70950 150 mA 30V input Internal ENable pullup C9 <u>+</u> C17 1000uF 1uF GND GND GND Blue Robotics BlueESC Main Power Caps and 5V Power Date: 26-05-2018 03:44 PM Sheet: 4/6





BlueESC Phase Sensing

Date: 26-05-2018 03:44 PM Sheet: 5/6

