

The diagram shows a 3V3 regulator (U1) with a bypass capacitor (C29). The input (IN) is connected to a 5V source through a 10µF capacitor (C28). The output (OUT) is connected to a 3V3RFB source through a 10µF capacitor (C29). The EN pin is connected to a 3V3 Reg. EN signal. The BYP pin is marked with a red 'X' and is not connected. The regulator is connected to GND.

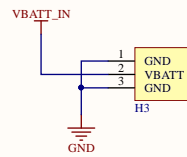
The diagram shows the DRV8833 H-Bridge module (yellow box) with the following connections:

- Pin 1 (nSLEEP_Motor_Driver):** Connected to GND.
- Pin 16 (AIN1):** Connected to MOTOR_3_IN_A.
- Pin 15 (AIN2):** Connected to MOTOR_3_IN_A.
- Pin 9 (BIN1):** Connected to MOTOR_3_IN_B.
- Pin 10 (BIN2):** Connected to MOTOR_3_IN_B.
- Pin 8 (nFAULT_Driver_Motor):** Connected to GND.
- Pin 13 (GND):** Connected to GND.
- Pin 17 (PAD):** Connected to GND.
- Pin 12 (VM):** Connected to VBAT_OUT.
- Pin 11 (VCP):** Connected to VBAT_OUT.
- Pin 14 (VINT):** Connected to GND.
- Pin 2 (AOUT1):** Connected to MOTOR_3_OUT_A.
- Pin 3 (AOUT2):** Connected to MOTOR_3_OUT_B.
- Pin 4 (AISEN):** Connected to GND.
- Pin 7 (BOUT1):** Connected to GND.
- Pin 5 (BOUT2):** Connected to GND.
- Pin 6 (BISEN):** Connected to GND.

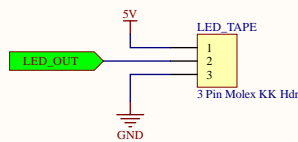
Additional components and labels:

- Capacitors:** C26 (100nF) and C27 (2.2uF 10V) are connected between VBAT_OUT and GND.
- Resistor:** R13 (10R) and R14 (10R) are connected between GND and the motor output lines.
- Labels:** H-Bridge_2, DRV8833, MOTOR_3_IN_A, MOTOR_3_IN_B, MOTOR_3_OUT_A, MOTOR_3_OUT_B, VBAT_OUT, GND, C26, C27, R13, R14, C25, 6.3V, 10uF.

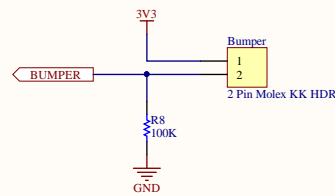
BATT HEADER



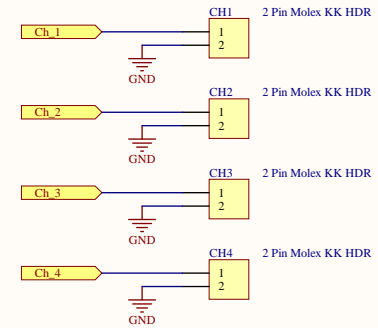
LED TAPE HEADER



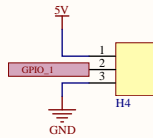
BUMPER HEADER



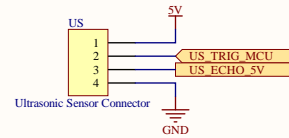
RADIO SELECTION HEADERS



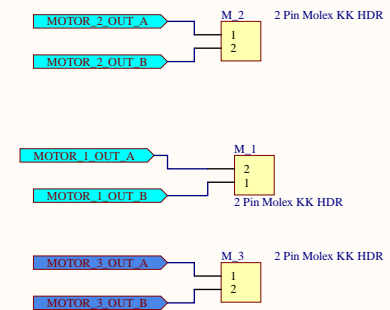
10 PIN GPIO BREAKOUT



ULTRASONIC SENSOR

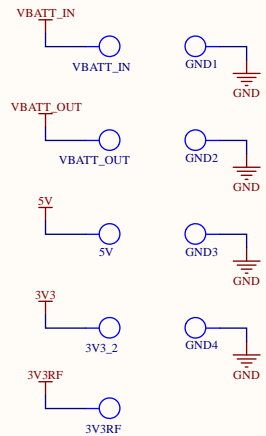


MOTOR HEADERS

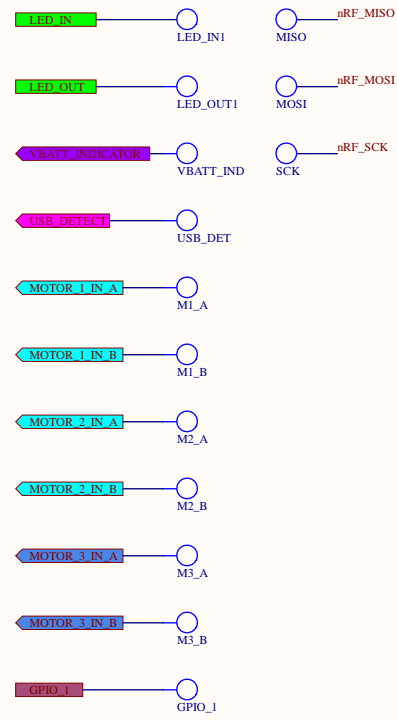


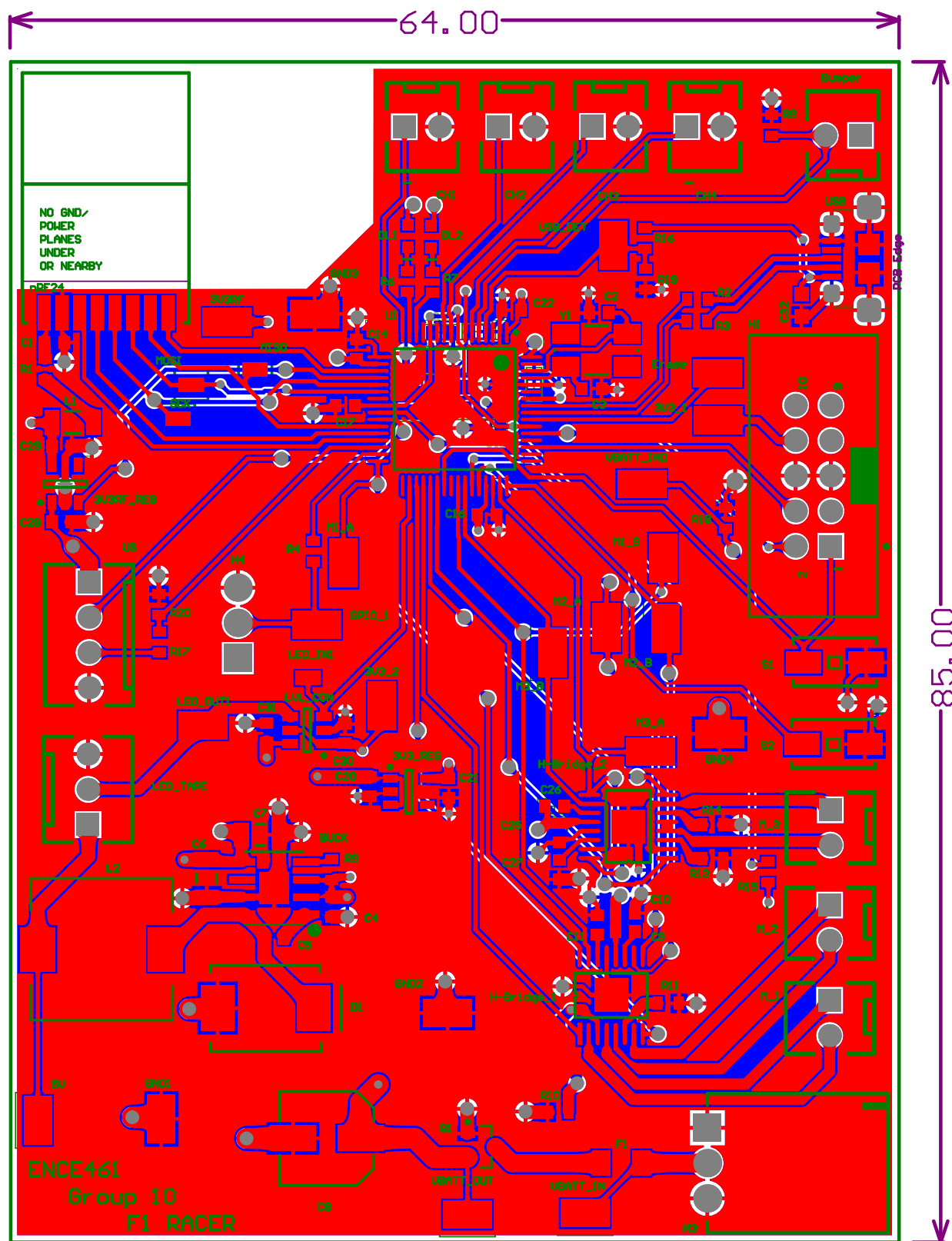
Title: Headers		* ECE Department University of Canterbury Christchurch 8041 New Zealand	Cannot open file: V:\Altium\Design er\Templates\ac- logo.png
Drawn by: Hassan Alhujhoj, Abdullah Naeem	Revision: *		
Date: 09-Apr-20	Time: 1:34:46 PM	Sheet * of *	
File: C:\Users\Hassan Alhujhoj\Desktop\Semester1_2020\ENCE461\Term_1\wacky_races\GTT\wacky-racers-2020\board\Design\acer			

POWER



DATA





Board slack kept

