The speed of the motor controller is controlled using PWM and the direction of the motor is controlled using the enable pins A and B. Each side of the robot has two motors connected together to provide more torque. The motors share a PWM signal and enable pins on their respective sides. Vin is supplied using a buck converter that converts 12V to 5V +5٧ J3 2 DO/RX RESET 28 Left_EN_B RESET 3 Left_EN_A AREF 18 Left_EN_B Right_EN_A (Right_PWM) Encoder_Left_A 12 D9
Encoder_Left_B 13 D10
Encoder_Right_A 14 D11
Encoder_Right_B 15 D12
16 D13 Left_PWM Tyler Julian - Sooner Competitive Robotics Arduino_Nano_v3.x Sheet: / File: MotorNucleo.sch Title: Motor Nucleo Size: A4 Date: Rev: 2 KiCad E.D.A. kicad (5.1.5)-3 ld: 1/1