This PCB will be used for the remote e-stop system in two places. 1. This PCB interfaces a sender Feather MO with the button and the Adafruit Nokia 5110 breakout board. 2. This PCB interfaces a receiver Feather MO with the kill signal which will signal the e-stop PCB to kill the motor signals. u1 +3.3V^{AdafruitFeatherMOLoRa} 32 RST 31 3V 30 ARf 29 GND SIG_KILL 2 Kill Signal J1 +5٧ Ţ 27 A0
26 A1
25 A2
24 A3
23 A4
22 A5
21 SCK
21 MOSI
20 MISSI
17 DIO1 VBAT 16 En 15 VUSB 14 GND GND D13 13(SIG_KILL) SW1 D12 12 DSPL_RST Stop Button Note: SIG_STOP is active low and uses D11 11 the Feather MO's internal pullup resistor. D10 10 DSPL_DC 9 (SIG_STOP) SIG_STOP-0 0-D6 8 DSPL_DIN D5 7 DSPL_SCLK GND SCL 6 SDA 5 Ant DI05 D103 2 vcc +3.3V ← DSPL_SCLK 3 CLK ANTENNA 2 DSPL_DC 5 D/C W 4 Nokia5110LED Note: VCC is power for the 3V3 logic. LED is power for the backlight which is recommend 3V3. The Feather cannot source enough current for the 5110 so we use a 560 Ohm resistor with the 5V power (from battery) instead of the recommended 3V3 with 330 Ohm resistor. DSPL_RST 7 RST GND R1 F1 560 +5√ ← Noah Zemlin, Sooner Competitive Robotics Sheet: / File: Estop Remote.sch Title: E-Stop Remote Size: USLetter Date: 2020-03-02 Rev: 1 KiCad E.D.A. kicad (5.1.5)-3 ld: 1/1