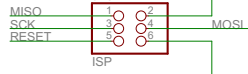
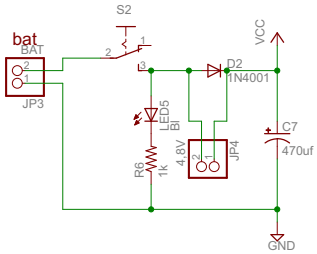
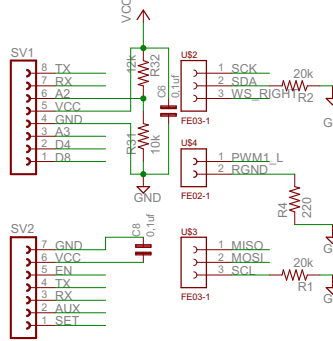


POWER SUPPLY

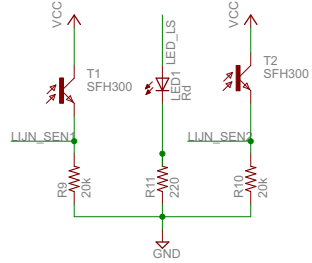
The diagram illustrates a power supply circuit for a microcontroller. A battery (BAT) is connected to a switch (S2) and a 1k resistor (R6). The switch controls the power to a 5V regulator (JP4) and a 4.7V LED (LED5). The regulator is powered by a 5V source (VCC) and has a 470uF capacitor (C7) connected to its output. The ground is labeled GND.



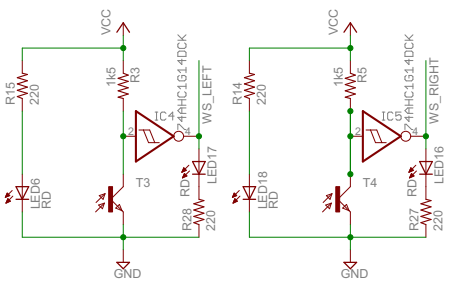
Extension board con.



Line tracing sensor



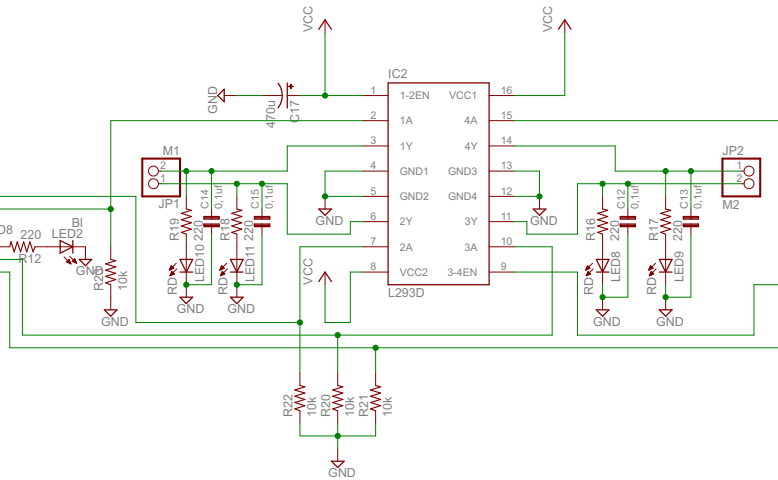
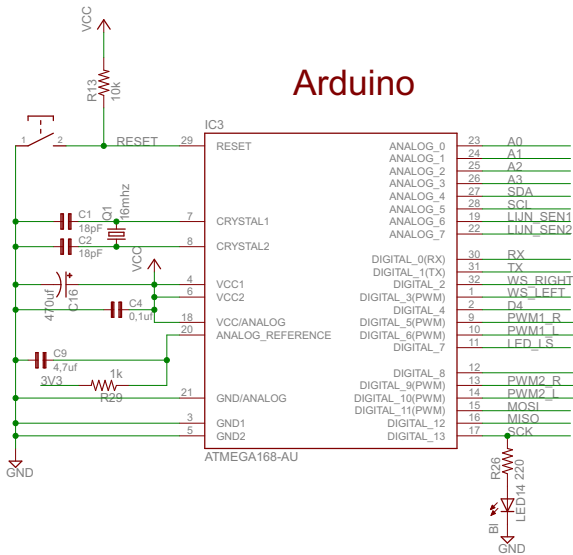
Wheel-sensors



Arduino

The diagram illustrates the internal circuitry of an Arduino Uno R3, centered around the ATmega168-AU microcontroller (IC3). Key components and their connections include:

- Power and Reset:** A 10kΩ resistor (R13) is connected between VCC and the RESET pin (pin 29). The RESET pin is also connected to pin 1 of a 16-pin header.
- Crystal Oscillator:** A 16MHz crystal (Q1) is connected between pins 7 and 8. Two 18pF capacitors (C1, C2) are connected from pins 7 and 8 to ground.
- VCC and GND:** VCC pins (4, 6, 18, 20) are connected to a common VCC line. GND pins (21, 3, 5) are connected to a common GND line.
- Analog Reference:** A 3V3 voltage divider (R29) is connected between VCC and the ANALOG_REFERENCE pin (pin 20).
- Digital Pins:** Pins 23-28 are connected to a common digital bus. Pins 29-31 are connected to a common digital bus. Pins 32-33 are connected to a common digital bus.
- LED:** An LED (D26) is connected between pin 26 and ground.

[illegible]