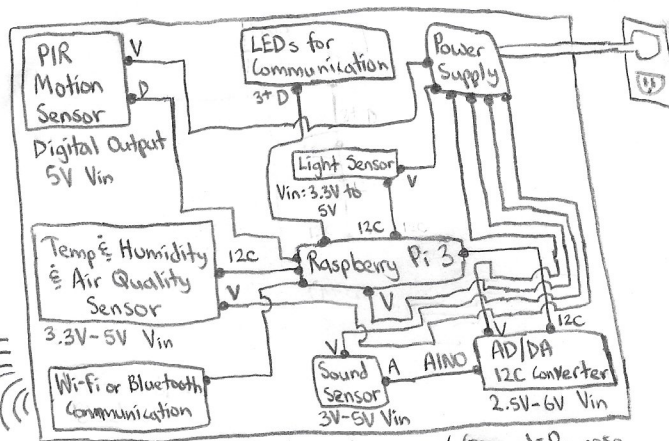


D = Digital Communication  
A = Analog Communication  
V = Voltage In



All-in-One Smart Home Device w/ General-Purpose Control

- General Purpose Control to be decided in time

LED's for Communication: Meant for indications, such as air quality being fine or there being an intruder - LED color for indication Digital GPIO

Temperature/Humidity/Air Quality Sensor: Adafruit BME680 that handles temp, humidity, & air quality  
: Humidity  $\pm 3\%$  Accuracy; Metal Oxide (MOX) sensor changes Temp  $\pm 1.0^\circ\text{C}$  Accuracy; resistance based on Volatile Compounds; Barometric Pressure  $\pm 1\text{hPa}$  Accuracy; (VOC) in the air. Can give you air quality but not differentiate gasses or al.  
3.3V to 5V Voltage In - 12C

Light Sensor: Adafruit TSL2561 - Can detect light ranges from 0.1 to 40,000+ lux  
Contains both infrared and full spectrum diodes  
3.3V to 5V Voltage In - 12C

Sound Sensor: Uses an LM358 IC; Receives sound waves and converts them into an electrical signal  
Needs to be connected to an AD/DA 12C converter (PCF8591) - 2.5V to 6V Voltage In - 12C  
Module Can act as a microphone; 3V to 5V Voltage In

PIR Motion Sensor: 5V Voltage In, Digital Out  
Sensitive up to 22 feet  
Should be far away from Raspberry Pi 3

Power Supply: Logis 480W 20+4-pin ATX Power Supply  
Connections for 3.3V & 5V  
Meant to power Raspberry Pi 3 & sensors

Wi-Fi or Bluetooth Communication: Communication btwn Raspberry Pi 3 & phone application  
: Via the world wide web or phone app