


# RASPBERRY PI ZERO POWER SENSOR HAT

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# POWER ENTRY, 5V BOOST, AND CHARGER

LiPo Battery: ~3.0V-4.2V  
3xAA Battery: ~3.7V to 4.6V  
Battery Current: ~400mA (AVG)  
~775mA (PEAK)

## CHARGING LOAD DISABLE

## 5V Boost SMPS

V<sub>in</sub> UVL0: 2.5V (MAX)

R8 sets switching  
frequency = ~500kHz

System Current: ~250mA (AVG)  
~500mA (PEAK)

## POWER TO SYSTEM

## POWER STATUS LEDS

## LiPo Battery Charger

## RASPI HARD RESET FROM MCU

## POWER\_ENTRY\_BOOST\_CHARGER

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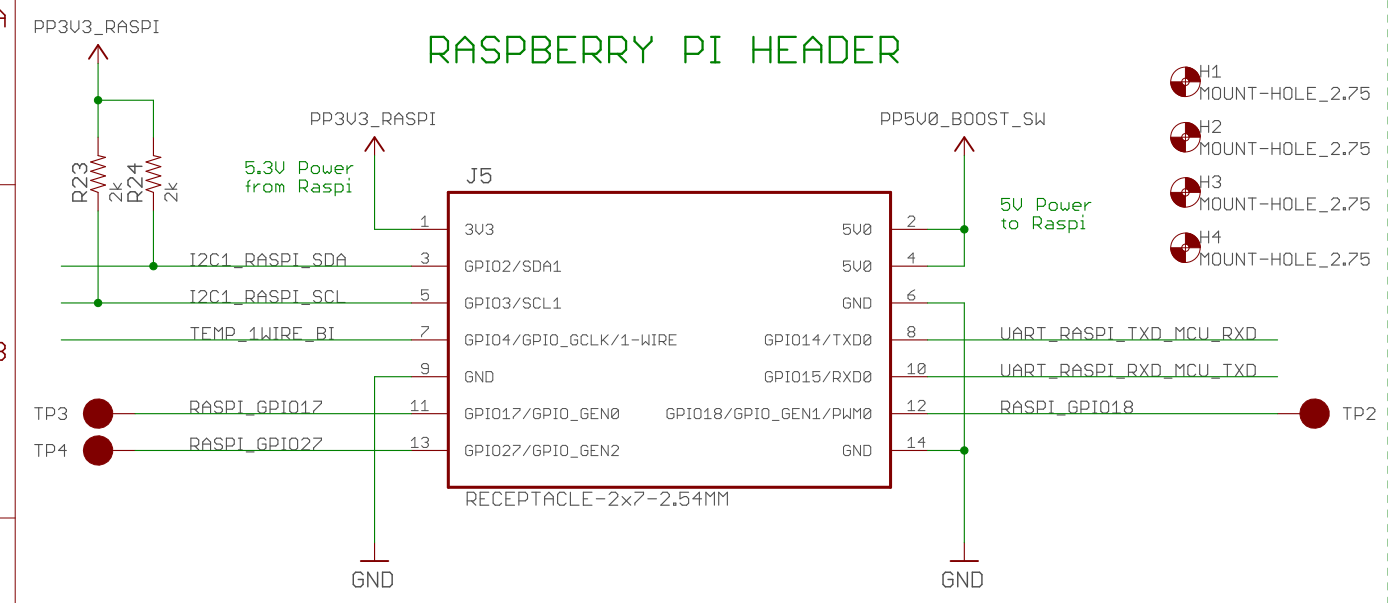
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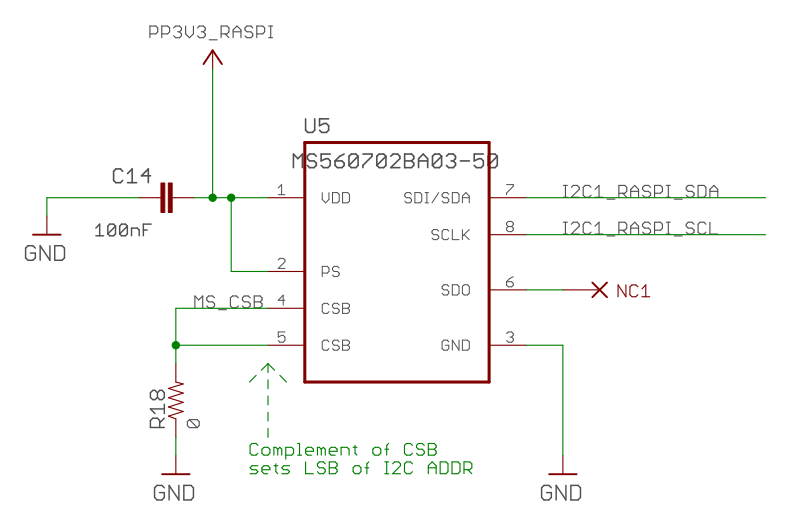
# HOST/RASPI CONNECTORS and SENSORS

## RASPBERRY PI HEADER



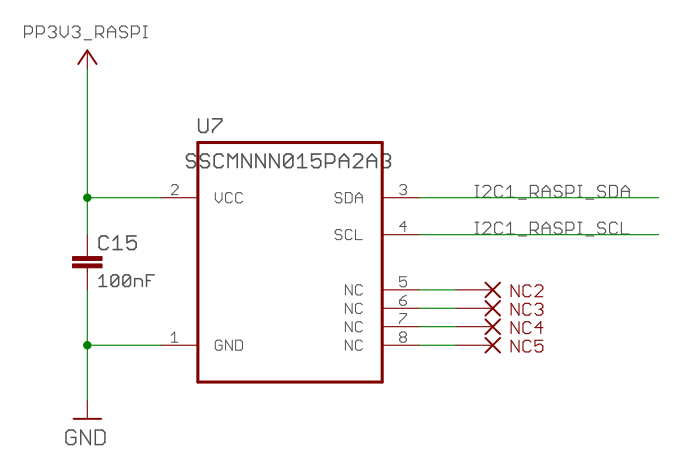
## Pressure Sensor (TE)

I2C Addr: 0xEE/0xEF (W/R)

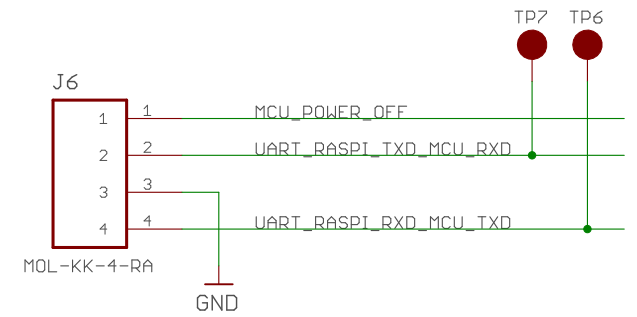


## Pressure Sensor (Honeywell)

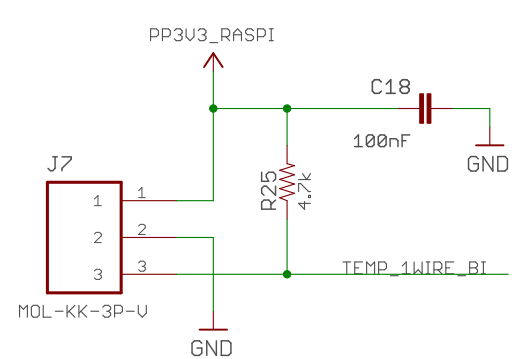
I2C Addr: 0x28/0x29 (W/R)



## HOST MCU CONNECTOR

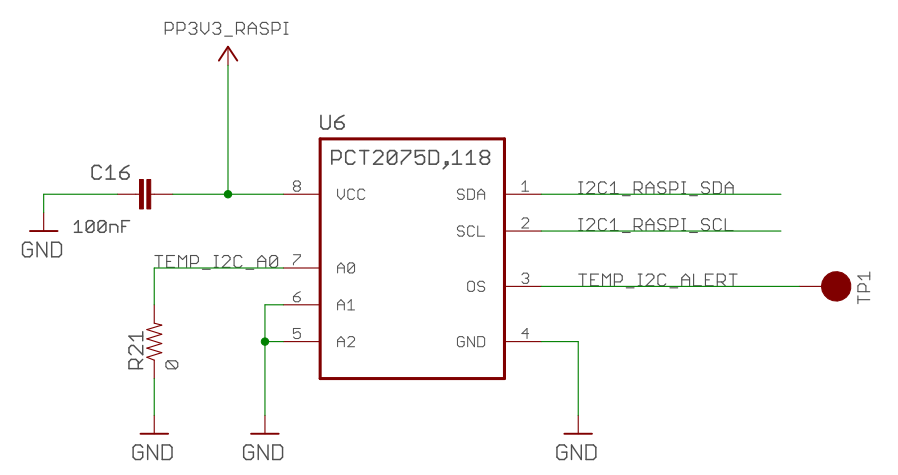


## EXTERNAL TEMPERATURE SENSOR CONNECTOR



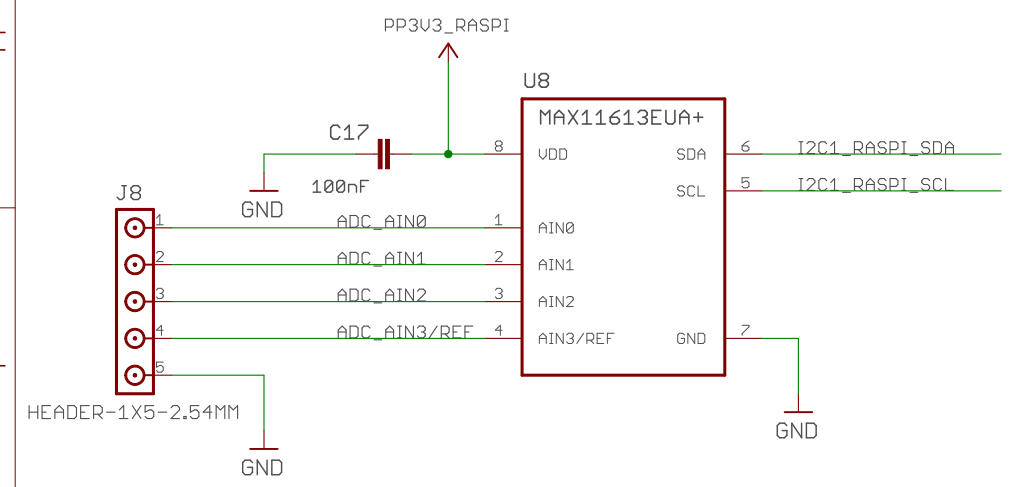
## Temperature Sensor

I2C Addr: 0x90/0x91 (W/R)



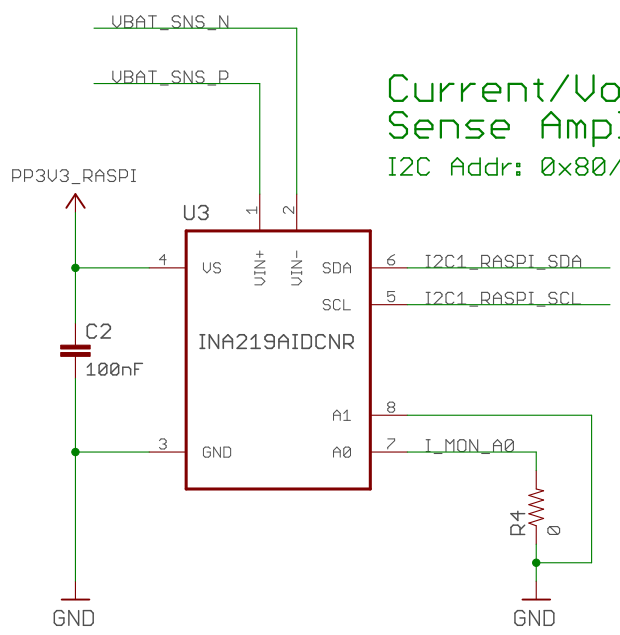
## 12-bit ADC

I2C Addr: 0x68/0x69 (W/R)



## Current/Voltage Sense Amplifier

I2C Addr: 0x80/0x81 (W/R)



## PI\_MCU\_CONNECT\_AND\_SENSORS

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