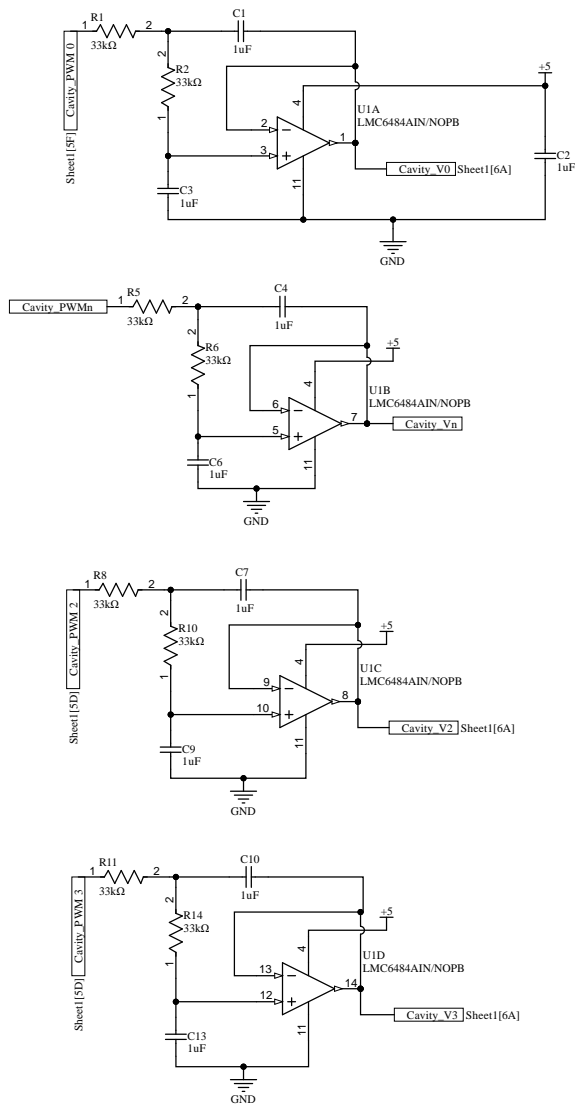


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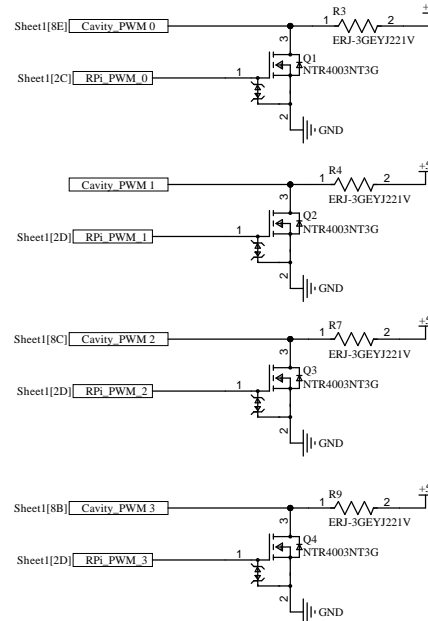
| REVISION | DESCRIPTION | DATE | APPROVED |
|----------|-------------|------|----------|
| | | | |

PWM to Voltage Level Conversion

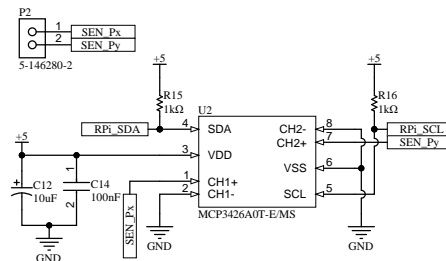


| | | | |
|------------|-----------|---|---|
| Sheet1[7B] | Cavity_V3 | 4 | ○ |
| Sheet1[7C] | Cavity_V2 | 3 | ○ |
| Sheet1[7D] | Cavity_V1 | 2 | ○ |
| Sheet1[7E] | Cavity_V0 | 1 | □ |

RPi PWM Out Logic Level Shifting (Inverts Logic)

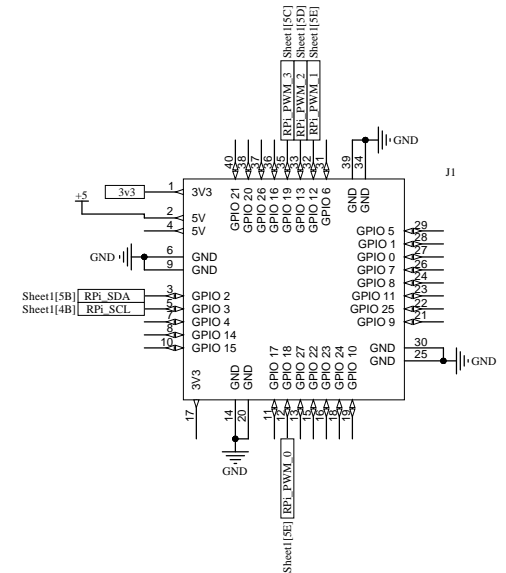


ADC for Power Sensing



RPi Header Connections

RASPBERRY-MODB+/8GB-US2



| | | | |
|---------------------|-------|--|--|
| APPROVALS | DATE | PROJECT | ADDRESS 1 |
| ENG: - | -/-/- | * | ADDRESS 2 |
| DSN: - | -/-/- | PROJECT REVISION | ADDRESS 3 |
| CHK: - | -/-/- | DOCUMENT REVISION | ADDRESS 4 |
| REFERENCE DOCUMENTS | TITLE | 37b0b0ra150654139197275776ecce34f5ea2b0c | 37b0b0ra150654139197275776ecce34f5ea2b0c |
| BOM: | SCALE | FILE NAME | SHEET 1 OF 1 |
| ASSY DWG: | SIZE | CAGE CODE | REV |
| FAB DWG: | B | DWG NO. | |
| PCB DWG: | SCALE | FILE NAME | SHEET 1 OF 1 |

| Line # | Name | Description | Designator | Revision ID | Revision Status | Quantity | RoHSCompliant | RoHS | TargetPrice | Manufacturer 1 | Manufacturer Part Number 1 | Manufacturer Lifecycle 1 | Supplier 1 | Supplier Part Number 1 | Supplier Unit Price 1 | Supplier Subtotal 1 |
|--------|-------------------------|---|--------------------------------------|-------------|-----------------|----------|---------------|---------|-------------|---------------------------|----------------------------|--------------------------|------------|------------------------|-----------------------|---------------------|
| | 1uF | Chip Capacitor, 1 uF, +/- 10%, 50 V, -55 to 125 degC, 1206 (3216 Metric), RoHS, Tape and Reel | C1, C2, C3, C4, C6, C7, C9, C10, C13 | | | 9 | ROHS3 | Details | 0.065 | KEMET | C1206C105K5RACTU | | | | | |
| | 10uF | Capacitor, Tantalum, 10 uF, +/- 10%, 10 V, -55 to 125 degC, 2-Pin SMD (1206), RoHS, Tape and Reel | C12 | | | 1 | ROHS3 | | 0.104 | KEMET | T491A106K010AT | | | | | |
| | 100nF | General Purpose Ceramic Capacitor, 1206, 100nF, 5%, X7R, 15%, 50V | C14 | | | 1 | ROHS3 | | 0.046 | Kyocera AVX | 12065C104JAT2A | | | | | |
| | RASPBERRY-MODB+/8GB-USD | Raspberry Pi Model B+ 8GB Noobs Usd Card | J1 | | | 1 | Yes | | 0 | Raspberry Pi | RASPBERRY-MODB+/8GB-USD | Volume Production | | | | |
| | 5-146280-2 | Male Header, Pitch 2.54 mm, 1 x2 Position, Height 8.21 mm, Tail Length 3.05 mm, -65 to 105 degC, RoHS, Bulk | P2 | | | 1 | ROHS3 | | 0.232 | TE Connectivity | 5-146280-2 | | | | | |
| | 61300411121 | THT Vertical Pin Header WR-PH-D, Pitch 2.54 mm, Single Row, 4 pins | P3 | | | 1 | ROHS3 | | 0.19 | Würth Electronics | 61300411121 | | | | | |
| | NTR4003NT3G | MOSFET N-CH 30V 500MA SOT-23 | Q1, Q2, Q3, Q4 | | | 4 | ROHS3 | | 0.4 | ON Semiconductor | NTR4003NT3G | Volume Production | | | | |
| | 33kΩ | RES Thick Film, 33kΩ, 1%, 0.25W, 100ppm/°C, 1206 | R1, R2, R5, R6, R8, R10, R11, R14 | | | 8 | ROHS3 | | 0.015 | Vishay | CRCW120633K0FKEA | | | | | |
| | ERJ3GEYJ221V | RES SMD 220 OHM 5% 1/10W 0603 | R3, R4, R7, R9 | | | 4 | Yes | | 0 | Panasonic | ERJ3GEYJ221V | | | | | |
| | 1kΩ | | R15, R16 | | | 2 | ROHS3 | | 0.051 | Panasonic | ERJ8BNF1001V | | | | | |
| | LMC6484AIN/NOPB | CMOS Quad Rail to Rail Input and Output Operational Amplifier, 14-pin MDIP, Pb-Free | U1 | | | 1 | ROHS3 | Y | 3.32 | TI National Semiconductor | LMC6484AIN/NOPB | Volume Production | | | | |
| | MCP3426A0T-E/MS | IC ADC 16BIT SIGMA-DELTA 8MSOP | U2 | | | 1 | | | 3.46 | Microchip | MCP3426A0T-E/MS | Volume Production | | | | |