

Raspberry 2.0 beta3 BOM

Assembly Build - October 31, 2018

| Part ID | Description | Part Number | Sub OK | Designators | Footprint | Pins | Quantity |
|---------|---|-------------------------------------|--------|---|----------------|------|----------|
| 15331 | 0.1uF 0603 \geq X5R \geq 50V \leq 20% | C0603C104M5RACTU | Y | C201,C202,C203,C210,C211,C212,C216,C219,C224,C225,C226,C227,C228,C229,C230,C231,C233,C234,C235,C236,C237,C239,C240,C245,C246,C248,C249,C250,C251,C252,C253,C254,C255,C256,C257,C258,C259,C401,C402,C409,C410,C411,C412,C414,C415,C416,C425,C426,C427,C428,C437,C438 | 0603 | 2 | 52 |
| 1940 | 1nF 0603 \geq X5R \geq 50V \leq 20% | C0603C102M5RACTU | Y | C204,C205,C206,C217,C417,C418,C419,C420 | 0603 | 2 | 8 |
| 58143 | 10nF 0603 \geq X5R \geq 50V \leq 20% | C0603C103M5RACTU | Y | C207,C208,C209,C218,C241,C242,C243,C421,C422,C423,C424 | 0603 | 2 | 11 |
| | 100uF 1206 \geq X5R \geq 6.3V \leq 20% | GRM31CR60J107ME39K | Y | C213,C214,C215,C220 | 1206 | 2 | 4 |
| 20411 | 10uF 0603 \geq X5R \geq 6.3V \leq 20% | GRM188R60J106KE47D | Y | C221,C222,C223,C232,C238,C244,C247,C433,C434,C435,C436 | 0603 | 2 | 11 |
| 2142 | 100pF 0805NP0 \geq 50V \leq 5% | CC0805JRNPO0BN101 | N | C403 | 0805 | 2 | 1 |
| | 180pF 0805NP0 \geq 50V \leq 5% | CC0805JRNPO0BN181 | N | C405 | 0805 | 2 | 1 |
| 2137 | 10pF 0805NP0 \geq 50V \leq 5% | CC0805JRNPO9BN100 | Y | C406 | 0805 | 2 | 1 |
| 14236 | 10uF 1206 \geq X5R \geq 25V \leq 20% | CL31A106KAHNNNE | Y | C408 | 1206 | 2 | 1 |
| | 8.2pF 0805NP0 \geq 25V \leq 5% | CL21C8R2DBANNNC | Y | C413 | 0805 | 2 | 1 |
| 16531 | 1uF 0603 \geq X5R \geq 6.3V \leq 20% | GRM188R61E105KA12D | Y | C429,C430,C431,C432 | 0603 | 2 | 4 |
| | GPIO Header for Raspberry Pi 3 - 2x20 Female Header | ADA product id 2222 | Y | CN302 | 2x20 | 40 | 1 |
| | TVS Diode | CDSOD323-T05LC | N | D401 | SC-76, SOD-323 | 2 | 1 |
| | FILTER LC(PI) 305NH/84PF SMD | NFL21SP506X1C3D | Y | F401,F402 | Custom | 4 | 2 |

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|---------|--|---|--------|---|---------------------|------|----------|
| | FB 0603 $\geq 600R@100MHz$ $\leq 200mOhm@DC$ 1A $\leq 25\%$ | MPZ1608S601ATA00 | Y | FB201,FB202,FB203, FB204,FB205,FB206, FB207,FB208,FB401, FB402,FB403,FB404, FB405,FB406 | 0603 | 2 | 14 |
| | IC REG LINEAR 2.5V 800MA | LD1117S25TR | Y | IC201 | SOT223 | 4 | 1 |
| | IC REG LINEAR 3.3V 800MA | LD1117S33TR | Y | IC202,IC203 | SOT223 | 4 | 2 |
| | IC REG LINEAR 1.2V 800MA | LD1117S12TR | Y | IC204 | SOT223 | 4 | 1 |
| | RF ADC DAC | AD9866BCPZ | N | IC401 | 64-VFQFN EP | 64 | 1 |
| | 330nH | LQW2BASR33J00L | N | L401,L402 | 0805 | 2 | 2 |
| 18125 | 27K 0603 $\leq 1\% \geq 1/10W$ | RC0603FR-07120RL | Y | R201 | 0805 | 2 | 1 |
| 26547 | 10K 0603 $\leq 5\% \geq 1/10W$ | RC0603FR-0710KL | Y | R301,R302 | 0603 | 2 | 2 |
| | 1.6K 0603 $\leq 5\% \geq 1/10W$ | RC0603FR-071K6L | Y | R403 | 0603 | 2 | 1 |
| | 1:1 RF Transformer | MABAES0060 | N | T401 | SM-22-5 3.81x3.81mm | 5 | 1 |
| | 8:1 RF Transformer | MABA-010143-FLUX18 | N | T402 | SM-22-5 3.81x3.81mm | 5 | 1 |
| | FPGA | 10CL016YE144C8G | N | U1 | EQFP-144 | 144 | 1 |
| | 38.4MHz Osc 3.3V $\leq 10ppm$ | ASTXR-12-38.400MHZ-514054-T | N | X400 | 2.5x2mm | 4 | 1 |
| | CONN SMA JACK R/A 50 OHM PCB | 5-1814400-1 | N | X401,X402 | BU-SMA-H | 5 | 2 |

Line Items: SMT:26 Assembled TH:2

Parts: SMT:127 Assembled TH:3

Pins: SMT:478 Assembled TH:50

Do Not Assemble: C404 C407 CN301 R303 R304 R305 R306 R307 R308