

**DECKARD'S DREAM BILL OF MATERIALS REV 1.0.5**

**HARDWARE BOARD**

| VALUE          | DESIGNATOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | QUANTITY | FOOTPRINT        | NOTE                                              | MOUSER PART #                                                                                                                                                                                       |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15uF           | C100, C101                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2        | 5MM DIA / 2MM LS | ELECTROLYTHIC CAPACITOR                           | 598-156PUM035M                                                                                                                                                                                      |
| 0.1uF          | C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100, C101, C104 | 99       | SMT 0805         | CERAMIC CAPACITOR                                 | 581-0805SC104K                                                                                                                                                                                      |
| CD4051         | KC2, IC3, IC5, IC6, IC8, IC9, IC11, IC12, IC14, IC15                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10       | DIP16            | ANALOG MULTIPLEXER/DEMULTIPLEXER                  | 595-CD4051BE                                                                                                                                                                                        |
| 74HC595        | IC4, IC7, IC10, IC13, IC16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5        | DIP16            | 8-BIT SHIFT REGISTER WITH 3-STATE OUTPUT REGISTER | 595-SN74HC595N                                                                                                                                                                                      |
|                | FLD1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1        | PLD-10           | 2.54M PITCH 2X5 FEMALE HEADER                     | 517-829075-01-05-RK                                                                                                                                                                                 |
|                | FLD2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1        | PLD-12           | 2.54M PITCH 2X6 FEMALE HEADER                     | 517-829075-01-06-RK                                                                                                                                                                                 |
| 47K            | R1, R2, R3, R4, R5, R11, R12, R13, R14, R19, R20                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11       |                  | 1/4W 1% RESISTOR                                  | 271-47K-RC                                                                                                                                                                                          |
| 10K            | R6, R7, R8, R9, R10, R15, R16, R17, R18, R21, R22                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 11       |                  | 1/4W 1% RESISTOR                                  | 271-10K-RC                                                                                                                                                                                          |
| 1K             | R23, R24, R26, R27, R28, R29, R30, R31, R32, R33                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10       |                  | 1/4W 1% RESISTOR                                  | 271-1K-RC                                                                                                                                                                                           |
|                | SW1, SW2, SW3, SW4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4        |                  | DPDT SLIDE SWITCH                                 | 612-EG2201B                                                                                                                                                                                         |
|                | SW5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1        |                  | DPST SLIDE SWITCH                                 | 612-EG2301B                                                                                                                                                                                         |
| 10-100K LINEAR |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 51       |                  | SLIDE POTENTIOMETER 30MM TRAVEL                   | 852-PTA0432015B104                                                                                                                                                                                  |
| 10-100K LINEAR |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10       |                  | SLIDE POTENTIOMETER 20MM TRAVEL                   | 852-PTA0432015CPB10                                                                                                                                                                                 |
| 10-100K LINEAR |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 9        |                  | SLIDE POTENTIOMETER 20MM TRAVEL CENTER DETENT     | 652-PTA2432214E2PB104                                                                                                                                                                               |
| 10-100K LINEAR |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1        |                  | 8MM METAL ROUND SHAFT POTENTIOMETER               | <a href="http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-8mm-right-angle-pc-mount/">http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-8mm-right-angle-pc-mount/</a> |
|                | BT1, BT2, BT3, BT4, BT5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5        | 6x6MM            | TACT SWITCH 15MM HEIGHT                           | <a href="http://www.ebay.com/itm/232190328351">http://www.ebay.com/itm/232190328351</a>                                                                                                             |
|                | OLED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1        |                  | 0.96" I2C IC SPI SERIAL 128X64 WHITE OLED DISPLAY | <a href="http://www.ebay.com/itm/172518846641">http://www.ebay.com/itm/172518846641</a>                                                                                                             |

**MAIN BOARD**

| VALUE         | DESIGNATOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | QUANTITY | FOOTPRINT         | NOTE                                   | MOUSER PART #                                                                                                                                                                                                              |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | BREAKOUT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1        | ICD-16            | 16 PIN IDC MALE HEADER                 | 571-17616B1-6                                                                                                                                                                                                              |
| 330uF         | C288, C289, C333, C338                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4        | 10MM DIA / 5MM LS | ELECTROLYTHIC CAPACITOR                | 667-ECA-1VM331                                                                                                                                                                                                             |
| 15uF          | C1, C2, C3, C4, C5, C34, C35, C36, C86, C87, C88, C89, C282, C283, C339, C340                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16       | 5MM DIA / 2MM LS  | ELECTROLYTHIC CAPACITOR                | 598-156PUM035M                                                                                                                                                                                                             |
| 0.1uF         | C8, C11, C13, C14, C15, C16, C18, C19, C20, C21, C23, C24, C30, C33, C38, C40, C43, C50, C52, C55, C62, C64, C67, C74, C76, C79, C80, C91, C93, C95, C98, C102, C103, C107, C110, C111, C113, C115, C116, C123, C127, C128, C130, C131, C133, C135, C138, C145, C146, C148, C149, C151, C153, C156, C163, C164, C167, C169, C172, C185, C187, C189, C203, C205, C208, C251, C253, C256, C259, C262, C268, C269, C270, C271, C274, C275, C280, C281, C290, C291, C296, C297, C298, C299, C308, C309, C310, C311, C316, C317, C319, C320, C326, C337 | 102      | SMT 0805          | CERAMIC CAPACITOR                      | 581-0805SC104K                                                                                                                                                                                                             |
| 4.7uF         | C17, C38, C41, C42, C51, C53, C54, C63, C65, C66, C75, C77, C78, C84, C96, C97, C114, C116, C117, C134, C136, C137, C152, C154, C155, C168, C170, C171, C186, C188, C189, C204, C206, C207, C222, C224, C225, C240, C242, C243, C258, C260, C261                                                                                                                                                                                                                                                                                                   | 43       | 5MM LS            | CERAMIC CAPACITOR                      | 810-FK26X7R1C475K                                                                                                                                                                                                          |
| 2.2uF         | C7, C8, C108, C124                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4        | 5MM LS            | CERAMIC CAPACITOR                      | 810-FG28X5R1E225KRT6                                                                                                                                                                                                       |
| 1uF           | C12, C334, C335                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3        | 5MM LS            | CERAMIC CAPACITOR                      | 810-FG28X5R1H105KRT0                                                                                                                                                                                                       |
| 0.47uF        | C165, C166, C173, C174, C175, C176, C179, C180, C183, C184, C191, C192, C193, C194, C197, C198, C201, C202, C209, C210, C211, C212, C215, C216, C219, C220, C221, C227, C228, C229, C230, C233, C234, C237, C238, C245, C246, C247, C248, C249, C252, C255, C256, C263, C264, C265, C266, C267                                                                                                                                                                                                                                                     | 47       | 5MM LS            | CERAMIC CAPACITOR                      | 810-FG26X7R1H447KNT6                                                                                                                                                                                                       |
| 0.01uF        | C25, C32, C44, C45, C48, C49, C56, C57, C60, C61, C88, C89, C72, C73, C80, C81, C84                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 17       | 5MM LS            | CERAMIC CAPACITOR                      | 810-FG28C0G1H103JNT6                                                                                                                                                                                                       |
| 560pF         | C22, C292, C295, C300, C303, C304, C307, C312, C315, C318, C323, C325, C328                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 13       | 5MM LS            | CERAMIC CAPACITOR                      | 810-FG28C0G1H561JNT0                                                                                                                                                                                                       |
| 100uF         | C85, C89, C99, C100, C101, C104, C105, C106, C109, C112, C115, C120, C121, C122, C125, C126, C129, C138, C140, C141, C142, C143, C144, C147, C150, C157, C158, C159, C160, C161, C162, C272, C273, C276, C277, C286, C287, C293, C294, C301, C302, C305, C306, C313, C314, C321, C322, C324, C326, C327, C331                                                                                                                                                                                                                                      | 52       | 5MM LS            | CERAMIC CAPACITOR                      | 810-FG28C0G1H101JNT6                                                                                                                                                                                                       |
| 22pF          | C9, C10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2        | 5MM LS            | CERAMIC CAPACITOR                      | 810-FG28C0G1H220JNT6                                                                                                                                                                                                       |
| 1uF           | C332, C341                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2        | 5MM LS            | FILM CAPACITOR                         | 80-R82DC4100AA6J0                                                                                                                                                                                                          |
| 100nF         | C29                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        | 5MM LS            | FILM CAPACITOR                         | 80-R82EC3100DQ7J0                                                                                                                                                                                                          |
| 1nF           | C31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        | 5MM LS            | FILM CAPACITOR                         | 80-R82EC1100Z35J0                                                                                                                                                                                                          |
| BAT43         | D1, D2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2        | DO-35             | SMALL SIGNAL SCHOTTKY DIODE            | 511-BAT43                                                                                                                                                                                                                  |
| STM32F405RGT6 | IC1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        | LOFP64            | ARM CORTEX-M4 32 BIT MCU               | <b>PREINSTALLED</b>                                                                                                                                                                                                        |
| SST25VF040B   | IC2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        | SOIC8             | 4 MBIT SPI SERIAL FLASH                | <b>PREINSTALLED</b>                                                                                                                                                                                                        |
| MAX5134       | IC8, IC11, IC13, IC15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4        | TSOP16            | QUAD 16 BIT VOLTAGE-OUTPUT DAC         | <b>PREINSTALLED</b>                                                                                                                                                                                                        |
| MAX5592       | IC17, IC21, IC24, IC27, IC30, IC33, IC36, IC39, IC42, IC45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 10       | TSSOP28           | OCTAL 12 BIT VOLTAGE-OUTPUT DAC        | <b>PREINSTALLED</b>                                                                                                                                                                                                        |
| TPA152        | IC59                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1        | SOIC8             | 75-mW STEREO AUDIO POWER AMPLIFIER     | <b>PREINSTALLED</b>                                                                                                                                                                                                        |
| CD4051        | IC3, IC4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2        | DIP16             | ANALOG MULTIPLEXER/DEMULTIPLEXER       | 595-CD4051BE                                                                                                                                                                                                               |
| TL072         | IC5, IC6, IC51, IC58                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4        | DIP8              | DUAL OPERATIONAL AMPLIFIER             | 595-TL072P                                                                                                                                                                                                                 |
| PENTANOISE    | IC7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        | DIP8              | NOISE GENERATOR                        | <a href="http://electronicuk.net/product/pentanoise-noise-generator/">http://electronicuk.net/product/pentanoise-noise-generator/</a>                                                                                      |
| TL431         | IC9, IC18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2        | TO-92             | PRECISION PROGRAMMABLE REFERENCE       | 595-TL431CP                                                                                                                                                                                                                |
| TL074         | IC19, IC20, IC22, IC23, IC25, IC26, IC28, IC29, IC43, IC44, IC46, IC47, IC48, IC50, IC52, IC54, IC56                                                                                                                                                                                                                                                                                                                                                                                                                                               | 17       | DIP14             | QUAD OPERATIONAL AMPLIFIER             | 595-TL074CN                                                                                                                                                                                                                |
| V2164         | IC53, IC55, IC57                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3        | DIP16             | QUAD VOLTAGE CONTROLLED AMPLIFIER      | <a href="https://www.thorncr.co.uk/shop/coolaudio-v2164-ai/">https://www.thorncr.co.uk/shop/coolaudio-v2164-ai/</a><br><a href="http://synthcube.com/cart/drm-60k-v2164-ic">http://synthcube.com/cart/drm-60k-v2164-ic</a> |
| TLV431        | IC61                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1        | TO-92             | LOW-VOLTAGE ADJUSTABLE PRECISION SHUNT | 595-TLV431ALPR                                                                                                                                                                                                             |
| PLD-10        | PBD1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1        | PBD-10            | 2.54M PITCH 2X5 MALE HEADER            | 517-829386-01-05-RK                                                                                                                                                                                                        |
| PLD-12        | PBD2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1        | PBD-12            | 2.54M PITCH 2X6 MALE HEADER            | 517-829386-01-06-RK                                                                                                                                                                                                        |
| IRLML2402     | Q1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1        | SOT23             | MOSFET                                 | <b>PREINSTALLED</b>                                                                                                                                                                                                        |
| 120K          | R188, R190                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2        |                   | 1/4W 1% RESISTOR                       | 271-120K-RC                                                                                                                                                                                                                |
| 100K          | R21, R46, R48, R50, R52, R54, R56, R62, R63, R65, R67, R69, R71, R73, R77, R81, R82, R84, R86, R88, R90, R92, R94, R97, R98, R100, R102, R104, R106, R108, R110, R113, R114                                                                                                                                                                                                                                                                                                                                                                        | 33       |                   | 1/4W 1% RESISTOR                       | 271-100K-RC                                                                                                                                                                                                                |
| 51K           | R45, R47, R49, R51, R53, R55, R59, R60, R64, R66, R68, R70, R72, R75, R79, R80, R83, R85, R87, R89, R91, R93, R95, R96, R99, R101, R103, R105, R107, R109, R111, R112                                                                                                                                                                                                                                                                                                                                                                              | 32       |                   | 1/4W 1% RESISTOR                       | 271-51K-RC                                                                                                                                                                                                                 |
| 47K           | R2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1        |                   | 1/4W 1% RESISTOR                       | 271-47K-RC                                                                                                                                                                                                                 |
| 30K           | R165, R170, R175, R176, R177, R178, R179, R180, R181, R182, R183, R184, R185, R186, R187, R189, R191, R192, R193, R196, R197, R198, R199, R202, R203, R204, R205, R208, R210, R211, R214, R216, R217, R220, R221, R222, R223, R224, R225, R228, R229, R230, R231, R236, R237                                                                                                                                                                                                                                                                       | 45       |                   | 1/4W 1% RESISTOR                       | 271-30K-RC                                                                                                                                                                                                                 |
| 22K6          | R162, R167                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2        |                   | 1/4W 1% RESISTOR                       | 271-22.6K-RC                                                                                                                                                                                                               |
| 22K           | R209, R215                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2        |                   | 1/4W 1% RESISTOR                       | 271-22K-RC                                                                                                                                                                                                                 |
| 20K           | R238, R239, R240, R242, R243, R245                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6        |                   | 1/4W 1% RESISTOR                       | 271-20K-RC                                                                                                                                                                                                                 |
| 10K           | R6, R7, R8, R9, R10, R11, R27, R32, R37, R42, R78, R163, R164, R166, R168, R169, R171                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 17       |                   | 1/4W 1% RESISTOR                       | 271-10K-RC                                                                                                                                                                                                                 |
| 5K9           | R20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        |                   | 1/4W 1% RESISTOR                       | 271-5.6K-RC                                                                                                                                                                                                                |
| 4K7           | R3, R4, R13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3        |                   | 1/4W 1% RESISTOR                       | 271-4.7K-RC                                                                                                                                                                                                                |
| 2K            | R74                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        |                   | 1/4W 1% RESISTOR                       | 271-2K-RC                                                                                                                                                                                                                  |
| 2K2           | R15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        |                   | 1/4W 1% RESISTOR                       | 271-2.2K-RC                                                                                                                                                                                                                |
| 1K3           | R76                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        |                   | 1/4W 1% RESISTOR                       | 271-1.3K-RC                                                                                                                                                                                                                |
| 1K            | R1, R12, R14, R22, R23, R24, R25, R26, R28, R29, R30, R31, R33, R34, R35, R36, R38, R39, R40, R41, R43, R44, R57, R58, R61, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139, R140, R141, R142, R143, R144, R145, R146, R147, R148, R149, R150, R151, R152, R153, R154, R155, R156, R157, R158, R159, R160, R161                                                                                                                               | 72       |                   | 1/4W 1% RESISTOR                       | 271-1K-RC                                                                                                                                                                                                                  |
| 499R          | R194, R195, R200, R201, R206, R207, R212, R213, R218, R219, R226, R227                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 12       |                   | 1/4W 1% RESISTOR                       | 271-499-RC                                                                                                                                                                                                                 |
| 100R          | R241, R244                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2        |                   | 1/4W 1% RESISTOR                       | 271-100-RC                                                                                                                                                                                                                 |
| 22R           | R5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1        |                   | 1/4W 1% RESISTOR                       | 271-22-RC                                                                                                                                                                                                                  |
|               | STLINK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1        | IDC-20            | 20 PIN IDC MALE HEADER                 | 571-176161-7                                                                                                                                                                                                               |
| 1N5817        | Z1, Z2, Z3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3        | DO-35             | SCHOTTKY BARRIER RECTIFIER             | 511-1N5817                                                                                                                                                                                                                 |
| 8MHz          | ZQ1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        | HC-49US           | AT-CUT CRYSTAL UNIT                    | 695-HC49US-8-U                                                                                                                                                                                                             |
|               | J1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1        |                   | 1/4" STEREO JACK                       | 502-112BX                                                                                                                                                                                                                  |
|               | POWER, VOICE1, VOICE2, VOICE3, VOICE4, VOICE5, VOICE6, VOICE7, VOICE8                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 9        | EDAC-44           | 44PIN EDGE CONNECTOR                   | <a href="http://www.ebay.com/itm/130486232450">http://www.ebay.com/itm/130486232450</a>                                                                                                                                    |

**VOICE BOARD**

| VALUE   | DESIGNATOR                                                                                                                                                                                                                                                                                                        | QTY (1 CARD) | QTY (8 CARDS) | FOOTPRINT        | NOTE                                  | MOUSER PART #                                                                                                                                                                                                                                            |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 220uF   | C1, C2, C3, C4                                                                                                                                                                                                                                                                                                    | 4            | 32            | 8MM DIA / 3.5 LS | ELECTROLYTHIC CAPACITOR               | 667-ECA-1VM221                                                                                                                                                                                                                                           |
| 47uF    | C11, C22                                                                                                                                                                                                                                                                                                          | 2            | 16            | 5MM DIA / 2MM LS | ELECTROLYTHIC CAPACITOR               | 667-ECA-1CM470                                                                                                                                                                                                                                           |
| 1uF     | C30, C31, C42, C77, C97, C98, C109, C142                                                                                                                                                                                                                                                                          | 8            | 64            | 5MM DIA / 2MM LS | ELECTROLYTHIC NON-POLARIZED CAPACITOR | 647-UVF1H01MDD11D                                                                                                                                                                                                                                        |
| 0.1uF   | C5, C6, C7, C8, C12, C13, C16, C18, C20, C21, C22, C23, C24, C25, C26, C27, C35, C37, C40, C41, C46, C47, C49, C50, C55, C56, C57, C58, C60, C61, C72, C73, C74, C82, C83, C84, C85, C86, C87, C89, C91, C92, C93, C102, C104, C107, C108, C113, C114, C116, C117, C122, C123, C125, C126, C136, C137, C138, C139 | 58           | 464           | SMT 0805         | CERAMIC CAPACITOR                     | 581-0805SC104K                                                                                                                                                                                                                                           |
| 0.01uF  | C9, C10, C19, C80, C81, C90                                                                                                                                                                                                                                                                                       | 6            | 48            | 5MM LS           | CERAMIC CAPACITOR                     | 810-FG28C0G1H103JNT6                                                                                                                                                                                                                                     |
| 1000pF  | C14, C15, C17, C85, C86, C89                                                                                                                                                                                                                                                                                      | 6            | 48            | 5MM LS           | CERAMIC CAPACITOR                     | 810-FG28C0G1H102JNT6                                                                                                                                                                                                                                     |
| 560pF   | C33, C34, C36, C44, C45, C46, C51, C54, C62, C66, C70, C75, C79, C100, C101, C103, C111, C112, C115, C118, C121, C127, C131, C132, C135, C140, C144                                                                                                                                                               | 28           | 224           | 5MM LS           | CERAMIC CAPACITOR                     | 810-FG28C0G1H561JNT0                                                                                                                                                                                                                                     |
| 180pF   | C20, C43, C98, C110                                                                                                                                                                                                                                                                                               | 4            | 32            | 5MM LS           | CERAMIC CAPACITOR                     | 810-FG28C0G1H181JNT6                                                                                                                                                                                                                                     |
| 1000pF  | C50, C53, C58, C63, C64, C65, C68, C69, C76, C78, C119, C120, C124, C128, C129, C130, C133, C134, C141, C143                                                                                                                                                                                                      | 20           | 160           | 5MM LS           | CERAMIC CAPACITOR                     | 810-FG28C0G1H101JNT6                                                                                                                                                                                                                                     |
| 1.5uF   | C28, C29, C38, C39, C85, C96, C105, C106                                                                                                                                                                                                                                                                          | 8            | 64            | 5MM LS           | FILM CAPACITOR                        | 80-R82EC1150AA5J0                                                                                                                                                                                                                                        |
| CEM3340 | IC1, IC16                                                                                                                                                                                                                                                                                                         | 2            | 16            | DIP16            | VOLTAGE CONTROLLED OSCILLATOR         | <a href="https://www.thorncr.co.uk/shop/curtis-cem3340-ic-vco-chip/">https://www.thorncr.co.uk/shop/curtis-cem3340-ic-vco-chip/</a><br><a href="http://synthcube.com/cart/drm-onchip-cem3340-x-17">http://synthcube.com/cart/drm-onchip-cem3340-x-17</a> |
| TL074   | IC2, IC6, IC7, IC12, IC14, IC17, IC19, IC20, IC25, IC26                                                                                                                                                                                                                                                           | 10           | 80            | DIP14            | QUAD OPERATIONAL AMPLIFIER            | 595-TL074CN                                                                                                                                                                                                                                              |
| 74LS274 | IC3                                                                                                                                                                                                                                                                                                               | 1            | 8             | DIP14            | POSITIVE EDGE TRIGGERED FLIP-FLOP     | 695-SN74LS274AN                                                                                                                                                                                                                                          |
| DG203   | IC4                                                                                                                                                                                                                                                                                                               | 1            | 8             | DIP16            | SPDT CMOS ANALOG SWITCH               | 781-DG203DJ-E3                                                                                                                                                                                                                                           |
| DG202   | IC5                                                                                                                                                                                                                                                                                                               | 1            | 8             | DIP16            | SPST CMOS ANALOG SWITCH               | 781-DG202BDJ-E3                                                                                                                                                                                                                                          |
| TL072   | IC8, IC11, IC21, IC24                                                                                                                                                                                                                                                                                             | 4            | 32            | DIP8             | DUAL OPERATIONAL AMPLIFIER            | 595-TL072P                                                                                                                                                                                                                                               |
| V2164   | IC9, IC10, IC13, IC15, IC22, IC23, IC27                                                                                                                                                                                                                                                                           | 7            | 56            | DIP16            | QUAD VOLTAGE CONTROLLED AMPLIFIER     | <a href="https://www.thorncr.co.uk/shop/coolaudio-v2164-ai/">https://www.thorncr.co.uk/shop/coolaudio-v2164-ai/</a><br><a href="http://synthcube.com/cart/drm-60k-v2164-ic">http://synthcube.com/cart/drm-60k-v2164-ic</a>                               |
| 2N3904  | Q1, Q2, Q3, Q4                                                                                                                                                                                                                                                                                                    | 4            | 32            | TO-92            | NPN TRANSISTOR                        | 610-2N3904                                                                                                                                                                                                                                               |
| 4M7     | R52, R53, R67, R68, R158, R159, R173, R174                                                                                                                                                                                                                                                                        | 8            | 64            |                  | 1/4W 1% RESISTOR                      | 603-MFR-25FRF52-4M7                                                                                                                                                                                                                                      |
| 1M5     | R5, R111                                                                                                                                                                                                                                                                                                          | 2            | 16            |                  | 1/4W 1% RESISTOR                      | 271-1.5M-RC                                                                                                                                                                                                                                              |
| 1M2     | R60, R74, R166, R160                                                                                                                                                                                                                                                                                              | 4            | 32            |                  | 1/4W 1% RESISTOR                      | 603-MFR-25FRF52-1M2                                                                                                                                                                                                                                      |
| 1M      | R37, R143                                                                                                                                                                                                                                                                                                         | 2            | 16            |                  | 1/4W 1% RESISTOR                      | 271-1.0M-RC                                                                                                                                                                                                                                              |
| 300K    | R6, R112                                                                                                                                                                                                                                                                                                          | 2            | 16            |                  | 1/4W 1% RESISTOR                      | 271-300K-RC                                                                                                                                                                                                                                              |
| 150K    | R56, R59, R61, R69, R162, R165, R167, R175                                                                                                                                                                                                                                                                        | 8            | 64            |                  | 1/4W 1% RESISTOR                      | 271-150K-RC                                                                                                                                                                                                                                              |
| 120K    | R88, R194                                                                                                                                                                                                                                                                                                         | 2            | 16            |                  | 1/4W 1% RESISTOR                      | 271-120K-RC                                                                                                                                                                                                                                              |
| 107K    | R24, R120                                                                                                                                                                                                                                                                                                         | 2            | 16            |                  | 1/4W 1% RESISTOR                      | 271-107K-RC                                                                                                                                                                                                                                              |
| 100K    | R18, R28, R41, R43, R44, R46, R48, R49, R124, R134, R147, R149, R150, R152, R154, R155                                                                                                                                                                                                                            | 16           | 128           |                  | 1/4W 1% RESISTOR                      | 271-100K-RC                                                                                                                                                                                                                                              |
| 73K2    | R19, R125                                                                                                                                                                                                                                                                                                         | 2            | 16            |                  | 1/4W 1% RESISTOR                      | 271-73.2K-RC                                                                                                                                                                                                                                             |
| 47K     | R1, R17, R107, R123                                                                                                                                                                                                                                                                                               | 4            | 32            |                  |                                       |                                                                                                                                                                                                                                                          |