## SOUTRA Bill of Materials for Project [2023002 A Soutra Velouria LED Controller PROJ.PrjPcb] Source Data From: Variant: Variant:

|                              | +44(0)7874693650         |        |                                    |                             |          |                           | _        |                        |                                            |        | _          |                             |                                                |            | 1                   |                               |                           |                     |                                   |
|------------------------------|--------------------------|--------|------------------------------------|-----------------------------|----------|---------------------------|----------|------------------------|--------------------------------------------|--------|------------|-----------------------------|------------------------------------------------|------------|---------------------|-------------------------------|---------------------------|---------------------|-----------------------------------|
|                              |                          |        |                                    |                             |          |                           | $\vdash$ | Primary Supplier       |                                            |        |            | Secondary Supplier          |                                                |            |                     | Alterna                       |                           |                     |                                   |
|                              |                          |        |                                    |                             |          |                           |          |                        |                                            |        |            |                             |                                                |            |                     | JLC Stock Accepted?           |                           |                     |                                   |
| Designator                   | Manufacturer Part Number |        | Manufacturer                       |                             | Quantity | Notes                     |          | r Supplier Part Number |                                            |        | Supplier 1 |                             | Pricing 1                                      | Total Cost |                     | Alternative Part Manufacturer | Alternative Part Supplier |                     |                                   |
| C1, C5, C6, C7, C8, C9       | CC0402KRX5R6BB105        | 1uF    |                                    | CAPC1005X06L                | 6        |                           |          | 1458896                | 10=0.039, 100=0.023                        | 0.39   | Digikey    | 311-1439-1-ND               | 1=0.08, 10=0.058, 50=0.034, 100=0.027          | 0.48       | 0402ZD105KAT2A      | KYOCERA AVX                   | Famel                     | 1740588             | USE JLC STOCKED PART IF AVAILABLE |
| C2                           | GRM21BR61A476ME15K       |        | Murata                             | CAPC2012X14L                | 1        |                           |          |                        | 10=0.276, 100=0.207                        | 2.76   | Digikey    | 490-GRM21BR61A476ME15KCT-ND | 1=0.53, 10=0.353, 50=0.28, 100=0.232           | 0.53       | C2012X5R1A476M125A0 |                               | Famel                     | 2211186             | USE JLC STOCKED PART IF AVAILABLE |
| C3                           | CL31A476MQHNNNE          | 47uF   | Samsung                            | CC1206-IPC_C                | 1        |                           |          | 3013519                | New Product - Undefined Lead Time          | 0      | Digikey    | 1276-1167-1-ND              | 1=0.24, 10=0.16, 50=0.118, 100=0.096           | 0.24       | C1206C476M9PACTU    | KEMET                         | Famel                     | 1650902             | USE JLC STOCKED PART IF AVAILABLE |
| C4                           | 0402X104M160CT           | 100nF  | Walsin Technologies                | CAPC1005X06L                | 1        |                           |          |                        | 10=0.0047, 100=0.0043                      | 0.047  | Digikey    | 1292-0402X104M160CT-ND      | 1=0.08, 10=0.023, 50=0.013, 100=0.01           | 0.08       | 885012105016        | WURTH                         | Famel                     | 2533933             | USE JLC STOCKED PART IF AVAILABLE |
| C10                          | CC0603KPX7R9BB472        | 4.7nF  | Yageo                              | CC0603-DA-IPC_C             | 1        |                           |          | 3764512                | 10=0.024, 100=0.014                        | 0.24   | Digikey    | 13-CC0603KPX7R9BB472CT-ND   | 1=0.08, 10=0.036, 50=0.02, 100=0.016           | 0.08       | MC0603B472K500CT    | Multicomp Pro                 | Famel                     | 1759098             | USE JLC STOCKED PART IF AVAILABLE |
| D1, D3                       | NSR0530HT1G              |        | ON Semiconductor                   | SODFL_250X100-2L            | 2        |                           |          |                        | 5=0.159, 10=0.117, 100=0.0654              | 0.795  | Digikey    | NSR0530HT1GOSCT-ND          | 1=0.16, 10=0.11, 100=0.059                     | 0.32       | PMEG3010BEA,115     | NEXPERIA                      | Famel                     | 8737991             | USE JLC STOCKED PART IF AVAILABLE |
| D2                           | ESDA8V2-1J               |        | STMicroelectronics                 | SODFL_250X117-2L            | 1        |                           |          | 2353667                | 5=0.0848, 10=0.0807, 100=0.0765            | 0.424  | Rs         | 9172719                     | 100=0.148                                      | 14.8       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| D4                           | SS12L                    |        | Multicomp Pro                      | SODFL370X120-2L             | 1        |                           |          |                        | 5=0.089, 10=0.071, 100=0.051               | 0.445  |            |                             |                                                |            | RSX101MM-30TR       | Rohm                          | Famel                     | 3214737             | USE JLC STOCKED PART IF AVAILABLE |
| D5                           | MP008282                 |        | Multicomp                          | DIOC_0603_1706X06L          | 1        |                           |          | 3796313                | 5=0.0713, 10=0.0611, 100=0.0476            | 0.3565 |            |                             |                                                |            | LG Q396-PS-35       | AMS OSRAM GROUP               | Famel                     | 2575345             | USE JLC STOCKED PART IF AVAILABLE |
| F1                           | MCCFB0603TFF/1           |        | Multicomp                          | FUSC_1608X06L               | 1        |                           |          |                        | 1=0.027 (GBP)                              | 0.027  |            |                             |                                                |            | MP001585            | Multicomp Pro                 | Famel                     | 3285087             | USE JLC STOCKED PART IF AVAILABLE |
| J1                           | 105017-0001              |        | Molex                              | 1050170001_USB-MICRO-B_V    | 1        |                           | Famel    | 3500663                | 1=0.97                                     | 0.97   | Rs         | 8486764                     | 5=0.754, 75=0.67                               | 3.77       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| J2                           | N/A                      |        |                                    | SMT-PAD_2x3_1-27_R0-5       | 1        | No part - solder pad only |          |                        |                                            | 0      |            |                             |                                                |            |                     |                               |                           |                     |                                   |
| J3                           | N/A                      |        |                                    | SMT-PAD_2-Pad_2X5Y2-5P      | 1        | No part - solder pad only |          |                        |                                            | 0      |            |                             |                                                |            |                     |                               |                           |                     |                                   |
| J4                           | N/A                      |        |                                    | SMT-PAD_3-Pad_5X8Y6P        | 1        | No part - solder pad only |          |                        |                                            | 0      |            |                             |                                                |            |                     |                               |                           |                     |                                   |
| L1                           | SRP4020TA-3R3M           |        | Bourns                             | SRP4020TA-MFG               | 1        |                           | Farnel   |                        | 5=0.543, 50=0.52                           | 2.715  | Digikey    | SRP4020TA-3R3MCT-ND         | 1=1.04, 10=0.879, 25=0.799, 50=0.75, 100=0.623 | 1.04       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| Q1                           | XP161A1355PR-G           |        | Torex                              | SOT89-150P350X160-3L        | 1        |                           |          |                        | 1=0.472, 10=0.413, 100=0.294               | 0.472  | Mouser     | 865-XP161A1355PR-G          | 1=0.568, 10=0.453, 100=0.353                   |            |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| Q2, Q3                       | RTQ020N05FRATR           |        | Rohm                               | SOT457T_95P280X100-6L       | 2        |                           |          | 2769553                | 5=0.359, 10=0.286, 100=0.2                 | 1.795  |            |                             |                                                |            | RTQ020N05HZGTR      | Rohm                          | Famel                     | 3261754             | USE JLC STOCKED PART IF AVAILABLE |
| R1, R9, R10, R22, R26        | MC0063W06030R            | 0R     | Multicomp                          | RESC_0603_1608X06L          | 5        |                           |          |                        | 10=0.007, 100=0.006                        | 0.07   |            |                             |                                                |            | MCWR06X000 PTL      | Multicomp Pro                 | Famel                     | 2447743             | USE JLC STOCKED PART IF AVAILABLE |
| R2, R16, R23, R24, R25, R27, | R2 RK73B1JTTD103J        | 10kR   | KOA Speer                          | RESC_0603_1608X06L          | 7        |                           | Farnel   | 4009056                | 10=0.009, 100=0.003                        | 0.09   | Digikey    | 2019-RK73B1JTTD103JCT-ND    | 1=0.08, 10=0.012, 50=0.0078, 100=0.0064        | 0.56       | RMCF0603FT10K0      | Stackpole Electronics Inc     | Digikey                   | RMCF0603FT10K0CT-ND | USE JLC STOCKED PART IF AVAILABLE |
| R11                          | CRCW0805100RFKTA         | 100R   | Vishay Dale                        | RESC_0805_2013X50X30LL20T20 | 1        |                           |          |                        | 10=0.06, 100=0.026                         | 0.6    | Mouser     | 71-CRCW0805-100             | 1=0.12, 10=0.042, 100=0.027                    | 0.12       | CRCW0805100RFKEA    | VISHAY                        | Famel                     | 1469862             | USE JLC STOCKED PART IF AVAILABLE |
| R12                          | MCWR06X3091FTL           | 3.09k  | Multicomp                          | RESC_0603_1608X06L          | 1        |                           | Famel    |                        | 10=0.011, 100=0.004                        | 0.11   |            |                             |                                                |            | RK73H1JTTD3091F     | KOA                           | Famel                     | 3539881             | USE JLC STOCKED PART IF AVAILABLE |
| R13                          | CR0603-FX-4992ELF        | 49.9kR | Bourns                             | RESC_0603_1608X06L          | 1        |                           | Farnel   | 4014374                | 1=0.0871, 25=0.0148, 50=0.0105, 100=0.0061 | 0.0871 | Digikey    | 118-CR0603-FX-4992ELFCT-ND  | 1=0.08, 10=0.012, 50=0.007, 100=0.006          | 0.08       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| R14                          | RK73H1JRTTD1001F         | 1kR    | KOA Speer                          | RESC_0603_1608X06L          | 1        |                           | Famel    | 3539564                | 10=0.053, 100=0.02                         | 0.53   | Digikey    | 2019-RK73H1JRTTD1001FCT-ND  | 1=0.11, 10=0.052, 50=0.034, 100=0.0288         | 0.11       | ERJUP3J102V         | PANASONIC                     | Famel                     | 3579508             | USE JLC STOCKED PART IF AVAILABLE |
| R15                          | CRM0805AJX-R100ELF       | R100   | Bourns                             | RESC_0805_2013X50X30LL20T20 | 1        |                           | Farnel   | 2824733                | 10=0.218, 100=0.168                        | 2.18   | Digi-Key   | CRM0805AJX-R100ELFCT-ND     | 1=0.49, 10=0.277, 50=0.1988, 100=0.174         | 0.49       | ERJ6BSFR10V         | PANASONIC                     | Famel                     | 1717812             | USE JLC STOCKED PART IF AVAILABLE |
| R17                          | CRGH0805J330R            | 330R   | TE Connectivity                    | RESC_0805_2013X50X30LL20T20 | 1        |                           | Farnel   | 2331789                | 10=0.012                                   | 0.12   | Rs         | 8075778P                    | 1000=0.012                                     | 12         |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| R18                          | RC0603FR-07150RL         | 150R   | Yageo                              | RESC_0603_1608X06L          | 1        |                           | Famel    | 9238387                | 10=0.011, 100=0.006                        | 0.11   | Digikey    | 311-150HRCT-ND              | 1=0.08, 10=0.016, 50=0.009, 100=0.008          | 0.08       | MCWR06X1500FTL      | Multicomp Pro                 | Famel                     | 2447255             | USE JLC STOCKED PART IF AVAILABLE |
| R19                          | CRGH0805F2K7             | 2.7k   | TE Connectivity                    | RESC_0805_2013X50X30LL20T20 | 1        |                           | Famel    | 2332077                | 10=0.0381                                  | 0.381  | Mouser     | 279-CRGH0805F2K7            | 1=0.096, 10=0.065, 100=0.033                   | 0.096      | MC01W08051100R      | Multicomp Pro                 | Famel                     | 9332375             | USE JLC STOCKED PART IF AVAILABLE |
| R20                          | RC0402FR-072K7L          | 2.7kR  | Yageo                              | RESC_0402_1005X40X25LL05T10 | 1        |                           | Farnel   | 9239286                | 10=0.008, 100=0.005                        | 0.08   | Digikey    | 311-2.70KLRCT-ND            | 1=0.08, 10=0.012, 50=0.007, 100=0.006          | 0.08       | MCSR04X2701FTL      | Multicomp Pro                 | Famel                     | 2074044             | USE JLC STOCKED PART IF AVAILABLE |
| SW1                          | N/A                      |        |                                    | SMT-PAD_2-Pad_2X5Y2-5P      | 1        | No part - solder pad only |          |                        |                                            | 0      |            |                             |                                                |            |                     |                               |                           |                     |                                   |
| U1                           | ATTINY412-SSNR           |        | Microchip                          | SOIC127P600X200-8L          | 1        |                           | Famel    | 3131843                | 1=0.469, 25=0.429, 100=0.39                | 0.469  | Digikey    | ATTINY412-SSNRCT-ND         | 1=0.48, 25=0.437, 0.388                        | 0.48       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| U2                           | MCP1650S-E/MS            |        | Microchip                          | MSOP-MS8_L                  | 1        |                           | Famel    | 1863920                | 1=1.548                                    | 1.548  | Digikey    | MCP1650S-E/MS-ND            | 1=1.54, 25=1.288, 100=1.228                    | 1.54       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| LI3                          | LTC4065EDC#TRMPBF        |        | Analog Devices / Linear Technology | DFN_0P200X200X85_HS-7L      | 1        |                           | Famel    | 4027894                | 1=3.14, 10=2.81, 25=2.67, 100=2.31         | 3.14   | Digikey    | 505-LTC4065EDC#TRMPBFCT-ND  | 1=2.94, 10=2.64, 25=2.495, 100=2.162           | 2.94       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| U4                           | AP9101CK-AHTRG1          |        | Diodes                             | SOT25_95P285X140-5L         | 1        |                           | Famel    | 3483011                | 5=0.318, 10=0.231, 100=0.165               | 1.59   | DigiKey    | AP9101CK-AHTRG1DICT-ND      | 1=0.36, 10=0.28, 100=0.169                     | 0.36       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| U5                           | AP22802AW5-7             |        | Diodes                             | SOT25 95P285X140-5L         | 1        |                           | Famel    | 3482850                | 5=0.152, 10=0.133, 100=0.11                | 0.76   | Digikey    | AP22802AW5-7DICT-ND         | 1=0.37, 10=0.277, 25=0.25, 100=0.173           | 0.37       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| U6                           | AP331AWRG-7              |        | Diodes                             | SOT25_95P285X140-5L         | 1        |                           | Famel    | 3373792                | 5=0.259, 10=0.16, 100=0.098                | 1.295  | Digikey    | AP331AWRGDICT-ND            | 1=0.38, 10=0.28, 25=0.256, 100=0.176           | 0.38       |                     |                               |                           |                     | USE JLC STOCKED PART IF AVAILABLE |
| 1                            |                          |        |                                    |                             |          |                           |          |                        |                                            |        |            |                             |                                                |            |                     |                               |                           |                     |                                   |
|                              |                          |        |                                    |                             |          |                           |          |                        | TOTAL MAY COOT DED DOADD                   |        |            |                             |                                                |            |                     |                               |                           |                     |                                   |

Total Number of Items: 52

TOTAL MAX COST PER BOARD (Primary Supplier Only):