

Bill of Materials from SM1000.sch, 138 parts, grouped by values, as of 4/9/2014 8:29:40 PM

| Part                                                                                     | Qty | DEFINITION                       | MANUFACTURER        | MFG_NUMBER          | DISTRIBUTOR | DIST_NUMBER       | GENERIC | ROHS | COST100 | COST EXT |
|------------------------------------------------------------------------------------------|-----|----------------------------------|---------------------|---------------------|-------------|-------------------|---------|------|---------|----------|
| C1                                                                                       | 1   | CAP TANT 4.7UF 16V 10% 1206      | AVX                 | TAJA475K016RNJ      | DIGIKEY     | 478-3868-1-ND     | Y       | Y    | 0.260   | 0.260    |
| C2, C3, C7, C8, C9, C11, C14, C15, C16, C17, C18, C19, C20, C21, C23, C24, C33, C36, C38 | 19  | CAP CER 0.1UF 16V 10% X7R 0603   | YAGEO               | CC0603KRX7R7BB104   | DIGIKEY     | 311-1088-1-ND     | Y       | Y    | 0.013   | 0.247    |
| C4, C5, C22                                                                              | 3   | CAP CER 1UF 16V 10% X5R 0603     | TDK                 | C1608X5R1C105K080AA | DIGIKEY     | 445-1416-1-ND     | Y       | Y    | 0.034   | 0.102    |
| C6, C10                                                                                  | 2   | CAP TANT 1UF 16V 20% 1206        | NICHICON            | F931C105MAA         | DIGIKEY     | 493-2364-1-ND     | Y       | Y    | 0.152   | 0.304    |
| C12, C13                                                                                 | 2   | CAP CER 2.2UF 16V Y5V 0805       | YAGEO               | CC0805ZRY5V7BB225   | DIGIKEY     | 311-1463-1-ND     | Y       | Y    | 0.042   | 0.084    |
| C25                                                                                      | 1   | CAP CER 22UF 25V 10% X5R 1210    | MURATA              | GRM32ER61E226KE15L  | DIGIKEY     | 490-3889-1-ND     | N       | Y    | 0.540   | 0.540    |
| C26                                                                                      | 1   | CAP CER 0.1UF 16V 10% X7R 0603   | YAGEO               | CC0603KRX7R7BB104   | DIGIKEY     | 311-1088-1-ND     | Y       | Y    | 0.013   | 0.013    |
| C27                                                                                      | 1   | CAP CER 7PF 50V NPO 0603         | YAGEO               | CC0603DRNPO9BN7R0   | DIGIKEY     | 311-1056-1-ND     | N       | Y    | 0.029   | 0.029    |
| C28, C29                                                                                 | 2   | CAP CER 10UF 10V 20% X5R 1206    | TDK                 | C3216X5R1A106M160AB | DIGIKEY     | 445-1387-1-ND     | N       | Y    | 0.114   | 0.228    |
| C30                                                                                      | 1   | CAP CER 0.47UF 16V 10% X5R 0603  | TDK                 | C1608X5R1C474K080AA | DIGIKEY     | 445-5152-1-ND     | N       | Y    | 0.030   | 0.030    |
| C31                                                                                      | 1   | CAP CER 0.082UF 25V 10% X7R 0603 | MURATA              | GRM188R71E823KA01D  | DIGIKEY     | 490-6434-1-ND     | N       | Y    | 0.050   | 0.050    |
| C32, C35, C39, C40                                                                       | 4   | CAP ALUM 100UF 16V 20% SMD       | CHEMI-CON           | EMZA160ADA101MF61G  | DIGIKEY     | 565-2539-1-ND     | Y       | Y    | 0.325   | 1.300    |
| C34                                                                                      | 1   | CAP CER 100PF 50V 5% NPO 0603    | TDK                 | C1608NPO1H101J080AA | DIGIKEY     | 445-14054-1-ND    | Y       | Y    | 0.038   | 0.038    |
| C37                                                                                      | 1   | CAP ALUM 470UF 16V 20% SMD       | UNITED CHEMI-CON    | EMVE160ADA471MHA0G  | DIGIKEY     | 565-2208-1-ND     | Y       | Y    | 0.456   | 0.456    |
| CN1                                                                                      | 1   | CONN RECEPT MINIUSB R/A 5POS SMD | MOLEX               | 675031020           | DIGIKEY     | WM5461CT-ND       | N       | Y    | 0.856   | 0.856    |
| CN2                                                                                      | 1   | CONN HEADER 6POS .100 VERT GOLD  | MOLEX               | 22-10-2061          | DIGIKEY     | WM2726-ND         | Y       | Y    | 0.985   | 0.985    |
| CN3                                                                                      | 1   | CONN JACK R/A .100 PIN SMD"      | SWITCHCRAFT         | RASM712PX           | DIGIKEY     | RASM712PX-ND      | N       | Y    | 1.082   | 1.082    |
| CN4                                                                                      | 1   | CONN MOD JACK R/A 8P8C           | MOLEX               | 441440003           | DIGIKEY     | WM4595CT-ND       | N       | Y    | 1.387   | 1.387    |
| CN5, CN6, CN7, CN8, CN9                                                                  | 5   | CONN AUDIO JACK MONO 3.5MM SMD   | CUI                 | MJ-3523-SMT-TR      | DIGIKEY     | CP-3523MJTR-ND    | N       | Y    | 0.796   | 3.980    |
| D1                                                                                       | 1   | DIODE SCHOTTKY 10V 3A SOD323     | STM                 | BAT60JFILM          | DIGIKEY     | 497-3707-1-ND     | Y       | Y    | 0.240   | 0.240    |
| IC1                                                                                      | 1   | CONN SOCKET IC 16-PIN T/H        | ON SHORE TECHNOLOGY | SA163040            | DIGIKEY     | ED3017-ND         | Y       | Y    | 0.598   | 0.598    |
| J1, J2, J3                                                                               | 3   | CONN HEADER 2POS .100 VERT GOLD  | MOLEX               | 22-28-4023          | DIJIKEY     | WM6502-ND         | Y       | Y    | 0.190   | 0.570    |
| L1                                                                                       | 1   | FERRITE CHIP 120 OHM 2000MA 0603 | MURATA              | BLM18PG121SN1D      | DIGIKEY     | 490-1037-1-ND     | N       | Y    | 0.050   | 0.050    |
| L2                                                                                       | 1   | INDUCTOR POWER SHIELD 4.7UH SMD  | BOURNS              | SRN6045-4R7Y        | DIGIKEY     | SRN6045-4R7YCT-ND | N       | Y    | 0.270   | 0.270    |
| LD1                                                                                      | 1   | LED IND RED/GRN TOP MOUNT 4PLCC  | AVAGO               | HSMF-A201-A00J1     | DIGIKEY     | 516-2491-1-ND     | N       | Y    | 0.341   | 0.341    |
| LD2                                                                                      | 1   | OPTOISOLATR 5KV TRANSISTOR 4-SMD | LITE-ON             | LTV-817S-TA1        | DIGIKEY     | 160-1893-1-ND     | N       | Y    | 0.217   | 0.217    |
| LED1, LED2, LED3                                                                         | 3   | LED GREEN CLEAR THIN 0603 SMD    | LITE-ON             | LTST-C191KGKT       | DIGIKEY     | 160-1446-1-ND     | Y       | Y    | 0.129   | 0.387    |
| LED4                                                                                     | 1   | LED RED ORAN CLEAR THIN 0603 SMD | LITE-ON             | LTST-C191KFKT       | DIGIKEY     | 160-1445-1-ND     | Y       | Y    | 0.113   | 0.113    |
| LED5, LED7                                                                               | 2   | LED SUPER RED CLR THIN 0603 SMD  | LITE-ON             | LTST-C191KRKT       | DIGIKEY     | 160-1447-1-ND     | Y       | Y    | 0.124   | 0.248    |
| LED6                                                                                     | 1   | LED 468NM BLUE CLEAR 0603 SMD    | LITE-ON             | LTST-C191TBKT       | DIGIKEY     | 160-1647-1-ND     | Y       | Y    | 0.181   | 0.181    |
| LED8                                                                                     | 1   | LED SUPR RED CLR 0603 RT ANG SMD | LITE=ON             | LTST-S270KRKT       | DIGIKEY     | 160-1479-1-ND     | Y       | Y    | 0.129   | 0.129    |
| MIC1                                                                                     | 1   | MIC COND ANALOG OMNI -44DB       | CUI                 | CMA-4544PF-W        | DIGIKEY     | 102-1721-ND       | N       | Y    | 0.569   | 0.569    |
| PCB1                                                                                     | 1   | TBD                              | TBD                 | TBD                 | TBD         | TBD               | N       | Y    | 0.000   | 0.000    |
| Q1, Q2                                                                                   | 2   | TRANSISTOR NPN GP 40V SOT23      | Micro Commercial Co | MMBT4401-TP         | DIGIKEY     | MMBT4401TPMSCT-ND | Y       | Y    | 0.110   | 0.220    |
| R1, R2, R3                                                                               | 3   | RES 4.70K OHM 1/10W 1% 0603 SMD  | VISHAY-DALE         | CRCW06034K70FKEA    | DIGIKEY     | 541-4.70KHCT-ND   | Y       | Y    | 0.025   | 0.075    |
| R4, R5, R6, R9, R44, R45, R47                                                            | 7   | RES 10.0K OHM 1/10W 1% 0603 SMD  | VISHAY/DALE         | CRCW060310K0FKEA    | DIGIKEY     | 541-10.0KHCT-ND   | Y       | Y    | 0.025   | 0.175    |
| R7, R12, R14                                                                             | 3   | RES 330 OHM 1/10W 1% 0603 SMD    | VISHAY-DALE         | CRCW0603330RFKEA    | DIGIKEY     | 541-330HCT-ND     | Y       | Y    | 0.025   | 0.075    |
| R8, R11, R13, R19, R21, R22, R23, R24, R25, R26, R27                                     | 11  | RES 22.0 OHM 1/10W 1% 0603 SMD   | VISHAY-DALE         | CRCW060322R0FKEA    | DIGIKEY     | 541-22.0HCT-ND    | Y       | Y    | 0.025   | 0.275    |
| R10, R16, R20, R31                                                                       | 4   | RES 0.0 OHM 1/10W JUMP 0603 SMD  | VISHAY-DALE         | CRCW06030000Z0EA    | DIGIKEY     | 541-0.0GCT-ND     | Y       | Y    | 0.023   | 0.092    |
| R15                                                                                      | 1   | RES 220K OHM 1/10W 1% 0603 SMD   | VISHAY-DALE         | CRCW0603220KFKEA    | DIGIKEY     | 541-220KHCT-ND    | Y       | Y    | 0.025   | 0.025    |
| R17                                                                                      | 1   | RES 47.0K OHM 1/10W 1% 0603 SMD  | VISHAY-DALE         | CRCW060347K0FKEA    | DIGIKEY     | 541-47.0KHCT-ND   | G       | Y    | 0.025   | 0.025    |
| R18, R40, R51                                                                            | 3   | RES 100K OHM 1/10W 1% 0603 SMD   | VISHAY/DALE         | CRCW0603100KFKEA    | DIGIKEY     | 541-100KHCT-ND    | Y       | Y    | 0.025   | 0.075    |
| R28, R29, R30, R38, R49, R50                                                             | 6   | RES 1.00K OHM 1/10W 1% 0603 SMD  | VISHAY-DALE         | CRCW06031K00FKEA    | DIGIKEY     | 541-1.00KHCT-ND   | Y       | Y    | 0.025   | 0.150    |
| R32                                                                                      | 1   | RES 220 OHM 1/10W 1% 0603 SMD    | VISHAY DALE         | CRCW0603220RFKEA    | DIGIKEY     | 541-220HCT-ND     | Y       | Y    | 0.025   | 0.025    |
| R33                                                                                      | 1   | RES 2.20K OHM 1/10W 1% 0603 SMD  | VISHAY-DALE         | CRCW06032K20FKEA    | DIGIKEY     | 541-2.20KHKDR-ND  | Y       | Y    | 0.030   | 0.030    |
| R34                                                                                      | 1   | RES 10.0K OHM 1/10W 1% 0603 SMD  | VISHAY-DALE         | CRCW060310K0FKEA    | DIGIKEY     | 541-10.0KHCT-ND   | Y       | Y    | 0.025   | 0.025    |
| R35                                                                                      | 1   | RES 124K OHM 1/10W 1% 0603 SMD   | VISHAY-DALE         | CRCW0603124KFKEA    | DIGIKEY     | 541-124KHCT-ND    | Y       | Y    | 0.025   | 0.025    |
| R36, R39                                                                                 | 2   | RES 22.1K OHM 1/10W 1% 0603 SMD  | VISHAY-DALE         | CRCW060322K1FKEA    | DIGIKEY     | 541-22.1KHCT-ND   | Y       | Y    | 0.025   | 0.050    |
| R37                                                                                      | 1   | RES 100 OHM 1/10W 1% 0603 SMD    | VISHAY-DALE         | CRCW0603100RFKEA    | DIGIKEY     | 541-100HCT-ND     | Y       | Y    | 0.025   | 0.025    |
| R41                                                                                      | 1   | RES 240 OHM 1/10W 1% 0603 SMD    | VISHAY-DALE         | CRCW0603240RFKEA    | DIGIKEY     | 541-240HCT-ND     | Y       | Y    | 0.025   | 0.025    |
| R42                                                                                      | 1   | RES 390 OHM 1/10W 1% 0603 SMD    | VISHAY-DALE         | CRCW0603390RFKEA    | DIGIKEY     | 541-390HCT-ND     | Y       | Y    | 0.025   | 0.025    |
| R43                                                                                      | 1   | RES 10K OHM 1/8W 5% 0805 SMD     | VISHAY/DALE         | CRCW080510K0JNEA    | DIGIKEY     | 541-10KACT-ND     | Y       | Y    | 0.033   | 0.033    |
| R46                                                                                      | 1   | RES 10.0 OHM 1/10W 1% 0603 SMD   | VISHAY-DALE         | CRCW060310R0FKEA    | DIGIKEY     | 541-10.0HCT-ND    | Y       | Y    | 0.025   | 0.025    |
| R48                                                                                      | 1   | RES 4.99K OHM 1/10W 1% 0603 SMD  | VISHAY DALE         | CRCW06034K99FKEA    | DIGIKEY     | 541-4.99KHCT-ND   | Y       | Y    | 0.025   | 0.025    |
| SH1, SH2, SH3                                                                            | 3   | SHUNT LP 2 POS SN                | TYCO AMP            | 1-382811-6          | DIGIKEY     | A26231-ND         | Y       | Y    | 0.210   | 0.630    |
| SW1, SW2                                                                                 | 2   | SWITCH TACTILE SPST-NO 0.05A 12V | TE                  | FSM2JSMATR          | DIGIKEY     | 450-1757-1-ND     | N       | Y    | 0.211   | 0.422    |

|        |   |                                   |          |                |         |                     |   |   |       |        |
|--------|---|-----------------------------------|----------|----------------|---------|---------------------|---|---|-------|--------|
| SW3    | 1 | SWITCH PUSH DPDT 0.1A 30V         | E-SWITCH | PBH2UEENAGX    | DIGIKEY | EG2655-ND           | N | Y | 1.332 | 1.332  |
| T1, T2 | 2 | TRANSF LINE MATCHING              | BOURNS   | LM-NP-1001-B1L | DIGIKEY | LM-NP-1001-B1L-ND   | N | Y | 1.388 | 2.776  |
| U1     | 1 | IC PWR SWITCH 1CH 500MA SOT23-5   | STM      | STMP52141STR   | DIGIKEY | 497-6933-1-ND       | N | Y | 0.480 | 0.480  |
| U2     | 1 | I C EMI FILTR/ESD PROT 11FLIPCHIP | STM      | EMIF02-USB03F2 | DIGIKEY | 497-13521-1-ND      | N | Y | 0.525 | 0.525  |
| U3     | 1 | IC MCU 32BIT 1MB FLASH 100LQFP    | STM      | STM32F407VGT6  | DIGIKEY | 497-11605-ND        | N | Y | 9.878 | 9.878  |
| U4     | 1 | IC REG LDO 3.3V 0.15A SOT23-5     | STM      | LD3985M33R     | DIGIKEY | 497-3504-1-ND       | N | Y | 0.466 | 0.466  |
| U5     | 1 | IC REG BUCK SYNC ADJ 3A 8SOPWR    | TI       | TPS54329EDDAR  | DIGIKEY | 296-29856-1-ND      | N | Y | 1.650 | 1.650  |
| U6     | 1 | IC AMP AUDIO PWR .325W AB 8SOIC   | TI       | LM386MX-1/NOPB | DIGIKEY | LM386MX-1/NOPBCT-ND | N | Y | 0.687 | 0.687  |
| U7, U8 | 2 | IC OPAMP GP 1MHZ RRO SOT23-       | TI       | LMV341IDBVR    | DIGIKEY | 296-17843-1-ND      | N | Y | 0.556 | 1.112  |
| X1     | 1 | CRYSTAL 8.000 MHZ 18 PF SMD       | TXC      | 9C-8.000MAGJ-T | DIGIKEY | 887-2474-1-ND       | N | Y | 0.273 | 0.273  |
|        |   |                                   |          |                |         |                     |   |   | TOTAL | 37.615 |