

Bill-of-Material  
Outsite Networks Inc. - All Points Beacon 4 (APB4)  
Assembly:  
Version: R202 Generated: May 15, 2015  
\*\*\* This BOM is RoHS compliant \*\*\*

Items changed from previous revision (R201,  
\*NOTE\* Packaging specification fields (e.g. reel, tube, bulk pack ...) have been replaced by '-' in Mfg Part Number

| ITEM | QTY | Ref-Des                 | NEOVENTUS PIN | VALUE              | DESCRIPTION                                                      | PACKAGE   | MANUFACTURER 1          | MFGR1 PART NUMBER          | MANUFACTURER 2 | MFGR2 PART NUMBER   |
|------|-----|-------------------------|---------------|--------------------|------------------------------------------------------------------|-----------|-------------------------|----------------------------|----------------|---------------------|
| 1    | 1   | R5                      | 1112-0002     | 1.00K              | RES, 0402, 1%, 1/16W, 1.00K                                      | 402       | PANASONIC               | ERJ-2RKF1001               | ROHM           | MCR01-F1001         |
| 2    | 2   | R2,R10                  | 1112-0005     | 2.21K              | RES, 0402, 1%, 1/16W, 2.21K                                      | 402       | PANASONIC               | ERJ-2RKF2211               | ROHM           | MCR01-F2211         |
| 3    | 1   | R1                      | 1112-0067     | 56.2K              | RES, 0402, 1%, 1/16W, 56.2K                                      | 402       | PANASONIC               | ERJ-2RKF5622               | ROHM           | MCR01-F5622         |
| 4    | 5   | R6,R12,R13,R14,R15      | 1113-0001     | 0                  | JUMPER                                                           | 402       | PANASONIC               | ERJ-2SG0R00                | ROHM           | MCR01-000           |
| 5    | 2   | C1,C2                   | 2104-0002     | 220PF              | CAP, CERAMIC, NPO, 0402, 220pf, 5%, 50V                          | 402       | MURATA                  | GRM1555C1H221JA01          | TDK            | C1005C0G1H221J050BA |
| 6    | 2   | C4,C6                   | 2104-0011     | 15PF               | CAP, CERAMIC, NPO, 0402, 15pf, 5%, 50V                           | 402       | AVX                     | 04025A150JAT-A             | MURATA         | GRM1555C1H150J01    |
| 7    | 6   | C14,C15,C16,C17,C18,C19 | 2134-0011     | 0.1UF              | CAP, CERAMIC, X7R, 0402, 0.1uF, 10%, 16V                         | 402       | MURATA                  | GRM155R71C104KAB8          | TDK            | C1005X7R1C104K      |
| 8    | 2   | C7,C8                   | 2164-0008     | 1.0UF              | CAP, CERAMIC, X5R, 0402, 1.0uF, 10%, 16V                         | 402       | TDK                     | C1005X5R1C105K             | TAIYO YUDEN    | EMK105B1105KV-F     |
| 9    | 2   | C11,C21                 | 2167-0006     | 10UF               | CAP, CERAMIC, X5R, 0603, 10uF, 20%, 6.3V                         | 603       | TAIYO YUDEN             | JMK107B106MAA              | AVX            | 0603G106MAT-A       |
| 10   | 1   | F81                     | 3101-0002     | 0.25A BEAD         | FERRITE BEAD, 0402, 0.25A, 1000 OHM                              | 402       | MURATA                  | BLM15SH1025N1D             |                |                     |
| 11   | 1   | T1                      | 3420-0002     | 2450BM15A00002     | TRANSFORMER, BALLUN, 2400-2500MHZ, BAL IN/UNBAL OUT              | 805       | JOHANSON TECHNOLOGIES   | 2450BM15A00002             |                |                     |
| 12   | 1   | ANT1                    | 3900-0001     | 2450AT42A100       | ANTENNA, 2400 - 2500 Mhz, -1 dBi typ. (KZ-V) GAIN, 9.5 dB R-LOSS | SM        | JOHANSON TECHNOLOGIES   | 2450AT42A100               |                |                     |
| 13   | 1   | F2                      | 4142-0012     | 32.000MHZ          | XTAL, 32.000 MHz, 10ppm, 10pf, -40 to +85C, 2.0K1 6MM, No Pb     | 2.0x1.5MM | EPSON                   | FA-128 32.000MHZ0K-K       |                |                     |
| 14   | 1   | U1                      | 4421-0001     | CC2541             | IC, WIRELESS BLUETOOTH LOW ENERGY, 8051 up, 256KB FLASH, 8MB RAM | QFN41     | TI                      | CC2541F256RHAT             |                |                     |
| 15   | 0   | -                       | 5120-0003     | GREEN              | LED, GREEN, SM, 0805                                             | 805       | CML                     | 7012X5                     |                |                     |
| 16   | 1   | Q1                      | 5410-0006     | FDV301N            | TRANSISTOR, N-CHAN FET, 25V, 220mA                               | SOT-23    | FAIRCHILD SEMICONDUCTOR | FDV301N                    |                |                     |
| 17   | 1   | Q2                      | 5411-0009     | DMP2100J           | TRANSISTOR, P-CHAN FET, 20V, 1.4A, 0.075 RDS                     | SOT-23    | DIODES INC              | DMP2100J-7                 |                |                     |
| 18   | 1   | J2                      | 6512-0004     | SOCKET, BATT, 2 AA | SOCKET, BATTERY HOLDER, 2 AA, IN SERIES, NICKEL, TH              | TH        | KEYSTONE ELECTRONICS    | 2462                       |                |                     |
| 19   | 1   | -                       | -             | PCB                | 2-Layer, RoHS, Beacon 4 R02                                      |           |                         |                            |                |                     |
| 20   | 1   | F1                      | 4140-0006     | 32.768KHZ          | XTAL, 32.768KHZ, 20PPM, 12.5pf, -40-85C, 3.2X1.5MM, No Pb        | 3.2x1.5MM | NDK                     | NX32155A-32.768K-STD-MUA-8 |                |                     |
| 21   | 2   | C9,C10                  | 2104-0016     | 18PF               | CAP, CERAMIC, NPO, 0402, 18pf, 5%, 50V                           | 402       | MURATA                  | GRM1555C1H180J201          | AVX            | 04025A180JAT-A      |

Note:

1. The following reference designators are NOT INSERTED

|   |                                 |           |                |                                                                 |           |                  |                            |           |                     |
|---|---------------------------------|-----------|----------------|-----------------------------------------------------------------|-----------|------------------|----------------------------|-----------|---------------------|
| 1 | R9                              | 1112-0003 | 10.0K          | RES, 0402, 1%, 1/16W, 10.0K                                     | 402       | PANASONIC        | ERJ-2RKF1002               | ROHM      | MCR01-F1002         |
| 2 | R3,R4                           | 1112-0005 | 2.21K          | RES, 0402, 1%, 1/16W, 2.21K                                     | 402       | PANASONIC        | ERJ-2RKF2211               | ROHM      | MCR01-F2211         |
| 2 | R7,R8                           | 1112-0098 | 174            | RES, 0402, 1%, 1/16W, 174, THICK FILM                           | 402       | VISHAY           | CRCW0402174RFR             | PANASONIC | ERJ-50ZF1740        |
| 1 | R11                             | 1113-0001 | 0              | JUMPER                                                          | 402       | PANASONIC        | ERJ-2G0R00                 | ROHM      | MCR01-000           |
| 2 | C3,C5                           | 2104-0011 | 15PF           | CAP, CERAMIC, NPO, 0402, 15pf, 5%, 50V                          | 402       | AVX              | 04025A150JAT-A             | MURATA    | GRM1555C1H150J01    |
| 0 | -                               | 2104-0016 | 18PF           | CAP, CERAMIC, NPO, 0402, 18pf, 5%, 50V                          | 402       | MURATA           | GRM1555C1H180J201          | AVX       | 04025A180JAT-A      |
| 2 | C12,C13                         | 2134-0011 | 0.1UF          | CAP, CERAMIC, X7R, 0402, 0.1uF, 10%, 16V                        | 402       | MURATA           | GRM155R71C104KAB8          | TDK       | C1005X7R1C104K      |
| 2 | C22,C23                         | 2165-0004 | 2.2UF          | CAP, CERAMIC, X5R, 0402, 2.2uF, 20%, 6.3V                       | 402       | TAIYO YUDEN      | JMK105B1225MV              | TDK       | C1005X5R02225M050BC |
| 1 | C20                             | 2167-0006 | 10UF           | CAP, CERAMIC, X5R, 0603, 10uF, 20%, 6.3V                        | 603       | TAIYO YUDEN      | JMK107B106MAA              | AVX       | 0603G106MAT-A       |
| 1 | L1                              | 3153-0004 | 2.2UH          | INDUCTOR, 2.2uH, 800mA, 25%, SM, 0805, RoHS                     | 805       | MURATA           | LQM21PN2R2N2GCD            |           |                     |
| 1 | U2                              | 4120-0032 | TPS62730       | IC, SWITCH REG, BUCK, 3MHz, 2.1V, 100mA                         | SON6      | TI               | TPS62730DRT                |           |                     |
| 0 | -                               | 4140-0006 | 32.768KHZ      | XTAL, 32.768KHZ, 20PPM, 12.5pf, -40-85C, 3.2X1.5MM, No Pb       | 3.2x1.5MM | NDK              | NX32155A-32.768K-STD-MUA-8 |           |                     |
| 1 | D1                              | 5103-0008 | SMA29V1        | DIODE, ZENER, 9.1V, +/-5%, 1W, SMA                              | SMA       | MICRO COMMERCIAL | SMA29V1-TP                 |           |                     |
| 2 | LD1,LD2                         | 5120-0003 | GREEN          | LED, GREEN, SM, 0805                                            | 805       | CML              | 7012X5                     |           |                     |
| 1 | J1                              | 6101-0032 | VERT MALE, SK2 | CONN, SM, SK2, 0.05IN, VERT, MALE, POST HIGHT=0.120", FLSH GOLD | SM        | SAMTEC           | FTS-105-01-F-DV-P          |           |                     |
| 8 | MP1,MP2,MP3,MP4,MP5,MP6,MP7,MP8 | 9996-0001 | SM 1.0MM       | NOZ POINT, SM, 1.0mm (39 mil) SQUARE PAD                        | SM        |                  |                            |           |                     |
| 4 | FID1,FID2,FID3,FID4             | 9997-0001 | FID 1.05MM     | FIDUCIAL, SM, 1.05mm PAD, 1.8mm MASK                            | SM        |                  |                            |           |                     |
| 8 | TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8 | 9998-0001 | SM 1.0MM       | TEST POINT, SM, 1.0mm (39 mil) PAD                              | SM        |                  |                            |           |                     |
| 4 | MT1,MT2,MT3,MT4                 | 9999-0021 | 3.175MM        | MOUNT HOLE, NON-PLATED, 3.175mm (125mil) HOLE                   | TH        |                  |                            |           |                     |