

**BILL OF MATERIALS:**

**MAX2338 EV KIT BILL OF MATERIAL**

BOM REV: F

BOARD REV: A

**LNA's TUNED TO GSM AND DCS BAND**

**MIXER's TUNED TO 270MHz AND 148MHz IF**

Underlined components are on the backside

|   | DESIGNATION                                                 | QTY | DESCRIPTION                                                             |  |
|---|-------------------------------------------------------------|-----|-------------------------------------------------------------------------|--|
|   | C1, C4, <u>C9</u>                                           | 3   | .01uF 10% Ceramic Capacitor (0402)<br>MURATA GRM36X7R103K016            |  |
|   | C2, C3, C13, C21, C24, C27                                  | 6   | 100pF 5% Ceramic Capacitor (0402)<br>MURATA GRM36COG101J050             |  |
|   | <u>C5</u> , C14, C16                                        | 3   | 6800pF 10% Ceramic Capacitor (0402)<br>MURATA GRM36X7R682025            |  |
|   | <u>C6</u>                                                   | 1   | <b>Leave Site Open</b>                                                  |  |
| * | C7                                                          | 1   | 2.7pF $\pm 0.1$ pF Ceramic Capacitor (0402)<br>MURATA GRM36COG2R7B050   |  |
| * | C8                                                          | 1   | 1.2pF $\pm 0.25$ pF Ceramic Capacitor (0402)<br>MURATA GRM36COG1R2C050  |  |
| * | <u>C10</u>                                                  | 1   | 6pF $\pm 0.5$ pF Ceramic Capacitor (0402)<br>MURATA GRM36COG060D050     |  |
|   | <u>C11</u> , C18, <u>C19</u> , C20, <u>C28</u> , <u>C33</u> | 7   | 1000pF 10% Ceramic Capacitor (0402)<br>MURATA GRM36X7R102050            |  |
|   | C12                                                         | 1   | 0 ohm Resistor (0402)                                                   |  |
|   | C22                                                         | 1   | 22pF 5% Ceramic Capacitor (0402)<br>MURATA GRM36COG220J050              |  |
|   | C15, C17                                                    | 2   | <b>Leave Site Open</b>                                                  |  |
| * | C23, C25                                                    | 2   | 2.7pF $\pm 0.25$ pF Ceramic Capacitor (0402)<br>MURATA GRM36COG02R7C050 |  |
| * | C29                                                         | 1   | 22uF Tantalum Cap 'C' 10V min<br>AVX TAJC226K010                        |  |
| * | <u>C30</u>                                                  | 1   | 2.2pF $\pm 0.25$ pF Ceramic Capacitor (0402)<br>MURATA GRM36COG2R2C050  |  |
| * | <u>C31</u>                                                  | 1   | 5.0pF $\pm 0.25$ pF Ceramic Capacitor (0402)<br>MURATA GRM36COG050C050  |  |
|   |                                                             |     |                                                                         |  |
|   | <u>R1</u> , <u>R4</u> , <u>R5</u> , <u>R6</u> , <u>R8</u>   | 5   | 1K 5 % Resistor (0402)                                                  |  |
|   | R2, R3                                                      | 2   | 24.3K 1 % Resistor (0402)                                               |  |
|   | R7                                                          | 1   | 2.7K 1 % Resistor (0402)                                                |  |
|   | R9, R10                                                     | 2   | 0 ohm Resistor (0402)                                                   |  |
|   | <u>R11</u>                                                  | 1   | 8.25K 1 % Resistor (0402)                                               |  |
|   | R12, R13                                                    | 2   | 91 ohm 5 % Resistor (0402)                                              |  |
|   |                                                             |     |                                                                         |  |
|   | L1                                                          | 1   | 8.2nH Inductor Toko LL1608-FS8N2J                                       |  |
|   | L2                                                          | 1   | 3.3nH Inductor Toko LL1608-FH3N3S                                       |  |
|   | <u>L12</u>                                                  | 1   | 2.7nH Inductor Toko LL1608-FS2N7S                                       |  |
|   | <u>L3</u>                                                   | 1   | 0 ohm Chip Resistor (0603)                                              |  |

|   |                                                                       |   |                                                                                                                                                                         |    |
|---|-----------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
|   | L4                                                                    | 1 | 2.2nH Inductor Toko LL1608-FS2N2S                                                                                                                                       |    |
|   | L5                                                                    | 1 | 3.9nH Inductor Toko LL1608-FS3N9J                                                                                                                                       |    |
|   | L6                                                                    | 1 | 12nH 5% Inductor COILCRAFT 0603CS-12NXJB                                                                                                                                |    |
|   | L7, L8                                                                | 2 | 68nH 5% Inductor COILCRAFT 0805CS-680XJBC                                                                                                                               |    |
|   | L9                                                                    | 1 | 15pF 5% Ceramic Capacitor (0603)<br>MURATA GRM39COG150J050A                                                                                                             |    |
|   | L11                                                                   | 1 | 150nH 5% Inductor CCOILCRAFT 0805CS-151XJBC                                                                                                                             |    |
|   | L10                                                                   | 1 | <b>Leave Site Open</b>                                                                                                                                                  |    |
|   |                                                                       |   |                                                                                                                                                                         |    |
|   | T1                                                                    | 1 | Balun Transformer<br>Toko B5F 458DB-1011                                                                                                                                |    |
|   |                                                                       |   |                                                                                                                                                                         |    |
| * | U1                                                                    | 1 | MAX2338EGI 44QFN-EP<br><b>NOTE: U1 HAS EXPOSED CONDUCTORS WHICH REQUIRE THEM TO BE SOLDER ATTACHED TO THE CIRCUIT BOARD TO INSURE PROPER FUNCTIONALITY OF THE PART.</b> | EU |
|   |                                                                       |   |                                                                                                                                                                         |    |
|   | JU2                                                                   | 1 | 20 ohm 1% Resistor (0603)                                                                                                                                               |    |
|   | JU6, JU8, JU10                                                        | 3 | 1X2 Headers (.1" Centers) Digi-Key S1012-36-ND                                                                                                                          |    |
|   | JU1, JU3, JU4, JU5, JU                                                | 5 | 1X3 Headers (.1" Centers) Digi-Key S1012-36-ND                                                                                                                          |    |
|   | JU1, JU3, JU4, JU5, JU<br>JU7, JU8, JU10                              | 8 | Shunt                                                                                                                                                                   |    |
|   |                                                                       |   |                                                                                                                                                                         |    |
|   | PMIXIN, CMIXIN,<br>CLOOUT                                             | 3 | SMA Connector (PC Mount)<br>Johnson 142-0701-201 Digi-Key J500-ND                                                                                                       |    |
|   | CLNAOUT, IFOUT,<br>PLNAOUT, PLNAIN,<br>CLNAIN, LOIN,<br>PLOOUT, FMOUT | 8 |                                                                                                                                                                         |    |
|   |                                                                       |   |                                                                                                                                                                         |    |
|   | VCC, GND                                                              | 2 | Test Point Digi-Key 5000K-ND                                                                                                                                            |    |
|   |                                                                       |   |                                                                                                                                                                         |    |
|   |                                                                       |   | MAX2338 Evaluation Kit Circuit Board REV A                                                                                                                              |    |
| * |                                                                       |   | MAX2338 Data Sheet                                                                                                                                                      |    |
| * |                                                                       |   | MAX2338 Evaluation Kit Data Sheet                                                                                                                                       |    |