

## SC1905 Evaluation Kit

Evaluates: SC1905

### General Description

The SC1905 evaluation kits (SC1905-EVKs) provide the hardware and software graphical user interface (GUI) necessary for the evaluation of the SC1905. The SC1905 is a pin-compatible upgrade of the popular SC1894 RF PA linearizer (RFPAL) supporting signal bandwidths up to 100MHz. The SC1905 is a fully adaptive, RFin/RFout predistortion linearization solution optimized for a wide range of amplifiers, power levels, and communication protocols. The SC1905 uses the PA output and input signals to adaptively generate an optimized correction function in order to minimize the PA's self-generated distortion and impairments. Using RF-domain analog signal processing enables the SC1905 to operate over wide-signal bandwidths and consume very low power.

### Benefits

- Ease-of-Use
  - Integrated RFin/RFout Solution
  - Reduces System Power Consumption, OPEX, and Total BOM Costs
  - Smaller Power Supply, Heat Sink, and Enclosure
  - Lower Backoff Reduces Transistor Costs

### Applications

- 4G and 5G Cellular Infrastructure
  - Single/Multicarrier, Multistandard: WCDMA, LTE, and TD-LTE
  - BTS Amplifiers, RRH, Booster Amplifiers,
- Repeaters, Small Cells, Microcells, Picocells, DAS, AAS, and MIMO Systems
- Wide Range of PAs and Output Power
  - Amplifier: Class A/AB and Doherty
  - PA Process: LDMOS, GaN, GaAs, and InGaP
- Any Application Requiring PA Linearization

### Benefits and Features

- Frequency Ranges:
  - SC1905-EVK3400: 3300MHz–3800MHz
  - SC1905-EVK2400: 2300MHz–2700MHz
  - SC1905-EVK1900: 1800MHz–2200MHz
- RFin/RFout PA Linearizer SoC in Standard CMOS
  - Fully Adaptive Correction
- External Reference Clock Support:
  - 10MHz, 13MHz, 15.36MHz, 19.2MHz, 20MHz, 26MHz, and 30.72MHz
- Low Power Consumption: 1280mW
- Frequency Range: 698MHz to 3800MHz
- Input Signal Bandwidth: 5MHz to 100MHz
- Packaged in 9mm x 9mm QFN Package
- Operating Case Temperature: -40°C to +105°C
- Fully RoHS Compliant, Green Materials
- Ease-of-Use
  - Integrated RFin/RFout Solution
  - Reduced SW Development
- Reduces System Power Consumption and OPEX
- Reduces BOM Costs, Area, and Total Volume
  - Smaller Power Supply, Heat Sink, and Enclosure
  - Small Implementation Size (< 6.5cm<sup>2</sup>)

[Ordering Information](#) appears at end of data sheet.

### Auxiliary Documentation

- SC1905 SPI Programming Guide is dedicated to describing how the host communicates with the SC1905. It describes the communication protocol in addition to the addresses of all the variables and parameters for monitoring the status and configuration of the SC1905.
- The SC1905 Hardware Design Guide provides guidance on how to design the SC1905 into a system; for example, recommendations on PCB layout, regulator and delay line selection etc.
- The firmware release notes provide a comprehensive user’s guide to evaluate the SC1905 operation and performance with different power amplifiers.

These auxiliary documents are available on the SC1905 product web page on Maxim’s website.

### Ordering Information

| PART           | DESCRIPTION                               |
|----------------|---|
| SC1905-EVK3400 | SC1905 Evaluation Kit for 3300MHz–3800MHz |
| SC1905-EVK2400 | SC1905 Evaluation Kit for 2300MHz–2700MHz |
| SC1905-EVK1900 | SC1905 Evaluation Kit for 1800MHz–2200MHz |

*#Denotes a RoHS-compliant device that may include lead(Pb) that is exempt under the RoHS requirements.*

SC1905-MB Bill of Materials

| DESIGNATOR   | COMMENT           | DESCRIPTION                                     | QUANTITY | MANUFACTURER 1                             | MANUFACTURER PART NUMBER 1 | PART SUBSTITUTION ALLOWED? |
|--|-------------------|---|----------|--|----------------------------|----------------------------|
| C1, C26, C28, C29, C30, C31, C34   | NO LOAD           | 0603 Cap No Load                                | 7        |  |                            |                            |
| C2, C3, C4, C6, C8, C25, C27, C32, C33, C35, C36, C37, C38, C39, C40, C42  | NO LOAD           | 0402 Cap No Load                                | 16       |  |                            |                            |
| C5, C19  | 10uF              | Cap 10uF 0805                                   | 2        | Murata Electronics North America           | GRM21BR71A106KE51L         | Yes                        |
| C7, C24  | 4.7uF             | Cap 4.7uF 0805                                  | 2        | TDK Corporation                            | C2012X7R1A475M125AC        | Yes                        |
| C9, C10  | 10uF              | Cap 10uF 0805                                   | 2        | Murata Electronics North America           | GRM21BR71A106KE51L         | N/A                        |
| C23, C41   | 0.1uF             | Cap 0.1uF 0402                                  | 2        | TDK Corporation                            | C1005X7R1A104K050BB        | Yes                        |
| R1, R2, R4, R9,  | 10k               | 10k Ohm 0402                                    | 4        | Yageo                                      | RC0402FR-0710KL            | Yes                        |
| R3, R6, R26, R42, R48, R61,  | 0 Ohm             | 0 Ohm 0402                                      | 6        | Yageo                                      | RC0402JR-070RL             | Yes                        |
| R5, R11, R20, R21, R22, R38, R39, R40, R41, R43, R44, R45, R46, R47, R49, R50, R51, R52 R53, R54, R55, R56, R57, R58, R59, R60, R62, R63, R64, R65 | NO LOAD           | NO LOAD RESISTOR 0402                           | 30       |  |                            |                            |
| R7   | 100               | RESISTOR 100 Ohm 0402                           | 1        | Panasonic Electronic Components            | ERJ-2GEJ101X               | Yes                        |
| R8, R10  | 510               | RESISTOR 510 Ohm 0402                           | 2        | Yageo                                      | RC0402JR-07510RL           | Yes                        |
| R23, R24   | 0 Ohm             | 0 Ohm 0603                                      | 2        | Panasonic Electronic Components            | ERJ-3GEY0R00V              | Yes                        |
| L1, L2   | NO LOAD           | NO LOAD INDUCTOR 0402                           | 2        |  |                            |                            |
| J1, J5   | NO LOAD           | SMA RECEPTACLE END LAUNCH, Emerson 142-0701-801 | 2        |  |                            |                            |
| J2, J3, J7   | SMA_EDGE          | SMA RECEPTACLE END LAUNCH, Emerson 142-0701-801 | 3        | Emerson Network Power Connectivity Johnson | 142-0701-801               | Yes                        |
| J4, J6, J8   | NO LOAD           | Two Pin Header / Jumper                         | 3        | Samtec Inc                                 | HTSW-102-07-G-S            | N/A                        |
| J9   | BOX HEADER 14 pin | BOX HEADER 14 Pin                               | 1        | FCI  | 10056844-114LF             | Yes                        |
| J10  | NO LOAD           | 14 Pin Header                                   | 1        | TE Connectivity                            | 4-103186-0-14              | Yes                        |
| J11, J14   | NO LOAD           | Banana Supply Connector Red                     | 2        | Deltron                                    | 571-0500                   | N/A                        |
| J12  | UFL-R-SMT_1       | Banana Supply Connector Red                     | 1        | Deltron                                    | 571-0500                   | Yes                        |
| J13  | UFL-R-SMT_2       | Banana Supply Connector Black                   | 1        | Deltron                                    | 571-0100                   | Yes                        |
| J15  | NO LOAD           | ERF8-013-01-S-D-RA-L                            | 1        | Samtec                                     | ERF8-013-01-S-D-RA-L       | N/A                        |
| MT1, MT2, MT3, MT4   | Standoff          | Mounting Hole / STANDOFF                        | 4        | Keystone Electronics                       | 8400                       | Yes                        |
| MT1N, MT2N, MT3N, MT4N   | Standoff          | Mounting Hole / STANDOFF                        | 4        | B&F Fastener Supply                        | HNZ 440                    | Yes                        |
| PRINTED CIRCUIT BOARD  |                   | SC1905-MB                                       | 1        |  | SC1905-MB                  | Yes                        |
| Q2   | NO LOAD           |   | 1        | FAIRCHILD SEMICONDUCTOR                    | MMBT3904                   | Yes                        |
| Q3   | 2N7002            |   | 1        |  |                            | Yes                        |
| SW1  | B3S-1000P         | Pushbutton Switch                               | 1        | Omron Electronics Inc-EMC Div              | B3S-1000P                  | Yes                        |
| D1, D2   | SML-LX23GC        | Green LED                                       | 2        |  |                            |                            |
| U1   | NO LOAD           | RF Amplifier MGA-30889-BLKG                     | 1        |  |                            |                            |
| U2   | NO LOAD           | IC Buffer                                       | 1        |  |                            |                            |
| U3   | EP5358HUI         | Enpirion Voltage Regulator                      | 1        | Enpirion                                   | EP5358HUI                  | No                         |
| U4   | EP53A8HQI         | Enpirion Voltage Regulator                      | 1        | Enpirion                                   | EP53A8HQI                  | No                         |
| U5   | NO LOAD           | RF Power Detector                               | 1        | Maxim Integrated                           | MAX2203EWT+T               | N/A                        |
| U6   | NO LOAD           | Temp Sensor                                     | 1        | ANALOG DEVICES                             | TMP36GRTZ-REEL7            | Yes                        |
| U8   | NO LOAD           | Temp Sensor                                     | 1        |  |                            |                            |
| U9   | NO LOAD           | Quad OpAmp LMV324QDR                            | 1        | Texas Instruments                          | LMV324QDR                  | Yes                        |

## SC1905-DB1900 (1800MHz–2200MHz) Bill of Material

| Designator   | Comment        | Description   | Quantity | Manufacturer 1                   | Manufacturer Part Number 1 | Part Substitution Allowed? |
|--|----------------|---|----------|----------------------------------|----------------------------|----------------------------|
| C1   | 1uF            | 1uF 0603 ceramic capacitor  | 1        | Murata Electronics North America | GRM188R61A105KA61D         |                            |
| C2, C6, C30  | 2.2uF          | 2.2uF 0603  | 3        | Murata                           | GRM188R71A225KE15J         |                            |
| C3, C4, C8, C9, C12, C13, C14, C25, C27, C29, C31, C32, C33, C35             | 1000pF         | 1000pF 0402   | 14       | Murata                           | GRM1555C1H102JA01D         |                            |
| C10, C11   | 10pF           | 10pF 0402   | 2        | Murata                           | GJM1555C1H100FB01D         |                            |
| C15, C22, C45, C46, C47, C48, R2, R9, R11, R13, R15, R21, R23, R24, R25, R27 | NO LOAD        | 10pF 0402, 0402 Cap No Load, Generic Capacitor, NO LOAD RESISTOR 0402, Resistor Generic | 25       | Murata                           | GJM1555C1H100FB01D         |                            |
| C17  | 0.2pF          | 0.2pF 0402  | 1        | Murata Electronics North America | GJM1555C1HR20BB01D         | No                         |
| C18  | 0.9pF          | 0.9pF 0402  | 1        | Murata Electronics North America | GJM1555C1HR90BB01D         | No                         |
| C20  | 0.5pF          | 0.5pF 0402  | 1        | Murata Electronics North America | GJM1555C1HR50BB01D         | No                         |
| C26, C28, C36  | 15pF           | 15pF 0402   | 3        | Murata                           | GJM1555C1H150FB01D         |                            |
| C34  | 1nF            | 1000pF 0402   | 1        | Murata                           | GRM1555C1H102JA01D         |                            |
| DC1  | 10dB Coupler   | Anaren 1700 - 2200 MHz 0805 10dB Coupler  | 1        | Anaren                           | DC1722J5010AHF             | No                         |
| DC2  | BDCN-7-25+     | Mini Circuits Balun   | 1        | Mini-Circuits                    | BDCN-7-25+                 | No                         |
| FT1, FT2   | Bead           | Bead  | 2        | Murata                           | BLM18AG121SN1D             | No                         |
| FT3  | Bead           | Bead 0402 470 ohm   | 1        | Murata                           | BLM15BD471SN1D             | No                         |
| L1   | 18nH           | 18nH  | 1        | Taiyo Yuden                      | HK100518NJ-T               | No                         |
| L2, L3   | 5.6nH          | 5.6nH   | 2        | Taiyo Yuden                      | HK10055N6S-T               | No                         |
| L4   | 3.3nH          | 3.3nH   | 1        | Taiyo Yuden                      | HK10053N3S-T               |                            |
| L5, L6   | 1.2nH          | 1.2nH   | 2        | Taiyo Yuden                      | HK10051N2S-T               | No                         |
| L7   | 8.2nH          | 8.2nH   | 1        | Taiyo Yuden                      | HK10058N2J-T               | No                         |
| L8, L9   | 2.2nH          | 2.2nH   | 2        | Taiyo Yuden                      | HK10052N2S-T               | No                         |
| PCB  | DB1900_RevA    | Printed Circuit Board (DB1900_RevA)   | 1        |                                  | DB1900_RevA                |                            |
| R1   | 10k            | 10k Ohm 0402  | 1        | Yageo                            | RC0402FR-0710KL            |                            |
| R8, R14, R17, R26, R102  | 0 Ohm          | 0 Ohm 0402  | 6        | Yageo                            | RC0402JR-070RL             |                            |
| R10, R16   | 49.9           | 49.9 Ohm 0402   | 2        | KOA Speer                        | RK73H1ELTP49R9F            |                            |
| R12  | 12.4k 1%       | 12.4k Ohm 0402  | 1        | Panasonic Electronic Components  | ERJ-2RKF1242X              |                            |
| R22  | 0 Ohm          | 0 Ohm 0201  | 1        | Yageo                            | RC0201JR-070RL             |                            |
| T1, T2, T3   | BAL 50 - 100   | Anaren 1700 - 2200 MHz 50Ohm UnBal 100 Dif Balun  | 3        | Anaren                           | BD1722J50100A00            | No                         |
| U2   | 2ns delay line | Anaren Delay Line 2ns   | 1        | Anaren                           | XDL15-2-020S               | No                         |
| U5   | SC1905         | SC1905: Adaptive RF Power Amplifier Linearizer  | 1        | Maxim Integrated                 | SC1905                     |                            |
| Y1   | 278-20.0M-20-W | Crystal 20MHz 278-20.0M-20-W  | 1        | Oscilent                         | 278-20.0M-20-W             |                            |

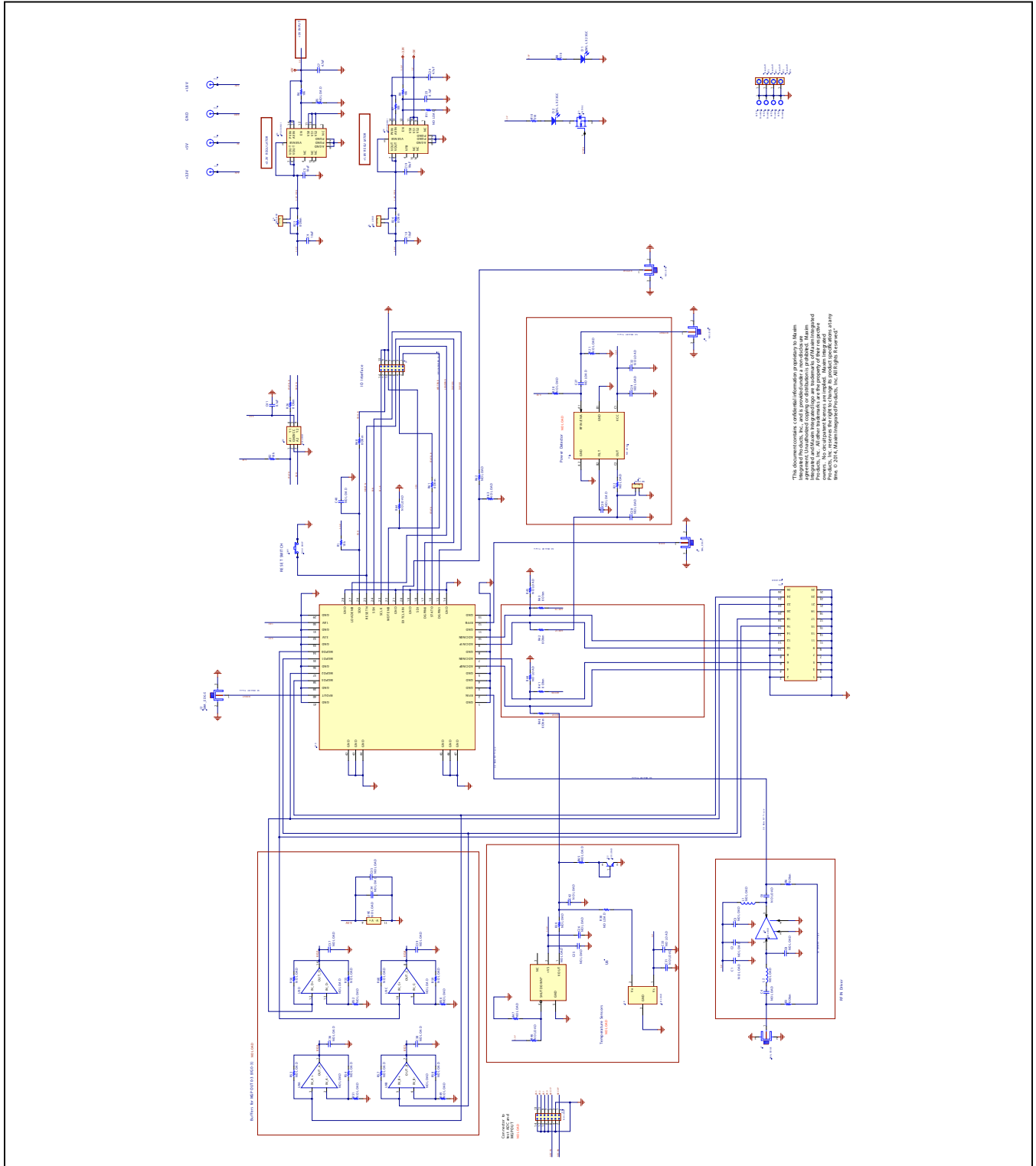
SC1905-DB2400 (2300MHz–2700MHz) Bill of Materials

| DESIGNATOR   | COMMENT        | DESCRIPTION   | QUANTITY | MANUFACTURER 1                           | MANUFACTURER PART NUMBER 1             | PART SUBSTITUTION ALLOWED? |
|--|----------------|---|----------|--|--|----------------------------|
| C1   | 1uF            | 1uF 0603 ceramic capacitor  | 1        | Murata Electronics North America         | GRM188R61A105KA61D                     |                            |
| C2, C6, C30  | 2.2uF          | 2.2uF 0603  | 3        | Murata                                   | GRM188R71A225KE15J                     |                            |
| C3, C4, C8, C9, C12, C13, C14, C25, C27, C29, C31, C32, C33, C35                   | 1000pF         | 1000pF 0402   | 14       | Murata                                   | GRM1555C1H102JA01D                     |                            |
| C10, C11   | 10pF           | 10pF 0402   | 2        | Murata                                   | GJM1555C1H100FB01D                     |                            |
| C15, C16, C40, C45, C46, C47, C53, L7, R2, R9, R11, R21, R23, R25, R27, R104, R106 | NO LOAD        | 0.9pF 0402, 10pF 0402, 0402 Cap No Load, Generic Capacitor, NO LOAD RESISTOR 0402, Resistor Generic, SMT Inductor | 27       | Murata, Murata Electronics North America | GJM1555C1H100FB01D, GJM1555C1HR90BB01D |                            |
| C17  | 1.1pF          | 1.1pF 0402  | 1        | Murata                                   | GJM1555C1H1R1BB01D                     | No                         |
| C18  | 1.3pF          | 1.3pF 0402  | 1        | Murata                                   | GJM1555C1H1R3BB01D                     | No                         |
| C19  | 0.4pF          | 0.4pF 0402  | 1        | Murata                                   | GJM1555C1HR40BB01D                     | No                         |
| C20  | 0.9pF          | 0.9pF 0402  | 1        | Murata Electronics North America         | GJM1555C1HR90BB01D                     | No                         |
| C21  | 0.3pF          | 0.3pF 0402  | 1        | Murata Electronics North America         | GJM1555C1HR30BB01D                     | No                         |
| C23  | 0.5pF          | 0.5pF 0402  | 1        | Murata Electronics North America         | GJM1555C1HR50BB01D                     | No                         |
| C26, C28, C36  | 15pF           | 15pF 0402   | 3        | Murata                                   | GJM1555C1H150FB01D                     | Yes                        |
| C34  | 1nF            | 1000pF 0402   | 1        | Murata                                   | GRM1555C1H102JA01D                     |                            |
| C52  | 2.2pF          | 2.2pF 0402  | 1        | Murata                                   | GJM1555C1H2R2BB01D                     | No                         |
| DC1  | 10dB Coupler   | Anaren 2300 - 3700 MHz 0805 10dB Coupler  | 1        | Anaren                                   | DC2337J5010AHF                         | No                         |
| DC2  | 6dB Coupler    | Mini Circuits Balun   | 1        | Mini-Circuits                            | BDCN-7-25+                             | No                         |
| FT1, FT2   | Bead           | Bead  | 2        | Murata                                   | BLM18AG121SN1D                         | No                         |
| FT3  | Bead           | Bead 0402 470 ohm   | 1        | Murata                                   | BLM15BD471SN1D                         | No                         |
| L2, L3, L12, L13, L14, L15   | 2.7nH          | 2.7nH   | 6        | Taiyo Yuden                              | HK10052N7S-T                           | No                         |
| L5, L6, L8, L9   | 1.5nH          | 1.5nH   | 4        | Taiyo Yuden                              | HK10051N5S-T                           | No                         |
| L10, L11   | 3.3nH          | 3.3nH   | 2        | Taiyo Yuden                              | HK10053N3S-T                           | No                         |
| PCB  | DB2400_RevA    | Printed Circuit Board (DB2400_RevA)   | 1        |  | DB2400_RevA                            |                            |
| R1   | 10k            | 10k Ohm 0402  | 1        | Yageo                                    | RC0402FR-0710KL                        |                            |
| R8, R17, R26, R97, R102  | 0 Ohm          | 0 Ohm 0402  | 5        | Yageo                                    | RC0402JR-070RL                         |                            |
| R12  | 12.4k 1%       | 12.4k Ohm 0402  | 1        | Panasonic Electronic Components          | ERJ-2RKF1242X                          |                            |
| R16, R28   | 49.9 Ohm       | 49.9 Ohm 0402   | 2        | KOA Speer                                | RK73H1ELTP49R9F                        |                            |
| R22  | 0 Ohm          | 0 Ohm 0201  | 1        | Yageo                                    | RC0201JR-070RL                         |                            |
| R24  | NO LOAD        | NO LOAD RESISTOR 0201   | 1        |  |  |                            |
| T1, T2, T3   | BAL 50 - 100   | Anaren 2000 - 4000 MHz 50Ohm UnBal - 100 Dif Balun  | 3        | Anaren                                   | BD2040J50100A00                        | No                         |
| U1   | SC1905         | SC1905: Adaptive RF Power Amplifier Linearizer  | 1        | Maxim Integrated                         | SC1905                                 |                            |
| U2   | 2ns delay line | Anaren Delay Line 2ns   | 1        | Anaren                                   | XDL15-2-020S                           | No                         |
| Y1   | 278-20.0M-20-W | Crystal 20MHz 278-20.0M-20-W  | 1        | Oscilent                                 | 278-20.0M-20-W                         |                            |

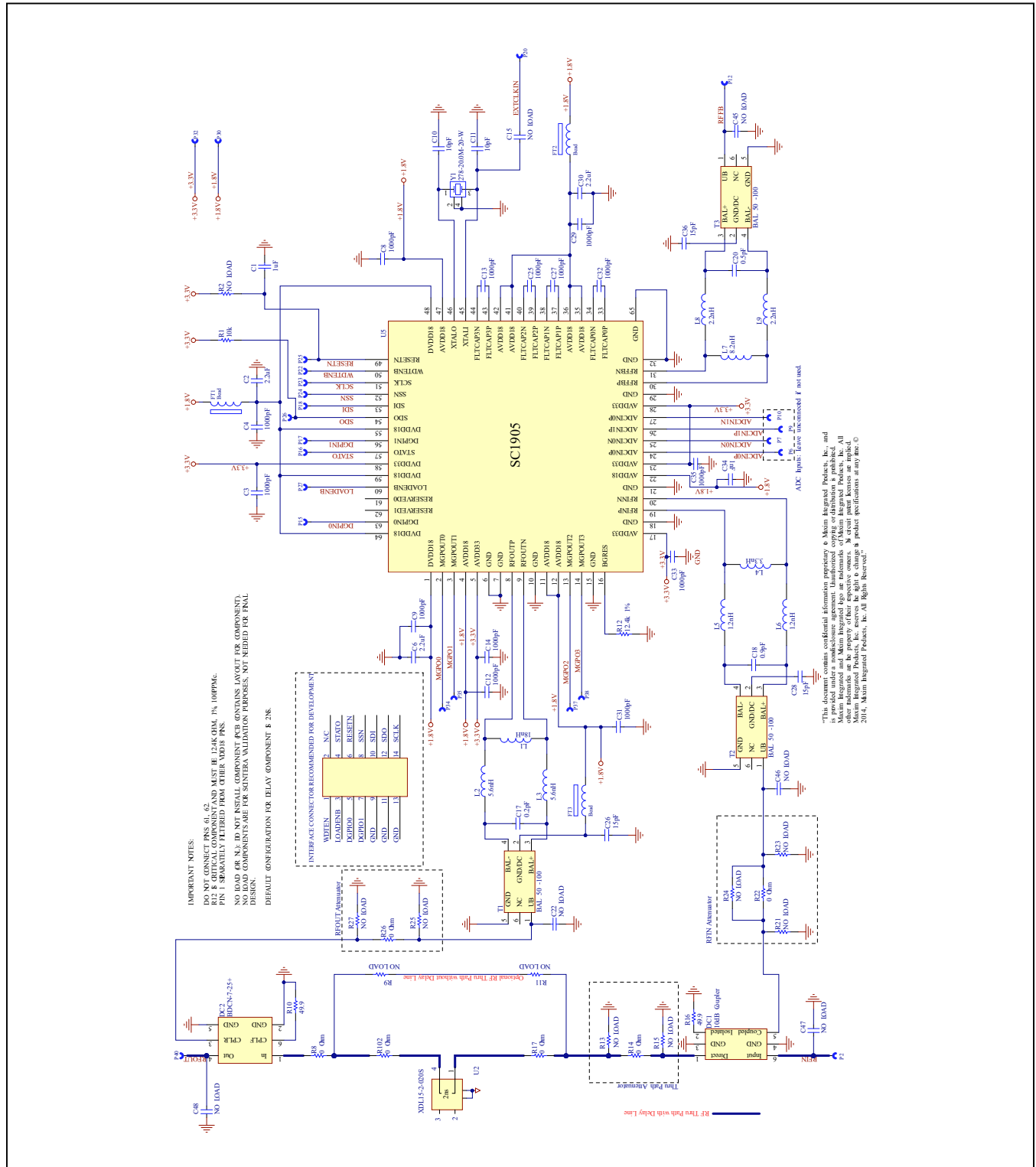
SC1905-DB3400 (3300MHz–3800MHz) Bill of Materials

| Designator   | Description   | Comment                             | Quantity | Manufacturer 1                   | Manufacturer Part Number 1 | Part Substitution Allowed? |
|--|---|-------------------------------------|----------|----------------------------------|----------------------------|----------------------------|
| C1   | 1uF 0603 ceramic capacitor  | 1uF                                 | 1        | Murata Electronics North America | GRM188R61A105KA61D         |                            |
| C2, C6, C30  | 2.2uF 0603  | 2.2uF                               | 3        | Murata                           | GRM188R71A225KE15J         |                            |
| C3, C4, C8, C9, C12, C13, C14, C25, C27, C29, C31, C32, C33, C35   | 1000pF 0402   | 1000pF                              | 14       | Murata                           | GRM1555C1H102JA01D         |                            |
| C10, C11   | 10pF 0402   | 10pF                                | 2        | Murata                           | GJM1555C1H100FB01D         |                            |
| C15, C22, C45, C46, C47, C48, L7, R2, R9, R11, R13, R15, R21, R23, R43, R45  | 10pF 0402, Generic Capacitor, NO LOAD RESISTOR 0402, Resistor Generic, SMT Inductor | NO LOAD                             | 25       | Murata                           | GJM1555C1H100FB01D         |                            |
| C17, C18, C20  | 0.3pF 0402  | 0.3pF                               | 3        | Murata Electronics North America | GJM1555C1HR30BB01D         | No                         |
| C26, C28, C36  | 15pF 0402   | 15pF                                | 3        | Murata                           | GJM1555C1H150FB01D         |                            |
| C34  | 1000pF 0402   | 1nF                                 | 1        | Murata                           | GRM1555C1H102JA01D         |                            |
| C51  | 0.2pF 0402  | 0.2pF                               | 1        | Murata Electronics North America | GJM1555C1HR20BB01D         | No                         |
| C52  | 0.9pF 0402  | 0.9pF                               | 1        | Murata Electronics North America | GJM1555C1HR90BB01D         | No                         |
| DC1  | AVX 0603 Coupler C LGA Termination  | Coupling: 5dB @ 3.5GHz              | 1        | AVX                              | CP0603A0902CNTR            |                            |
| DC2  | AVX 0603 Coupler C LGA Termination  | Coupling: 7dB @ 3.5GHz              | 1        | AVX                              | CP0603A0902HNTR            |                            |
| FT1, FT2   | Bead  | Bead                                | 2        | Murata                           | BLM18AG121SN1D             | No                         |
| FT3  | Bead 0402 470 ohm   | Bead                                | 1        | Murata                           | BLM15BD471SN1D             | No                         |
| L2, L3   | 1.5nH   | 1.5nH                               | 2        | Taiyo Yuden                      | HK10051N5S-T               | No                         |
| L5, L6   | 2.2nH   | 2.2nH                               | 2        | Taiyo Yuden                      | HK10052N2S-T               | No                         |
| P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35, P36, P37, P38, P39, P40, P41, P42, P43, P44, P45, P46, P47 | Ports of RDB Daughterboards   | PORT 1-M                            | 47       |                                  |                            |                            |
| PCB  | DB3400_RevB   | Printed Circuit Board (DB3400_RevB) | 1        |                                  | DB3400_RevB                |                            |
| R1   | 10k Ohm 0402  | 10k                                 | 1        | Yageo                            | RC0402FR-0710KL            |                            |
| R8, R14, R17, R25, R26, R44, R102  | 0 Ohm 0402  | 0 Ohm                               | 8        | Yageo                            | RC0402JR-070RL             |                            |
| R10, R16   | 49.9 Ohm 0402   | 49.9 Ohm                            | 2        | KOA Speer                        | RK73H1ELTP49R9F            |                            |
| R12  | 12.4k Ohm 0402  | 12.4k 1%                            | 1        | Panasonic Electronic Components  | ERJ-2RKF1242X              |                            |
| R22  | NO LOAD RESISTOR 0201   | NO LOAD                             | 1        |                                  |                            |                            |
| R24  | 0 Ohm 0201  | 0 Ohm                               | 1        | Yageo                            | RC0201JR-070RL             |                            |
| T1, T2, T3   | Anaren 3100 - 5000 MHz 50Ohm UnBal - 100 Dif Balun                                  | BAL 50 - 100                        | 3        | Anaren                           | BD3150N50100AHF            | No                         |
| U1   | SC1905: Adaptive RF Power Amplifier Linearizer                                      | SC1905                              | 1        | Maxim                            | SC1905                     | No                         |
| U2   | Anaren Delay Line 2ns   | 2ns delay line                      | 1        | Anaren                           | XDL15-2-020S               | No                         |
| Y1   | Crystal 20MHz 278-20.0M-20-W  | 278-20.0M-20-W                      | 1        | Oscilent                         | 278-20.0M-20-W             |                            |

SC1905-MB Schematic

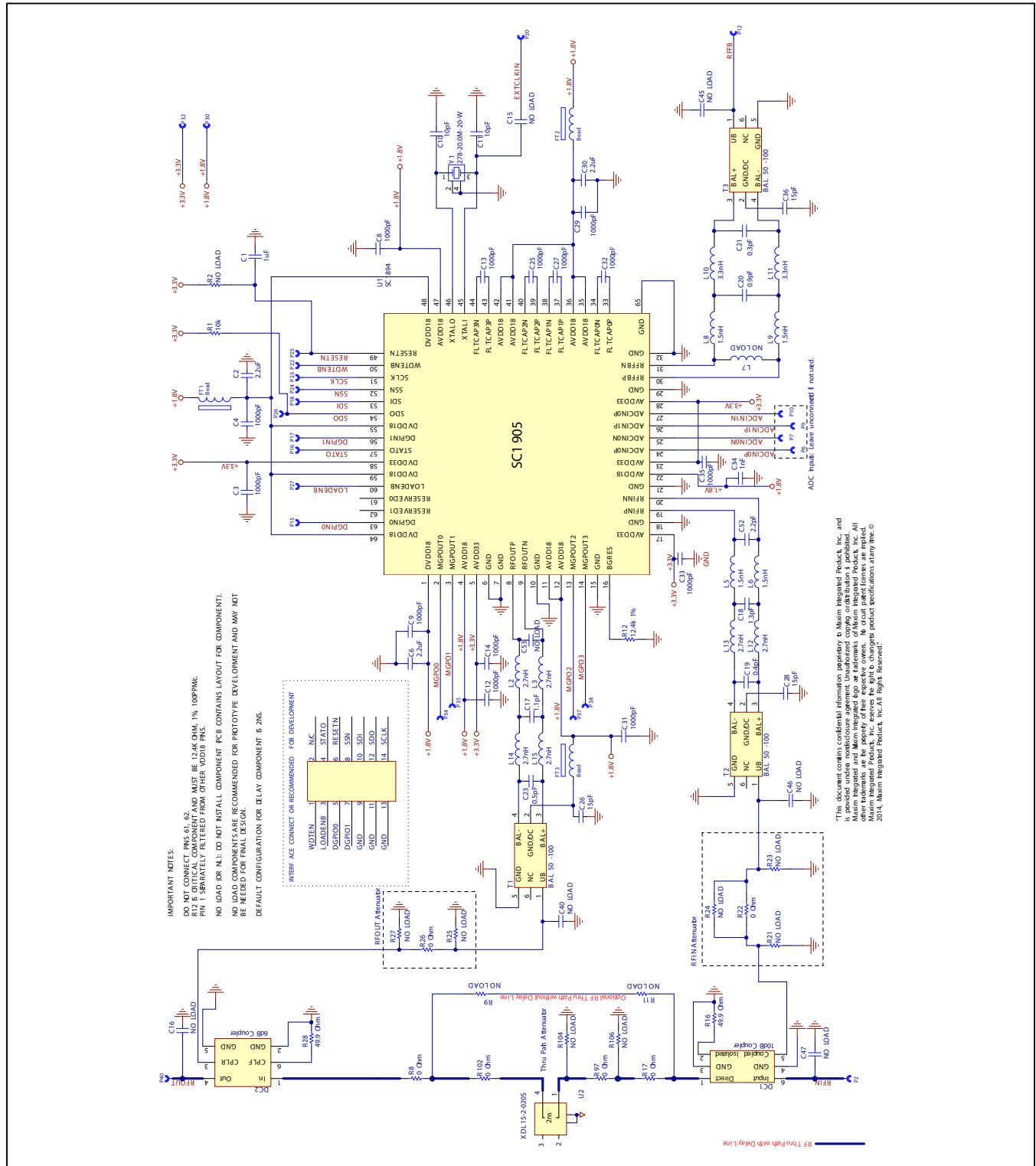


SC1905-DB1900 (1800MHz-2200MHz) Schematic

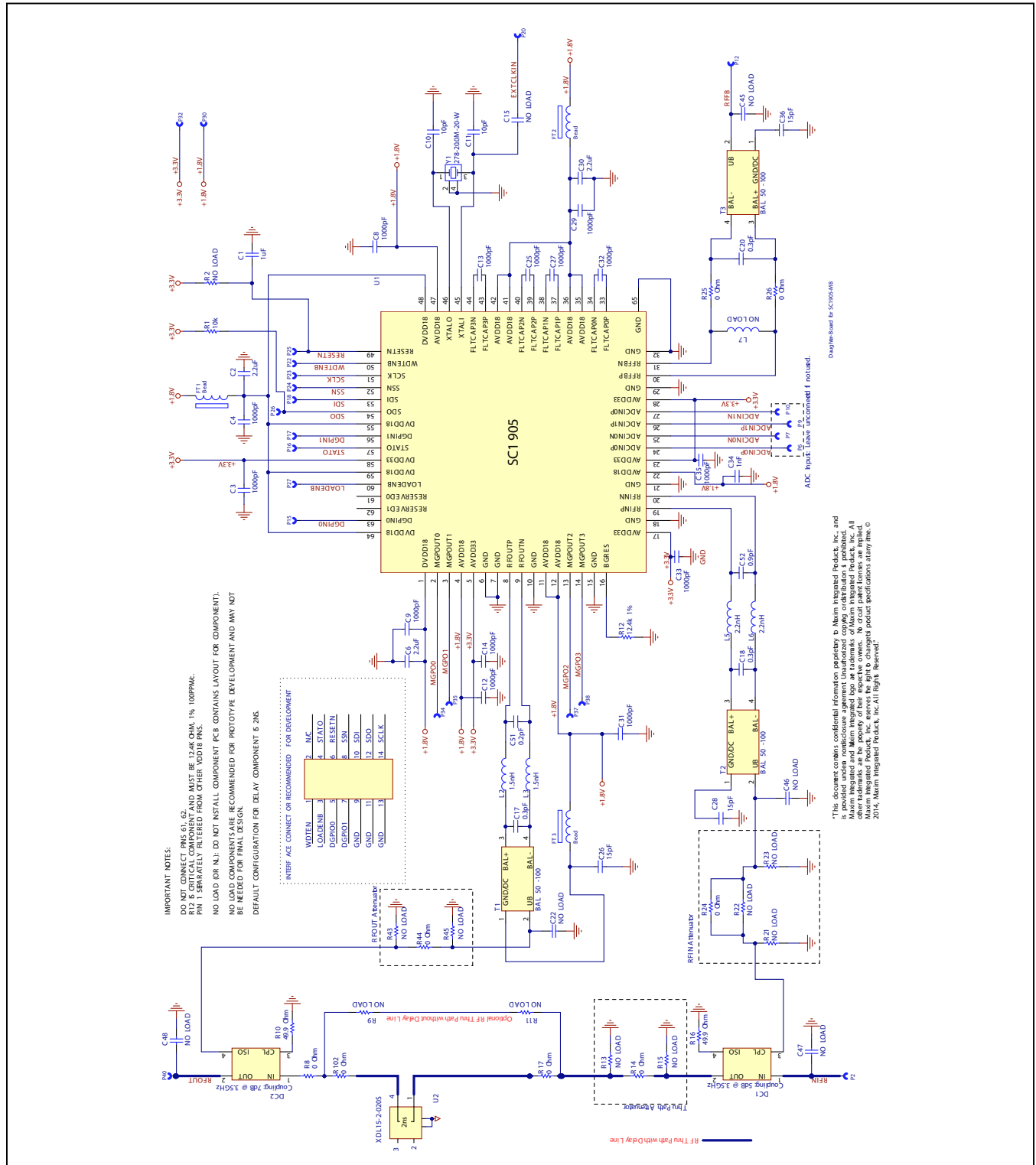




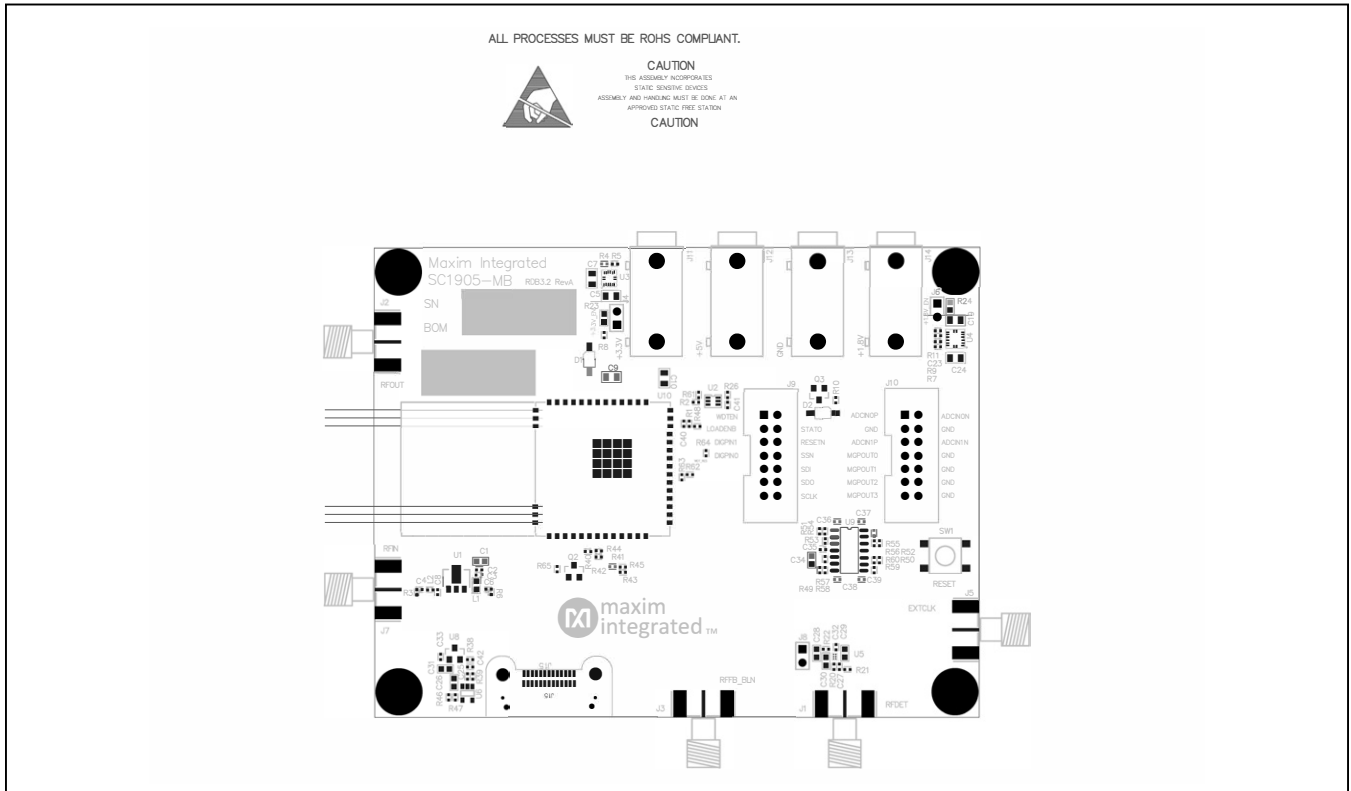
SC1905-DB2400 (2300MHz-2700MHz) Schematic



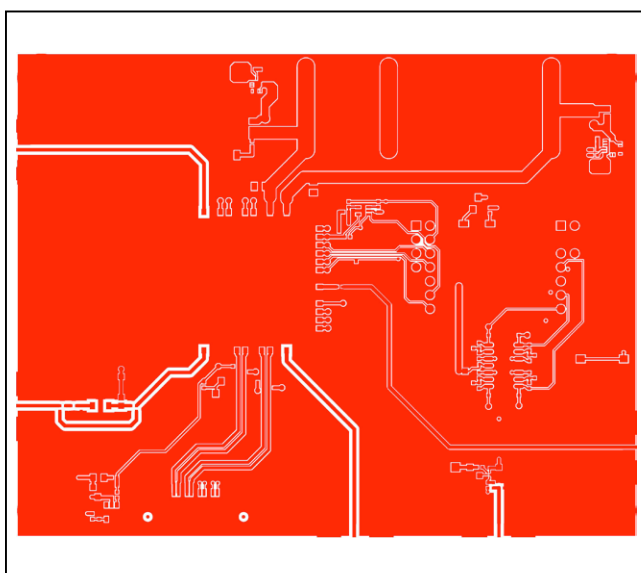
SC1905-DB3400 (3300MHz -3800MHz) Schematic



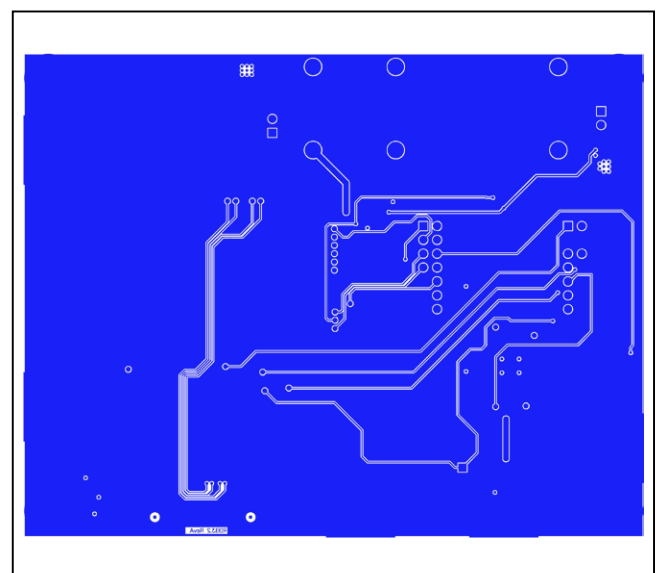
### SC1905-MB PCB Layout Diagrams



SC1905-MB—Assembly Drawing

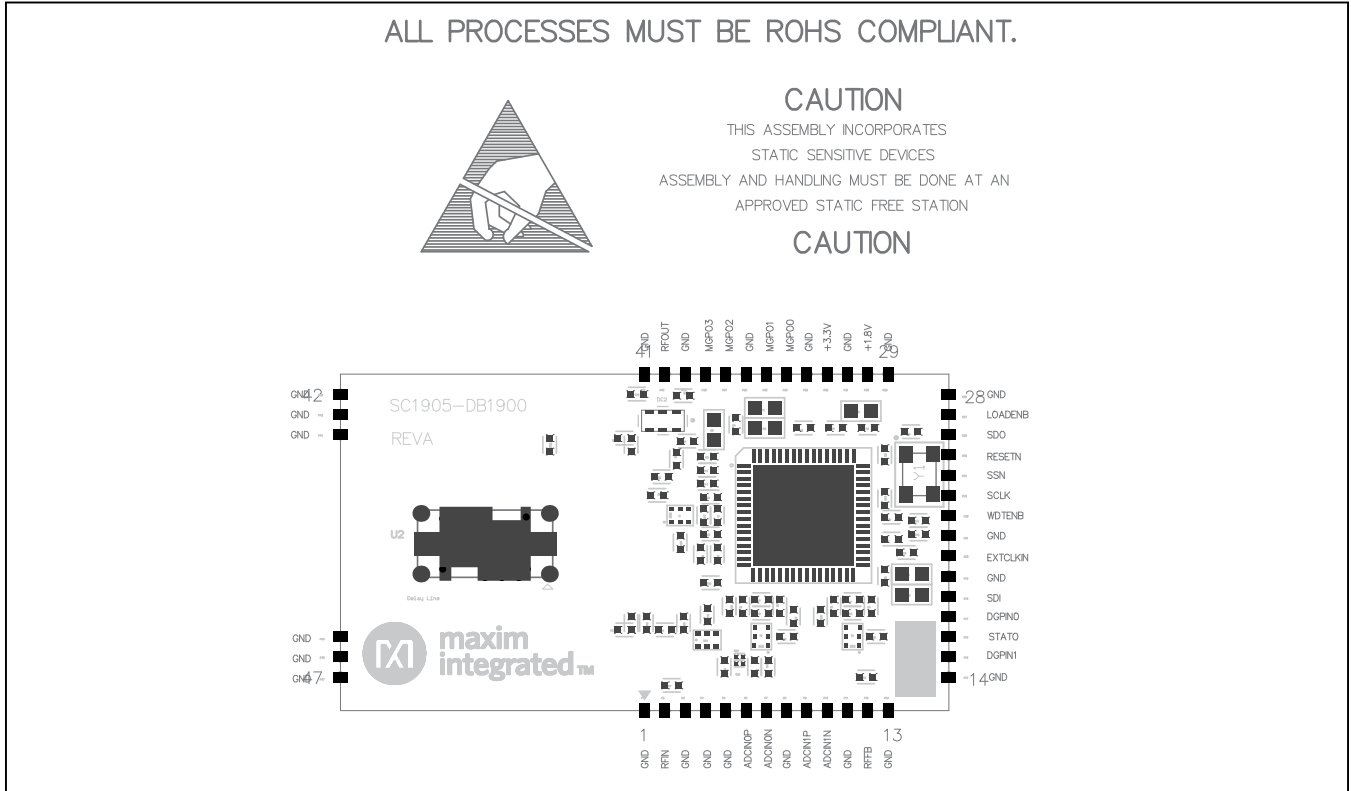


SC1905-MB PCB Layout—Top

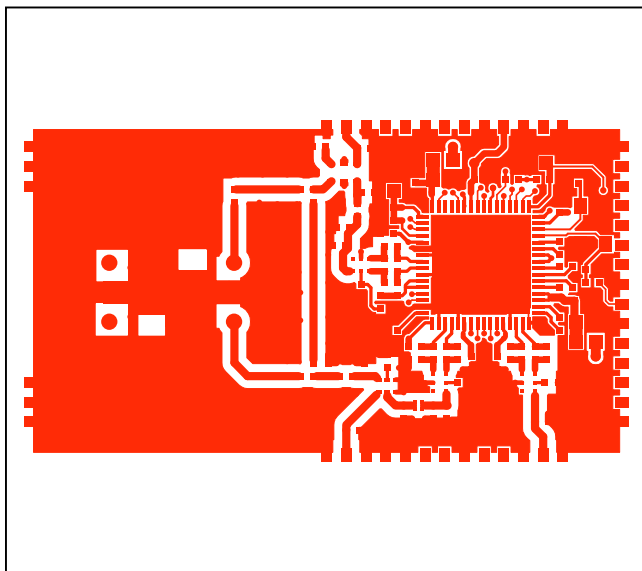


SC1905-MB PCB Layout—Bottom

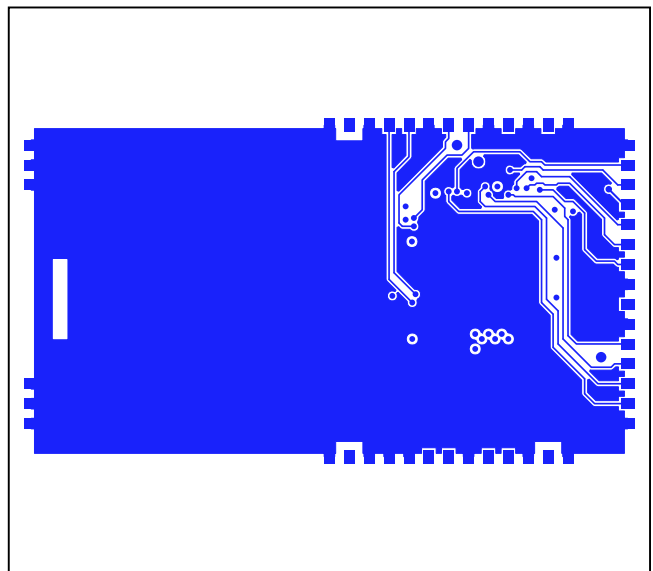
SC1905-DB1900 (1800MHz-2200MHz) PCB Layout Diagrams



SC1905-DB1900—Assembly Drawing

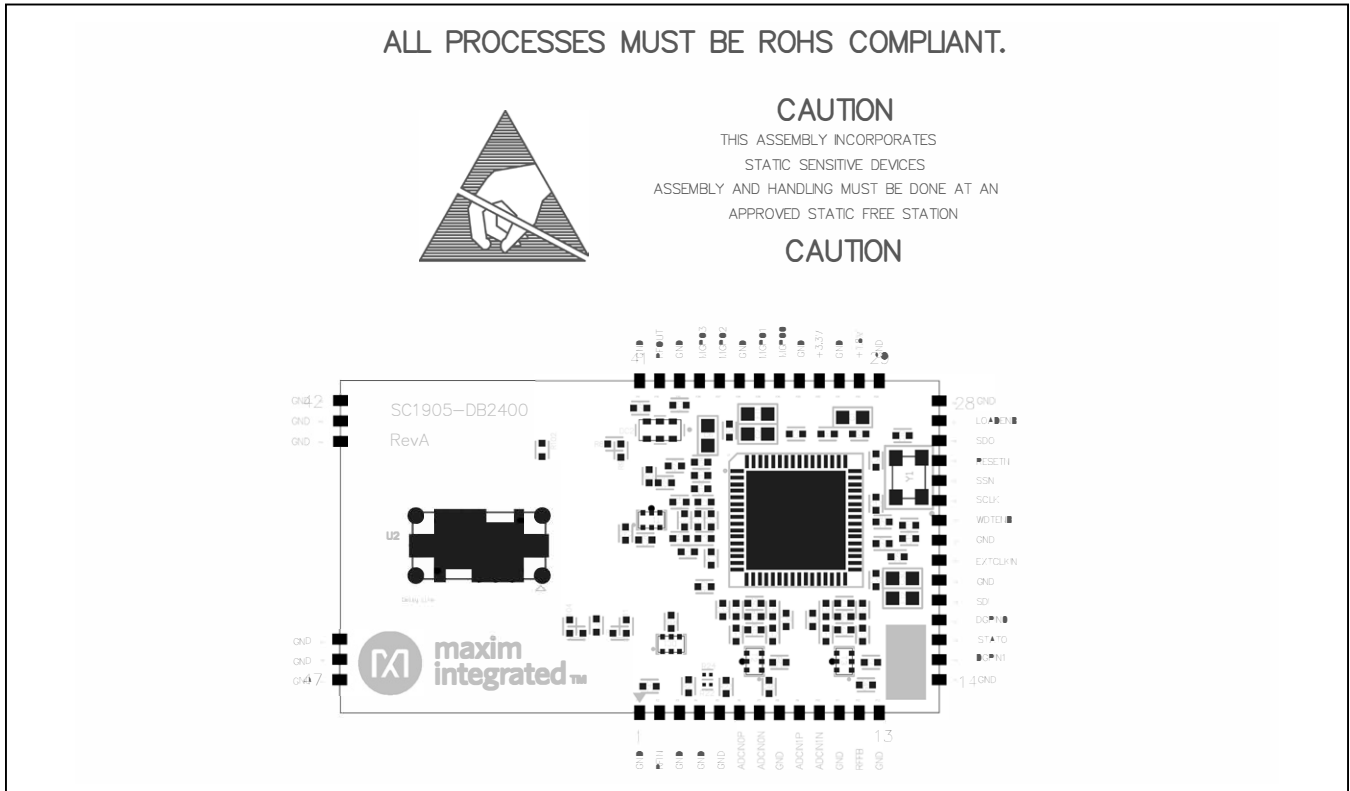


SC1905-DB1900—PCB Layout—Top

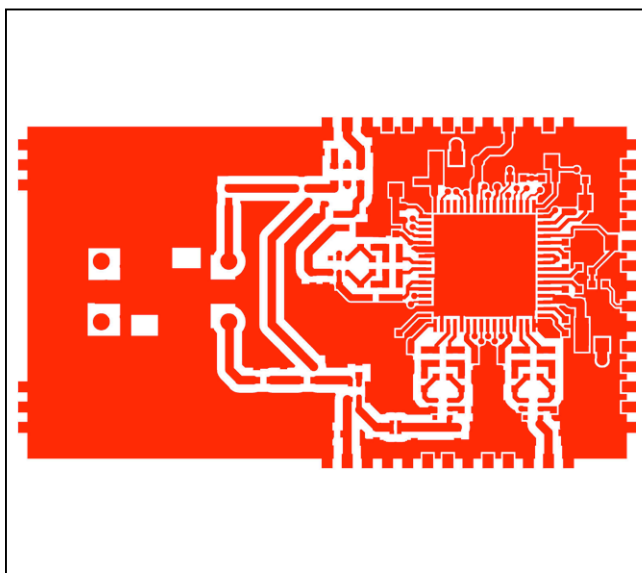


SC1905-DB1900—PCB Layout—Bottom

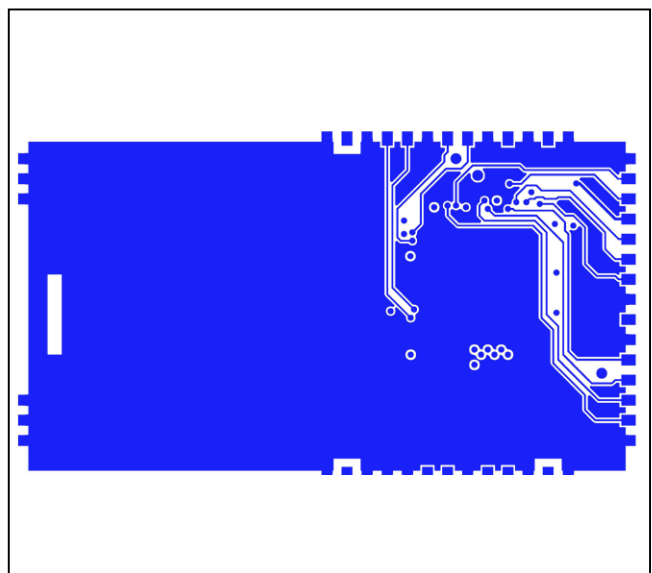
SC1905-DB2400 (2300MHz-2700MHz) PCB Layout Diagrams



SC1905-DB2400—Assembly Drawing

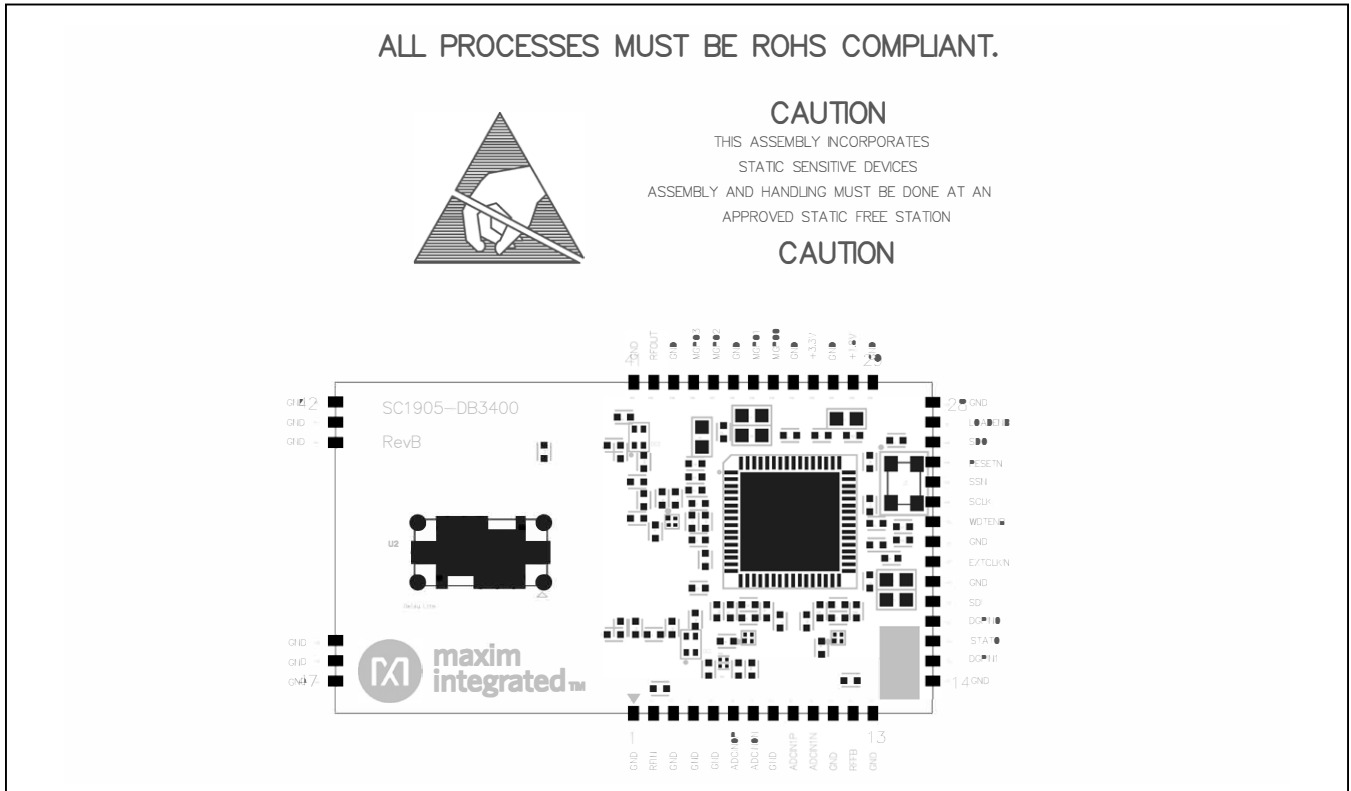


SC1905-DB2400—PCB Layout—Top

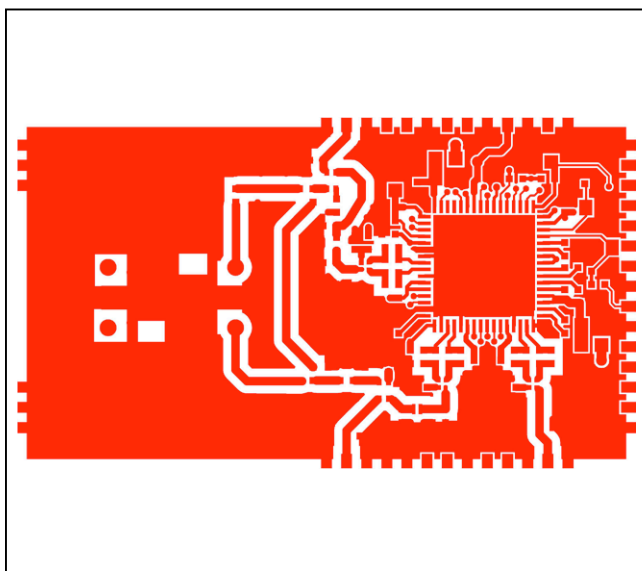


SC1905-DB2400—PCB Layout—Bottom

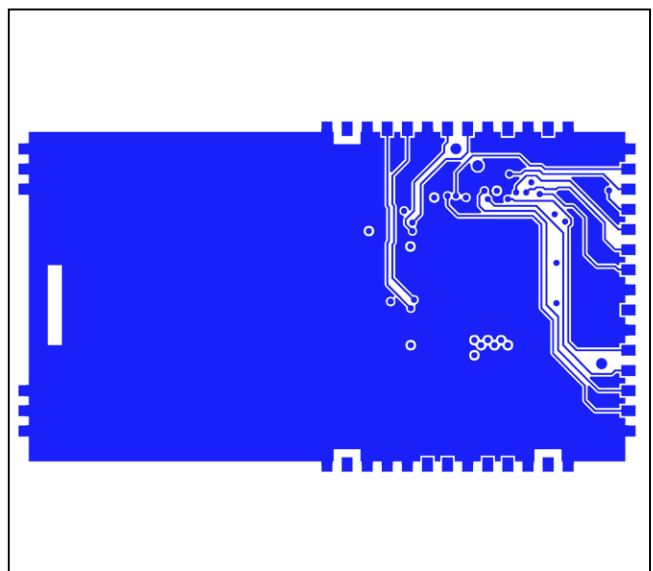
SC1905-DB3400 (3300MHz-3800MHz) PCB Layout Diagrams



SC1905-DB3400—Assembly Drawing



SC1905-DB3400—PCB Layout—Top



SC1905-DB3400—PCB Layout—Bottom

## Revision History

| REVISION NUMBER | REVISION DATE | DESCRIPTION  | PAGES CHANGED |
|-----------------|---------------|--|---------------|
| 0               | 11/18         | Initial release  | —             |
| 1               | 4/19          | Added SC1905-EVK1900, replaced SC1905-DB3400 BOM, and added frequency ranges | 1–15          |

For pricing, delivery, and ordering information, please visit Maxim Integrated's online storefront at <https://www.maximintegrated.com/en/storefront/storefront.html>.

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- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



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ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

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