

**Linear Technology Corporation**  
**LTC6952IUKG**

**Bill Of Materials**  
**DEMO CIRCUIT 2609A-2**  
 7/14/2017 1:39 PM

| Item | Qty | Reference  | Part Description   | Manufacturer / Part #  | Kit Qty |  |  |            |
|------|-----|--|--|--|---------|--|--|------------|
|      |     |  | <b>NUMBER OF BOARDS =</b>  |  |         |  |  | <b>325</b> |
| 1    | 0   | CI1_A,C3,CP_A (OPT)  | CAP., OPTION, 0603   | OPT  | 0       |  |  |            |
| 2    | 1   | CI1_P  | CAP., 0.68uF, X7R, 16V, 10%, 0603, AEC-Q200                      | SAMSUNG, CL10B684KO8VPNC   | 325     |  |  |            |
| 3    | 0   | CI2_A (OPT)  | CAP., OPTION, 1206   | OPT  | 0       |  |  |            |
| 4    | 1   | CI2_P  | CAP., 1uF, X7R, 25V, 10%, 1206, AEC-Q200                         | SAMSUNG, CL31B105KAPWPNE   | 325     |  |  |            |
| 5    | 1   | CP_P   | CAP., 0.033uF, X7R, 50V, 10%, 0603                               | MURATA, GRM188R71H333KA61D   | 325     |  |  |            |
| 6    | 18  | C1,C4,C6,C9,C50,C51,C52,C53,C54,C55,C56,C57,C58,C59,C60,C61,C110,C112                                | CAP., 1uF, X5R, 16V, 10%, 0402                                   | MURATA, GRM155R61C105KE01D   | 5850    |  |  |            |
| 7    | 1   | C2   | CAP., 0.022uF, X7R, 50V, 10%, 0603                               | MURATA, GRM188R71H223KA01D   | 325     |  |  |            |
| 8    | 25  | C5,C11,C17,C18,C19,C20,C21,C22,C23,C24,C26,C29,C30,C31,C32,C63,C64,C65,C66,C67,C81,C88,C89,C101,C111 | CAP., 0.1uF, X7R, 10V, 10%, 0402                                 | MURATA, GRM155R71A104KA01D<br>AVX, 0402ZC104KAT2A                                | 8125    |  |  |            |
| 9    | 1   | C7   | CAP., 0.01uF, X7R, 16V, 10%, 0402                                | AVX, 0402YC103KAT2A  | 325     |  |  |            |
| 10   | 0   | C8,C12,C14,C15,C16,C25,C27,C28,C33,C34,C35,C36,C37,C82,C83,C84,C85                                   | CAP., OPTION, 0402   | OPT  | 0       |  |  |            |
| 11   | 14  | C10,C38,C39,C40,C41,C42,C43,C44,C45,C46,C47,C48,C49,C62  | CAP., 0.01uF, X7R, 6.3V, 10%, 0201                               | MURATA, GRM033R70J103KA01D   | 4550    |  |  |            |
| 12   | 1   | C13  | CAP., 10pF, C0G, 50V, 10%, 0402                                  | AVX, 04025A100KAT2A  |         |  |  |            |
| 13   | 3   | C68,C91,C106   | CAP., 22uF, ALUM., 63V, 20%, SMD 6.3x7.7mm, CE-BS Series         | SUN ELECTRONIC INDUSTRIES CORPORATION, 63CE22BS                                  | 975     |  |  |            |
| 14   | 4   | C69,C74,C92,C97  | CAP., 10uF, ALUM., 63V, 20%, SMD 6.3x5.4mm, CE-BS Series         | SUN ELECTRONIC INDUSTRIES CORPORATION, 63CE10BS                                  | 1300    |  |  |            |
| 15   | 13  | C70,C72,C73,C75,C77,C78,C93,C95,C96,C98,C104,C105,C107   | CAP., 4.7uF, X7R, 50V, 10% 1206                                  | MURATA, GRM31CR71H475KA12L<br>AVX, 12065C475KAT2A<br>NIC, NMC1206X7R475K50TRPLPF | 4225    |  |  |            |
| 16   | 6   | C71,C76,C79,C86,C94,C103   | CAP., 0.1uF, X7R, 16V, 10%, 0603                                 | MURATA, GRM188R71C104KA01D<br>YAGEO, CC0603KRX7R7BB104                           | 1950    |  |  |            |
| 17   | 3   | C80,C87,C90  | CAP., 47uF, TANT, 35V, 10%, 7361                                 | AVX, TAJV476K035RNJ  | 975     |  |  |            |
| 18   | 1   | C99  | CAP., 330uF, TANT, 10V, 10%, 7343                                | AVX, TPME337K010R0035  | 325     |  |  |            |
| 19   | 1   | C100   | CAP., 10uF, X7R, 25V, 10%, 1206                                  | MURATA, GRM31CR71E106KA12L   | 325     |  |  |            |
| 20   | 1   | C102   | CAP., 1uF, X7R, 50V, 10%, 0805                                   | TDK, C2012X7R1H105K125AB   | 325     |  |  |            |
| 21   | 1   | C108   | CAP., 47uF, X5R, 25V, 20%, 1206                                  | TDK, C3216X5R1E476M160AC   | 325     |  |  |            |
| 22   | 1   | C109   | CAP., 4.7uF, X7R, 16V, 10%, 0805                                 | MURATA, GRM21BR71C475KA73L<br>AVX, 0805YC475KAT2A                                | 325     |  |  |            |
| 23   | 1   | D1   | LED, RED, CLEAR, 3020 (1208)                                     | ROHM, SML-012V8TT86  | 325     |  |  |            |
| 24   | 5   | D2,D3,D4,D5,D6   | LED, GREEN, CLEAR, 3020 (1208)                                   | ROHM, SML-012P8TT86  | 1625    |  |  |            |
| 25   | 15  | E1,E2,E3,E4,E5,E6,E7,E8,E9,E10,E11,E12,E13,E14,E15   | TEST POINT, TURRET, 0.064", MTG. HOLE                            | MILL-MAX, 2308-2-00-80-00-00-07-0  | 4875    |  |  |            |
| 26   | 3   | FB1,FB2,FB3  | IND., 330 OHMS @ 100MHz, FERRITE BEAD, 25%, 0.8A, 0.21OHMS, 0603 | TAIYO YUDEN, FBMH1608HL331-T   | 975     |  |  |            |

**Linear Technology Corporation**  
**LTC6952IUKG**

**Bill Of Materials**  
**DEMO CIRCUIT 2609A-2**  
 7/14/2017 1:39 PM

|    |    |  |   |  |             |
|----|----|--|---|--|-------------|
| 27 | 2  | FB4,FB5  | IND., 220 OHMS @ 100MHz, FERRITE BEAD, 3A, 0.04OHM, 0805      | TDK, MPZ2012S221AT000  | 650         |
| 28 | 7  | JP1,JP2,JP3,JP4,JP5,JP6,JP7  | CONN., HDR, MALE, 1x3, 2mm, THT, STR                          | Wurth Elektronik, 62000311121  | 2275        |
| 29 | 0  | J1,J2,J7,J8,J13,J14,J15,J16,J21,J22 (OPT)                              | CONN., SMA, JACK, RCPT, END LAUNCH, STR, 50 OHMS              | OPT  | 0           |
| 30 | 19 | J3,J4,J5,J6,J9,J10,J11,J12,J17,J18,J19,J20,J24,J25,J26,J27,J28,J29,J31 | CONN., SMA, JACK, RCPT, END LAUNCH, STR, 50 OHMS              | CINCH CONNECTIVITY SOLUTIONS, 142-0701-851   | 6175        |
| 31 | 1  | J23  | CONN., HDR., MALE, 2x7, 2mm, THT, VERT, SHROUDED              | MOLEX, 87831-1420  | 325         |
| 32 | 3  | J30,J32,J33  | CONN., BANANA JACK, FEMALE, THT, NON-INSULATED, SWAGE, 0.218" | KEYSTONE, 575-4  | 975         |
| 33 | 1  | L1   | IND., 0 OHM, 1/8W, 0805                                       | VISHAY, CRCW08050000Z0EA<br>YAGEO, RC0805JR-070RL  | 325         |
| 34 | 1  | L2   | IND., 2.2uH, PWR, 20%, 8A, 23.5mOHMS, 4.3mmX4.3mm, AEC-Q200   | COILCRAFT, XFL4020-222MEB<br>COILCRAFT, XFL4020-222MEC   | 325         |
| 35 | 2  | R1,RZ_P  | RES., 48.7 OHMS, 1%, 1/10W, 0603, AEC-Q200                    | VISHAY, CRCW060348R7FKEA   | 650         |
| 36 | 4  | R2,R39,R51,R52   | RES., 0 OHM, 1/10W, 0603                                      | VISHAY, CRCW06030000Z0EA<br>NIC, NRC06ZOTRF  | 1300        |
| 37 | 0  | R3,R8,R11,R13,R14,R15,R17,R20,R35,R64,R69 (OPT)                        | RES., OPTION, 0402  | OPT  | 0           |
| 38 | 2  | R4,R73   | RES., 49.9 OHMS, 1%, 1/16W, 0402                              | VISHAY, CRCW040249R9FKED<br>NIC, NRC04F49R9TRF   | 650         |
| 39 | 0  | R5,R6,R21 (OPT)  | RES., 100 OHMS, 1%, 1/16W, 0402                               | OPT  | 0           |
| 40 | 8  | R7,R9,R10,R42,R50,R54,R63,R70  | RES., 0 OHM, 1/16W, 0402                                      | VISHAY, CRCW04020000Z0ED<br>NIC, NRC04ZOTRF<br>YAGEO, RC0402JR-070RL                                 | 2600        |
| 41 | 1  | R12  | RES., 330 OHMS, 1%, 1/16W, 0402, AEC-Q200                     | VISHAY, CRCW0402330RFKED   | 325         |
| 42 | 11 | R16,R19,R23,R24,R25,R26,R29,R30,R33,R34,R40                            | RES., 100 OHMS, 1%, 1/16W, 0402                               | VISHAY, CRCW0402100RFKED<br>SPEER, RK73H1ETTP1000F<br>PANASONIC, ERJ2RKF1000X<br>ROHM, MCR01MZPF1000 | KOA<br>3575 |
| 43 | 1  | R18  | RES., 75 OHMS, 1%, 1/16W, 0402, AEC-Q200                      | VISHAY, CRCW040275R0FKED   | 325         |
| 44 | 1  | R22  | RES., 30 OHMS, 1%, 1/16W, 0402, AEC-Q200                      | VISHAY, CRCW040230R0FKED   | 325         |
| 45 | 6  | R27,R28,R31,R32,R41,R53  | RES., 200k OHMS, 1%, 1/16W, 0402                              | VISHAY, CRCW0402200KFKED<br>PANASONIC, ERJ2RKF2003X<br>YAGEO, RC0402FR-07200KL                       | 1950        |
| 46 | 5  | R36,R37,R38,R57,R58  | RES., 4.99k OHMS, 1%, 1/16W, 0402                             | VISHAY, CRCW04024K99FKED<br>NIC, NRC04F4991TRF<br>YAGEO, RC0402FR-074K99L                            | 1625        |
| 47 | 4  | R43,R62,R65,R75  | RES., 619 OHMS, 1%, 1/16W, 0402, AEC-Q200                     | VISHAY, CRCW0402619RFKED   | 1300        |
| 48 | 1  | R44  | RES., 33.2k OHMS, 1%, 1/4W, 0805, AEC-Q200                    | VISHAY, CRCW080533K2FKEA   | 325         |

**Linear Technology Corporation**  
**LTC6952IUKG**

**Bill Of Materials**  
**DEMO CIRCUIT 2609A-2**  
 7/14/2017 1:39 PM

|    |   |  |  |   |      |
|----|---|--|--|---|------|
| 49 | 1 | R45  | RES., 1.21k OHMS, 1%, 1/16W, 0402  | VISHAY, CRCW04021K21FKED<br>KOA SPEER, RK73H1ETTP1211F<br>ROHM, MCR01MZPF1211 | 325  |
| 50 | 1 | R46  | RES., 80.6k OHMS, 1%, 1/4W, 0805, AEC-Q200   | VISHAY, CRCW080580K6FKEA  | 325  |
| 51 | 0 | R47,R48,R49,R55,R56,RZ_A (OPT)                     | RES., OPTION, 0603   | OPT   | 0    |
| 52 | 2 | R59,R61  | RES., 49.9k OHMS, 1%, 1/8W, 0805, AEC-Q200   | VISHAY, CRCW080549K9FKEA<br>PANASONIC, ERJ6ENF4992V                           | 650  |
| 53 | 1 | R60  | RES., 698k OHMS, 1%, 1/8W, 0805, AEC-Q200  | VISHAY, CRCW0805698KFKEA  | 325  |
| 54 | 2 | R66,R67  | RES., 0 OHM, 3/4W, 2010, AEC-Q200  | VISHAY, CRCW2010000Z0EF   | 650  |
| 55 | 2 | R68,R74  | RES., 1M OHM, 1%, 1/10W, 0603  | VISHAY, CRCW06031M00FKEA<br>NIC, NRC06F1004TRF<br>PANASONIC, ERJ3EKF1004V     | 650  |
| 56 | 1 | R71  | RES., 18.2k OHMS, 1%, 1/10W, 0603  | VISHAY, CRCW060318K2FKEA<br><b>MOUSER ELECT., 71-CRCW0603-18.2K-E3</b>        | 325  |
| 57 | 1 | R72  | RES., 309k OHMS, 1%, 1/10W, 0603, AEC-Q200   | VISHAY, CRCW0603309KFKEA  | 325  |
| 58 | 1 | U1   | IC., ULTRALOW JITTER PLL, QFN-52(UKG)7x8   | LINEAR TECH., LTC6952IUKG#PBF   | 325  |
| 59 | 1 | U2   | OSC., 100MHz, 15pF, +/-25ppm, 5x7.5mm SMD, 3.3V, HCMOS,  | CRYSTEK <b>CORPORATION</b> , CCHD-575-25-100.000                              | 325  |
| 60 | 1 | U3   | IC., MEMORY, EEPROM, 2Kb (256x8), TSSOP-8, 400kHz  | MICROCHIP, 24LC025-I /ST  | 325  |
| 61 | 2 | U4,U5  | IC., TinyLogic UHS Dual Buffer, SC70-6   | FAIRCHILD <b>SEMI.</b> , NC7WZ17P6X   | 650  |
| 62 | 1 | U6   | IC., Dual Supply Receiver, SOT363-6 (SC-88), Single Bit, 3-State Outputs                             | NXP <b>SEMI.</b> , 74LVC1T45GW,125  | 325  |
| 63 | 3 | U7,U8,U11  | IC., PSRR RF LINEAR REGULATOR, DFN-10(DD)  | LINEAR TECH., LT3042EDD#PBF<br>LINEAR TECH., LT3042EDD#TRPBF                  | 975  |
| 64 | 1 | U9   | <b>OSC. COAXIAL RESONATOR, 4000-4000MHz, 10pF, 50 OHMS, 0.50" SQ SMD, VCO, PS=8V, MAX VTUNE=4.7V</b> | CRYSTEK, CVCO55CC-4000-4000   | 325  |
| 65 | 1 | U10  | IC., DUAL/QUAD LOW NOISE OP AMPS, SO8  | LINEAR TECH., LT1678IS8#PBF   | 325  |
| 66 | 1 | U12  | IC., 3A, 3.3V, LDO REGULATOR, DDPAK5Q  | <b>LINEAR TECH., LT1764AEQ-3.3#PBF</b>  | 325  |
| 67 | 1 | U13  | IC, Silent Switcher 2 Synchronous,LGA-16(3x3)  | LINEAR TECH., LT8609SIV#PBF   | 325  |
| 68 | 7 | JP1,JP2,JP3,JP6,JP6 PINS 1&2; JP4 AND JP7 PINS 2&3 | CONN., SHUNT, FEMALE, 2 POS, 2mm   | Wurth Elektronik, 60800213421   | 2275 |
| 69 | 4 | MH1,MH2,MH3,MH4                                    | STANDOFF, NYLON, SNAP-ON, 0.50"  | Wurth Elektronik, 702935000   | 1300 |
| 70 | 2 | STENCILS   | TOOL, STENCIL, DC2609A-1   | LINEAR TECH., DC2609A-1   | 2    |