CC2531\_ZL\_LED\_demo (DesignSync 11342) Revision: 3.2

Bill Of Materials February 25,2013 14:45:01

| em | Quantity | Reference             | Part               | Description   | MPN   |
|----|----------|-----------------------|--------------------|---|---|
|    |          |                       |                    |   |   |
|    | 1 :      | 1 CR1                 | LA CP7P            | OPTO, LED, 2.6V, 0.35A, SMD   | LA CP7P   |
|    | 2        | 1 CR2                 | LD CP7P            | OPTO, LED, 3.7V, 0.35A, SMD   | LD CP7P   |
|    | 3        | 1 CR3                 | LT CP7P            | OPTO, LED, 3.5V, 0.35A, SMD   | LT CP7P   |
|    | 4        | 1 CR4                 | LUW CP7P           | OPTO, LED, 3.75V, 0.35A, SMD  | LUW CP7P  |
|    | 5        | 1 C3                  | 1uF                | CAPACITORS, CERAMIC, 1uF, 15%, X5R, 10V, 0603, SMD  | GRM188R61A105KA61D                              |
|    | 6        | 1 C4                  | DNM                | CAPACITOR, DO NOT MOUNT, 0603, SMD  |   |
|    | 7        | 2 C21,C31             | 47pF               | CAPACITOR, CERAMIC, 47pF, 5%, C0G, 50V, 0402, SMD   | GRM1555C1H470JZ01D                              |
|    | 8 2      | 2 C41,C42             | 4.7uF              | CAPACITOR, CERAMIC X5R, 4.7uF, 6.3V, -10%/+10%, -55DEGC/+85DEGC, 0603, SMD  | GRM188R60J475KE19D                              |
|    | 9        | 4 C101,C241,C271,C311 | 100nF              | CAPACITOR, CERAMIC X7R, 100nF, 6.3V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD   | GRM155R70J104KA01D                              |
| 1  | 10 3     | 3 C211,C391,C401      | 1uF                | CAPACITOR, CERAMIC X5R, 1uF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0402, SMD   | GRM155R61A105KE15D                              |
| 1  | 11 2     | 2 C221,C231           | 15pF               | CAPACITOR, CERAMIC COG/NP0, 15pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD   | GRM1555C1H150JA01D                              |
| 1  | 12 2     | 2 C251,C261           | 1.5pF              | CAPACITOR, CERAMIC COG/NP0, 1.5pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD                                    | GRM1555C1H1R5CA01D                              |
| 1  | 13 :     | 1 C272                | 220pF              | CAPACITOR, CERAMIC COG/NPO, 220pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD  | GRM1555C1H221JA01D                              |
| 1  | 14       | 1 C392                | 22pF               | CAPACITOR, CERAMIC COG/NP0, 22pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD   | GRM1555C1H220JA01D                              |
| 1  | 15 :     | 1 C393                | 10uF               | CAPACITOR, CERAMIC X5R, 10uF, 6.3V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD   | GRM188R60J106ME47D                              |
| 1  | 16 2     | 2 C394,C395           | 18pF               | CAPACITOR, CERAMIC COG/NPO, 18pF, 50V, -55DEGC/+125DEGC, 0402, SMD  | GRM1555C1H180JA01D                              |
| 1  | 17 2     | 2 C402,C403           | 2.2pF              | CAPACITOR, CERAMIC COG/NPO, 2.2pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD                                    | GRM1555C1H2R2CA01D                              |
| 1  | 19 :     | 1 J2                  | 1981568-1          | CONNECTOR, USB-B, 5 PINS, PITCH 0.65mm, SMD   | 1981568-1                                       |
| 2  | 21 :     | 1 L251                | 3.9nH              | INDUCTOR, CHIP, 3.9nH, -0.3nH/+0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD   | LQG15HS3N9S02D                                  |
| 2  | 22 :     | 1 L262                | 2.2uH              | INDUCTOR, CHIP, 2.2uH, -20%/+20%, 1A, -55DEGC/+125DEGC, 1008, SMD   | LQM2HPN2R2MJ0L                                  |
| 2  | 23 3     | 3 L263,L264,L265      | 22nH               | INDUCTOR, STANDARD, CHIP, 22nH, -5%/+5%, 0.3A, -55DEGC/+125DEGC, 0402, SMD  | LQG15HS22NJ02D                                  |
| 2  | 27 :     | 1 P1                  | FTSH-105-01-F-DV-K | CONNECTOR, HEADER, MALE, STRAIGHT, 10 PINS, 2 ROWS, PITCH 1.27mm, SMD   | FTSH-105-01-F-DV-K                              |
| 2  | 28 4     | 4 Q1,Q2,Q3,Q4         | BC817-16           | TRANSISTOR, BIPOLAR NPN, 45V, 0.5A, 0.25W, SOT23-3, SMD   | BC817-16,215                                    |
| 2  | 29 :     | 1 R1                  | 560                | RESISTOR, THICK FILM, 560, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD  | RESISTOR 0402 560 +/-5% 50V 0.063W M +/-200PP   |
| 3  | 30 3     | 3 R2,R3,R4            | 1k                 | RESISTOR, THICK FILM, 1k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD   | RESISTOR 0402 1k +/-5% 50V 0.063W M +/-200PPM   |
| 3  | 31 :     | 1 R5                  | DNM                | RESISTOR, DO NOT MOUNT, 0402, SMD   |   |
| 3  | 32 2     | 2 R21,R31             | 33                 | RESISTOR, THICK FILM, 33, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD   | RK73H1ETTP33R0F                                 |
| 3  | 33 4     | 4 R32,R74,R75,R78     | 1.5k               | RESISTOR, THICK FILM, 1.5k, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD   | RK73H1ETTP1501F                                 |
|    |          | 1 R41                 | 2                  | RESISTOR, THICK FILM, 2, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD  | RK73H1ETTP2R00F                                 |
| 3  | 35 :     | 1 R45                 | 820k               | RESISTOR, THICK FILM, 820k, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD   | RESISTOR 0402 820k +/-1% 50V 0.063W M +/-100PF  |
| 3  | 36 :     | 1 R46                 | 160k               | RESISTON, THICK FILM, 160k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD   | RESISTOR 0402 160k +/-5% 50V 0.063W M +/-200PF  |
| 3  | 37 :     | 1 R64                 | 2.7                | RESISTOR, THICK FILM, 2.7, -5%/+5%, 0.25W, 200V, -55DEGC/+155DEGC, 1206, SMD  | RESISTOR 1206 2.7 +/-5% 200V 0.25W M +/-200PPN  |
| 3  | 38 3     | 3 R65,R66,R67         | 1                  | RESISTOR, THICK FILM, 1, -5%/+5%, 0.25W, 200V, -55DEGC/+155DEGC, 1206, SMD  | RESISTOR 1206 1 +/-5% 200V 0.25W M +/-200PPM    |
| 3  |          | 2 R68,R76             | DNM                | RESISTOR, DO NOT MOUNT, 0402, SMD   | DNM   |
|    |          | 1 R69                 | 56k                | RESISTON, THICK FILM, 56k, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD  | RESISTOR 0402 56k +/-1% 50V 0.063W M +/-100PPM  |
|    |          | 1 R70                 | 6.8k               | RESISTOR, THICK FILM, 6.8k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD   | RESISTOR 0402 6.8k +/-5% 50V 0.063W M +/-200PP  |
|    |          | 3 R71,R72,R73         | 1.2k               | RESISTOR, THICK FILM, 1.2k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD   | RESISTOR 0402 1.2k +/-5% 50V 0.063W M +/-200PPI |
|    |          | 1 SW1                 | 1188E-1W2-V        | SWITCH, TACT, 0.05A@250VAC, 0.05A@12VDC, 0.05A, 250V, PTH   | 1188E-1W2-V                                     |
|    |          | 1 U1                  | CC2531             | IC, ANALOG, A USB ENABLED SYSTEM ON CHIP SOLUTION FOR 2.4 GHz IEEE 802.15.4 AND ZigBee APPLICATIONS, 2V TO 3.6V, VQFN40 | CC2531F256RHAR                                  |
|    |          | 1 U3                  | TPS76933           | IC, ANALOG, ULTRALOW-POWER LINEAR REGULATORS, VIN:32.7V TO 10V, VOUT: 3.3V, SOT23-5, SMD                                | TPS76933DBVT                                    |
|    |          | 1 U4                  | TPS62290           | IC, ANALOG, 1A STEP DOWN CONVERTER, VIN;2.3V TO 6V, VOUT; ADJ 0.6V TO 6V, SON6, SMD                                     | TPS62290DRVT                                    |
|    |          | 1 Y1                  | 32MHz              | CRYSTAL, OSCILATOR, 32MHz, 12pF, -10PPM/+10PPM, -40DEGC/+85DEGC, SMD  | NX2016SA32MHzEXS00A-C504859 from NDK            |
|    |          | 1 Y3                  | 32.768kHz          | CRYSTAL, RESONATOR, 32.768K1, 20PPM/+20PPM, -40DEGC/+85DEGC, SMD  | EXS00A-MU00301 32.768kHz NX3215SA from NDK      |