MSP-EXP430F6137R9 Bill of Material Date: HW-V2.1 27/09/11



| Capacition Cap | Dort | Value | Tal | Bookers | Manufacturar | Deteile | Dietributer | VV IRELESS |
|--|--------------------|-----------------|------|-------------|---------------------|-------------------|-------------|---------------------------------|
| 1.00 | Part Capacitors | Value | Tol. | Package | Manufacturer | Details | Distributor | Part no. |
| Common | C1 | n.m. | Τ | C0402 | Johanson Technology | | | 500R07S2R2BV4T |
| Company | C2 | | | | U, | | | |
| 68 196° 196° 196° 196° 196° 196° 196° 196° | C3 | | | | Johanson Technology | | | 500R07S2R2BV4T |
| 100 | | | | | | | | |
| Sept | | | | | | | | |
| Sept M-0-256 Color Col | C7 | | | | | | | |
| Sep | C8 | | | | | | | |
| C10 12pf | C9 | | | | | | | |
| ST ST ST ST ST ST ST ST | | | | | | | | |
| 100 | | | | | | | | |
| C14 1UF | C12 | 100nF | 10% | C0402 | | | | |
| C1S 1000F 10% C0402 | | | | | | | | |
| 1900 1900 1906 1906 1906 1907 1908 1909 | | | | | | | | |
| 1906 | | | | | | | | |
| 11 | | | | | | | | |
| C190 | | | | | | | | |
| COMPAND COMP | | | 1070 | | | | | |
| C21 | | | | | | | | |
| 224 886 F | | | | | | | | |
| C24 | | 100uF | 20% | C-POLB/3528 | | | | |
| 20% 100F | C23 | | 10% | | | | | |
| 226 | | | | | | | | |
| C27 | | | | | | | | |
| 228 | | | | | | | | |
| 10% 0.0402 | | | | | | | | |
| 27pF | | | | | | | | |
| C32 | | | | | | | | |
| 190F | | | | | | | | |
| 19% | | | | | | | | |
| C35 | | | | | | | | |
| C38 | C34 | | | | | | | |
| C33 | | | | | | | | |
| C38 | | | | | | | | |
| C39 | | | | | | | | |
| C401 100nF 10% C0402 | | | | | | | | |
| C41 2pF ++0.25pF 0402 | | | | | | | | |
| C42 100nF 10% C0402 < | | | | | | | | |
| C43 100nF 10% C0402 | | | | | | | | |
| C447 | | | | | | | | |
| C47 100nF 10% C0402 | C44 | 100nF | 10% | C0402 | | | | |
| C48 10uF 20% C0603 C49 2.2nF +/-0,25pF C0402 C50 1pF +/-0,25pF C0402 C51 1.5pF +/-0,25pF C0402 C52 100pF 10% C0402 | | 1.5pF | | C0402 | | | | |
| C49 2.2nF 4+0.25pF C0402 C050 1pF 4+0.25pF C0402 C050 C051 1.5pF 4+0.25pF C0402 C0402 C0402 C0402 C052 C052 C0402 C0402 C0402 C0402 C053 1.5pF 4+0.25pF C0402 C0402 C055 C0402 C055 C0402 C0402 C055 C0402 | | | | | | | | |
| C50 1pF 4+0.25pF C0402 C51 1.5pF ++0.25pF C0402 C52 100pF C52 100pF C54 C55 C55 < | | | | | | | | |
| C51 | | | | | | | | |
| C52 | | | | | | | | |
| C53 | | | | | | | | |
| C54 1.5pF +/-0,25pF C0402 | | | | | | | | |
| C55 6.8pF 4/-0,25pF C0402 Image: Control of the co | | | | | | | | |
| C0402 | | | | | | | | |
| D1 | C56 | | | C0402 | | | | |
| D2 | Diodes | | | | | | | |
| Inductors | | | | | | | | |
| L1 BLM15HG102SN1D L0402 Murata Ferrit, SMT, 250mA BLM15HC L2 BLM15AX700SN1 L0402 Murata Ferrit, SMT, 780mA BLM15AX L4 12nH 5% L0402 Johanson Technology L-07W12 L5 18nH 5% L0402 Johanson Technology L-07W18 L6 15nH 5% L0402 Johanson Technology L-07W15 L7 2,2nH +/-0,2nH L0402 Johanson Technology L-07W15 L8 15nH 5% L0402 Johanson Technology L-07W15 L9 12nH 5% L0402 Johanson Technology L-07W15 L9 12nH 5% L0402 Johanson Technology L-07W15 L10 18nH 5% L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07W15 Resistors R1 | | n.m. | | SOD523 | | (PESD5V0U1UB) | | |
| L2 BLM15AX700SN1 L0402 Murata Ferrit, SMT, 780mA BLM15AX L4 12nH 5% L0402 Johanson Technology L-07W12 L5 18nH 5% L0402 Johanson Technology L-07W18 L6 15nH 5% L0402 Johanson Technology L-07W15 L7 2,2nH +/-0,2nH L0402 Johanson Technology L-07W2N L8 15nH 5% L0402 Johanson Technology L-07W15 L9 12nH 5% L0402 Johanson Technology L-07W18 L10 18nH 5% L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07W18 L11 15nH R0402 Johanson Technology L-07C15h Resistors R2 n.m. 1% R0402 Inchnology L-07C15h R2 n.m. 1% <td></td> <td>DI MASHCAOSSNAD</td> <td></td> <td>1.0402</td> <td>Murata</td> <td>Forrit CMT 250m A</td> <td></td> <td>DI M15HC1029N4D</td> | | DI MASHCAOSSNAD | | 1.0402 | Murata | Forrit CMT 250m A | | DI M15HC1029N4D |
| L4 12nH 5% L0402 Johanson Technology L-07W12 L5 18nH 5% L0402 Johanson Technology L-07W18 L6 15nH 5% L0402 Johanson Technology L-07W15 L7 2,2nH +/-0,2nH L0402 Johanson Technology L-07W18 L8 15nH 5% L0402 Johanson Technology L-07W18 L9 12nH 5% L0402 Johanson Technology L-07W12 L10 18nH 5% L0402 Johanson Technology L-07W13 L11 15nH L0402 Johanson Technology L-07W12 L11 15nH L0402 Johanson Technology L-07W13 Resistors L0402 Johanson Technology L-07W15 Resistors R8 R0402 S S R1 n.m. 1% R0402 S S R2 n.m. 1% R0402 S S S R3 470R 1% R0402 S S S S | | | + | | | | | BLM15HG102SN1D BLM15AX700SN1 |
| L5 18nH 5% L0402 Johanson Technology L-07W18 L6 15nH 5% L0402 Johanson Technology L-07W15 L7 2,2nH +/-0,2nH L0402 Johanson Technology L-07W15 L8 15nH 5% L0402 Johanson Technology L-07W15 L9 12nH 5% L0402 Johanson Technology L-07W12 L10 18nH 5% L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07W18 L11 15nH New Technology L-07W18 R2 n.m. 1% R0402 New Technology R3 470R 1% R0402 New Technology New Technology R4 750R 1% R0402 New Technology New Technology R5 47kR 1% R0402 New Technology< | | | 5% | | | . om, own, roomA | | L-07W12NJV4S |
| L6 15nH 5% L0402 Johanson Technology L-07W15 L7 2,2nH ++O,2nH L0402 Johanson Technology L-07W15 L8 15nH 5% L0402 Johanson Technology L-07W15 L9 12nH 5% L0402 Johanson Technology L-07W12 L10 18nH 5% L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07C15N Resistors R1 n.m. 1% R0402 NOT C15N R2 n.m. 1% R0402 NOT C15N R3 470R 1% R0402 NOT C15N R4 750R 1% R0402 NOT C15N R5 47kR 1% R0402 NOT C15N R6 100R 1% R0402 NOT C15N R7 100R 1% R0402 NOT C15N | | | | | | | | L-07W12N3V4S |
| L7 2,2nH +/-0,2nH L0402 Johanson Technology L-07W2N L8 15nH 5% L0402 Johanson Technology L-07W18 L9 12nH 5% L0402 Johanson Technology L-07W18 L10 18nH 5% L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07C15h Resistors R1 n.m. 1% R0402 Image: R0402 Image: R0402 R2 n.m. 1% R0402 Image: R0402 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>L-07W15NJV4S</td> | | | | | | | | L-07W15NJV4S |
| L8 15nH 5% L0402 Johanson Technology L-07W15 L9 12nH 5% L0402 Johanson Technology L-07W12 L10 18nH 5% L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07C15h Resistors R1 n.m. 1% R0402 Security R2 n.m. 1% R0402 Security R3 470R 1% R0402 Security R4 750R 1% R0402 Security R5 47kR 1% R0402 Security R6 100R 1% R0402 Security R7 100R 1% R0402 Security | L7 | | | | | | | L-07W2N2JV4S |
| L10 18nH 5% L0402 Johanson Technology L-07W18 L11 15nH L0402 Johanson Technology L-07C15h Resistors R1 n.m. 1% R0402 Section | | | 5% | L0402 | | | | L-07W15NJV4S |
| L11 15nH L0402 Johanson Technology L-07C15h Resistors R1 n.m. 1 % R0402 R2 n.m. 1 % R0402 R3 470R 1 % R0402 | | | | | | | | L-07W12NJV4S |
| Resistors R1 n.m. 1% R0402 | | | 5% | | | | | L-07W18NJV4S |
| R1 n.m. 1% R0402 | | TONH | 1 | LU4U2 | Johanson Technology | | | L-07C15NJV6T / L-07W15NJV6T |
| R2 n.m. 1% R0402 R3 470R 1% R0402 R4 750R 1% R0402 R5 47kR 1% R0402 R6 100R 1% R0402 R7 100R 1% R0402 | | n m | 10/ | R0402 | | | | |
| R3 470R 1% R0402 R4 750R 1% R0402 R5 47kR 1% R0402 R6 100R 1% R0402 R7 100R 1% R0402 | | | | | | | | |
| R4 750R 1% R0402 R5 47kR 1% R0402 R6 100R 1% R0402 R7 100R 1% R0402 | | | | | | | | |
| R5 47kR 1% R0402 | | | | | | | | |
| R6 100R 1% R0402 R7 100R 1% R0402 | R5 | | | R0402 | | | | |
| | R6 | | | | | | | |
| R8 47kR 1% R0402 | | | | | | | | |
| | | | | | | | | |
| R9 47kR 1% R0402 | | | | | | | | |
| R10 100R 1% R0402 | | | | | | | | |
| R11 100R 1% R0402 | | | | | | | | |
| R12 33kR 1% R0402 | | | | | | | | |
| R13 33R 1% R0402 | | | | | | | | |
| R15 1.5kR 1% R0402 | | | | | | | | |
| R16 6.8kR 1% R0402 | | | | | | | | |
| R17 3.3kR 1% R0402 | | | | | | | | |
| R18 1.5kR 1% R0402 | | | | | | | | |

MSP-EXP430F6137R9
Bill of Material
Date: HW-V2.1 27/09/11



| | | | | | | | WIRELESS |
|--------------------------------------|--|--|--------------------------------|---------------------|--|--|--|
| Part | Value | Tol. | Package | Manufacturer | Details | Distributor | Part no. |
| R19 | 1.5kR | 1% | R0402 | | | | |
| R20 | 100R | 1% | R0402 | | | | |
| R21 | 15kR | 1% | R0402 | | | | |
| | 47kR | 1% | R0402 | | | | |
| | 47kR | 1% | R0402 | | | | |
| | 3.3kR | 1% | R0402 | | | | |
| | | | | | | | |
| | 3.3kR | 1% | R0402 | | | | |
| R26 | 100kR | 1% | R0402 | | | | |
| R27 | 100kR | 1% | R0402 | | | | |
| R28 | 33kR | 1% | R0402 | | | | |
| R29 | 10kR | 1% | R0402 | | | | |
| R30 | 47kR | 1% | R0402 | | | | |
| R31 | 100R | 1% | R0402 | | | | |
| 32 | 270R | 1% | R0402 | | | | |
| R33 | 56kR | 1% | R0402 | | | | |
| R34 | 0R | 1% | R0402 | | | | |
| | 56kR | 1% | R0402 | | | | |
| | 47kR | 1% | R0402 | | | | |
| | 0R | 1% | R0402 | | | | |
| | UR | 1% | R0402 | | | | |
| 2 | 0042050427500 | | IC DOED NO. | Taura Is : | | | 0042050427 |
| | CC430F6137IRGC | | S-PQFP-N64 | Texas Inst. | | ļ | CC430F6137 |
| C2 | TUSB3410VF | | VF32 | Texas Inst. | | | TUSB3410VF |
| | AT24C12810-TU | | TSSOP8 | Atmel | | 1 | AT24C12810-TU |
| C4 | TPS77301DGK | | MSO8 | Texas Inst. | | | TPS77301DGK |
| C5 | TPD2E001DRL | | SOT533-5 | Texas Inst. | | | TPD2E001DRL |
| C6 | SN74CBTLV3384DBQR | | 24-SSOP | Texas Inst. | | | SN74CBTLV3384 |
| | SFH5711 | | SFH5711 | Osram | | | SFH5711 |
| C8 | MSP430F1612IPM | | PM/PAG64 | Texas Inst. | | | MSP430F16x |
| Miscellaneou | 1 | | | . 27.00 11.00 | | | |
| SW1 | JS203011CQN | 1 | JS203011CQN | C&K Components | | _ | JS203011CQN |
| | | 1 | | | | | JS203011CQN |
| SW2 | J202011CQN | | JS202011CQN | C&K Components | | | |
| SW3 | J202011CQN | | JS202011CQN | C&K Components | | | JS203011CQN |
| 5W4 | J202011CQN | | JS202011CQN | C&K Components | | | JS203011CQN |
| | FSM2JSMA | | B3FS-1002P | Omron | | | B3FS-1002P |
| SW_L | FSM2JSMA | | B3FS-1002P | Omron | | | B3FS-1002P |
| SW_R | FSM2JSMA | | B3FS-1002P | Omron | | | B3FS-1002P |
| SW RES | FSM2JSMA | | B3FS-1002P | Omron | | | B3FS-1002P |
| SW_U | FSM2JSMA | | B3FS-1002P | Omron | | | B3FS-1002P |
| | 0920AT50A080 | | | Johanson Technology | 868/915MHz | | 0920AT50A080 |
| | n.m. | | | Johanson Technology | 433MHz | | 0433AT62A0020 |
| BAT1 | 1028_KEYSTONE | | | Keystone | 4031011 12 | | 1028 |
| BAT2 | 1028 KEYSTONE | - | | | | | 1028 |
| | | | | Keystone | | | |
| CD1 | FH-1138H | | | Texas Inst. | | | FH-1138H |
| | APT1608QBC/D(blue) | | LED0603 | Kingbright | blue | | APT1608QBC/D |
| | APT1608MGC(green) | | LED0603 | Kingbright | green | | APT1608MGC |
| .ED3 | APT1608SYCK(yellow) | | LED0603 | Kingbright | yellow | | APT1608SYCK |
| ED4 | APT1608SRCPRV(red) | | LED0603 | Kingbright | red | | APT1608SRCPRV |
| 21 | FT10A-12,0/16-30-30/27 | | 5032-4PIN | Coftech | | | 12MHz, 16pF, 30ppm |
| 22 | CTA531-26.000-16-10/10/A | | NX5032 | Compotek | hf crystal | | CTA531-26.000-16-10/10/A |
| 23 | CC7V-T1A_32,768kHz_12,5pF | +/-20ppm | 3216 | Micro Crystal | watch crystal | | CC7V-T1A_32,768kHz_12,5pF |
| 1 | SI2323DS | Loppin | SOT23-3 | Vishay | P-Channel 20-V MOSFET | | |
| | SI2323DS | | SOT23-3 | Vishay | P-Channel 20-V MOSFET | 1 | + |
| | | 1 | | violiay | I OHAHHUI ZU-V WIOOFET | | provided separately by EMS |
| | n.m. | | 1X16 | | + | 1 | |
| | n.m. | 1 | 1X16 | | 1 | 1 | provided separately by EMS |
| | n.m. | | 1X16 | | 1 | _ | provided separately by EMS |
| | n.m. | | 1X3 | | | | provided separately by EMS |
| | n.m. | | 1X3 | | | | provided separately by EMS |
| | PINHD-1X3 | | 1X3 | | or identical in construction | MPE Garry | 0871-1-003-0-T-xso-1260 |
| 7 | PINHD-1X3 | | 1X3 | | or identical in construction | MPE Garry | 0871-1-003-0-T-xso-1260 |
| 98 | PINHD-1X2 | | 1X2 | | or identical in construction | MPE Garry | 0871-1-002-0-T-xso-1260 |
| 9 | PINHD-1X2 | | 1X2 | | or identical in construction | MPE Garry | 0871-1-002-0-T-xso-1260 |
| 210 | PINHD-1X2 | | 1X2 | | or identical in construction | MPE Garry | 0871-1-002-0-T-xso-1260 |
| | PINHD-1X3 | 1 | 1X3 | | or identical in construction | MPE Garry | 0871-1-003-0-T-xso-1260 |
| 12 | PINHD-1X2 | | 1X2 | | or identical in construction | MPE Garry | 0871-1-003-0-1-xso-1260 0871-1-002-0-T-xso-1260 |
| 213 | | | 2X4 | | or identical in construction | | 0871-2-004-0-T-xso-1260 |
| | PINHD-2X4 | <u> </u> | | | | MPE Garry | 4 |
| 214 | PINHD-1X2 | | 1X2 | | or identical in construction | MPE Garry | 0871-1-002-0-T-xso-1260 |
| | n.m. | | BU-SMA-V | | SMA Female Connector | | |
| CON1 | 1 | | USB-MINI_2486_01 | LUMBERG | | | 2486 01 |
| CON1 CON2 | USB-MINI 2486 01 | 1 | DC_BUCHSE_2,1MM | LUMBERG | | | NEB 21 R |
| CON2 | USB-MINI_2486_01 | | IDO DOOLIGE Z. HVIIVI | | + | 1 | TFM-110-02-S-D-A-K |
| CON2 CON3 | NEB21R | | | | | | 1 1 E M - 1 1 H - H 2 - S - H - A - K |
| ON2 ON3 ON4 | NEB21R TFM-110-02-S-D-A-K | | 10X2_SAMTEC_M | SAMTEC | | | |
| ON2 ON3 ON4 | NEB21R | | | SAMTEC SAMTEC | | | TFM-110-02-S-D-A-K |
| CON2 CON3 CON4 CON5 | NEB21R TFM-110-02-S-D-A-K TFM-110-02-S-D-A-K | | 10X2_SAMTEC_M 10X2_SAMTEC_M | SAMTEC | | | TFM-110-02-S-D-A-K |
| CON2 CON3 CON4 CON5 CON6 | NEB21R TFM-110-02-S-D-A-K | | 10X2_SAMTEC_M | | | | |
| CON2 CON3 CON4 CON5 | NEB21R TFM-110-02-S-D-A-K TFM-110-02-S-D-A-K | | 10X2_SAMTEC_M 10X2_SAMTEC_M | SAMTEC | FR4 TG150 see CC-FYP- | | TFM-110-02-S-D-A-K |
| CON2 CON3 CON4 CON5 CON6 | NEB21R TFM-110-02-S-D-A-K TFM-110-02-S-D-A-K | | 10X2_SAMTEC_M 10X2_SAMTEC_M | SAMTEC | FR4, TG150, see CC-EXP- 4306137RF9-HW-V1- | | TFM-110-02-S-D-A-K |