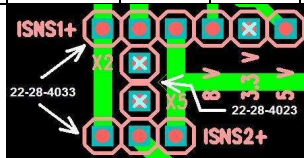




Bill of Materials for the NCV8855G Demo Board

| Designator | Quantity | Description | Value | Tolerance | Footprint | Manufacturer | Manufacturer's Part Number | Substitution Allowed | RoHS Compliant |
|---|----------|---|-------------|-----------|------------|--|----------------------------|----------------------|----------------|
| CF21, CF22 | 2 | CAP CER 22000PF 50V X7R 0603 | 22nF | 10% | 0603 | Murata Electronics North America | GCM188R71H223KA37 | YES | YES |
| CV11, CV12 | 2 | CAP CER 1000PF 50V X7R 0603 | 1nF | 10% | 0603 | Murata Electronics North America | GCM188R71H102KA37 | YES | YES |
| CV21 | 1 | CAP CER 3300PF 50V 10% X7R 0603 | 3.3nF | 10% | 0603 | Murata Electronics North America | GRM188R71H332KA01D | YES | YES |
| CV22 | 1 | CAP CER 2200PF 50V 10% X7R 0603 | 2.2nF | 10% | 0603 | Murata Electronics North America | GRM188R71H222KA01D | YES | YES |
| C1, C4, C11, C17, C18, C19 | 6 | CAP CER .47UF 50V X7R 0805 | 0.47uF | 10% | 0805 | Murata Electronics North America | GRM21BR71H474KA88L | YES | YES |
| C2, C9, C10, C21 | 4 | CAP CER .1UF 50V X7R 0603 | 0.1uF | 10% | 0603 | Murata Electronics North America | GCM188R71H104KA57D | YES | YES |
| C3, C8 | 2 | CAP 47UF 10V ELECT UD SMD | 47uF | 20% | UD_6.3x5.8 | Nichicon | UUD1A470MCL1GS | NO | YES |
| C12, C15 | 2 | CAP 330UF 10V ELECT UD SMD | 330uF | 20% | UD_8x10 | Nichicon | UUD1A331MNL1GS | NO | YES |
| C20 | 1 | CAP 1500UF 50V ELECT HE RADIAL | 1500uF | 20% | PM_16x40 | Nichicon | UHE1H152MHD | NO | YES |
| D1 | 1 | DIODE SCHOTTKY 4A 200V SMC | MBRS4201T3G | N/A | SMC_DIODE | ON Semiconductor | MBRS4201T3G | NO | YES |
| J1, J2, J3, J4 | 4 | CONN JACK RF VERTICAL PCMNT GOLD | SMB | N/A | SMB_CONN | Emerson Network Power Connectivity Solutions | 131-3701-261 | YES | YES |
| L1 | 1 | INDUCTOR POWER 22UH 5.3A SMD | 22uH | 20% | WE_PD_L | Würth Electronics Inc | 7447709220 | NO | YES |
| L2 | 1 | INDUCTOR POWER 33UH 3.2A SMD | 33uH | 20% | WE_PD_L | Würth Electronics Inc | 744770133 | NO | YES |
| Q1, Q2 | 2 | MOSFET PWR P-CH LOG 15A 60V DPAK | NTD20P06L | N/A | MOS_DPAK | ON Semiconductor | NTD20P06L4G | NO | YES |
| Q3, Q4 | 2 | MOSFET N-CH 60V 24A DPAK | NTD24N06L | N/A | MOS_DPAK | ON Semiconductor | NTD24N06L4G | NO | YES |
| RFA1, RFA2 | 2 | RES 4.87K OHM 1/10W 1% 0603 SMD | 4.87K | 1% | 0603 | Vishay/Dale | CRCW06034K87FKEA | YES | YES |
| RFA3 | 1 | RES 1.96K OHM 1/10W 1% 0603 SMD | 1.96K | 1% | 0603 | Vishay/Dale | CRCW06031K96FKEA | YES | YES |
| RFA4 | 1 | RES 8.45K OHM 1/10W 1% 0603 SMD | 8.45K | 1% | 0603 | Vishay/Dale | CRCW06038K45FKEA | YES | YES |
| RFB1, RFB2 | 2 | RES 1.74K OHM 1/10W 1% 0603 SMD | 1.74K | 1% | 0603 | Vishay/Dale | CRCW06031K74FKEA | YES | YES |
| RFB3 | 1 | RES 3.16K OHM 1/10W 1% 0603 SMD | 3.16K | 1% | 0603 | Vishay/Dale | CRCW06033K16FKEA | YES | YES |
| RFB4 | 1 | RES 2.43K OHM 1/10W 1% 0603 SMD | 2.43K | 1% | 0603 | Vishay/Dale | CRCW06032K43FKEA | YES | YES |
| RF01, RF02 | 2 | RES 3.24K OHM 1/10W 1% 0603 SMD | 3.24K | 1% | 0603 | Vishay/Dale | CRCW06033K24FKEA | YES | YES |
| RF03, RF11, RF12 | 3 | RES 10.2K OHM 1/10W 1% 0603 SMD | 10.2K | 1% | 0603 | Vishay/Dale | CRCW060310K2FKEA | YES | YES |
| RF04 | 1 | RES 2.00K OHM 1/10W 1% 0603 SMD | 2.00K | 1% | 0603 | Vishay/Dale | CRCW06032K00FKEA | YES | YES |
| RF13 | 1 | RES 2.00K OHM 1/10W 1% 0603 SMD | 5.11K | 1% | 0603 | Vishay/Dale | CRCW06032K00FKEA | YES | YES |
| RF14 | 1 | RES 10.5K OHM 1/10W 1% 0603 SMD | 10.5K | 1% | 0603 | Vishay/Dale | CRCW060310K5FKEA | YES | YES |
| RF21, RF22 | 2 | RES 10.0 OHM 1/10W 1% 0603 SMD | 10.0 | 1% | 0603 | Vishay/Dale | CRCW060310R0FKEA | YES | YES |
| RT1, RT2, RT5 | 3 | DO NOT POPULATE | OPEN | OPEN | 0603 | OPEN | DO NOT POPULATE | YES | YES |
| RO21, RO22 | 2 | RES 665 OHM 1/4W 1% 1206 SMD | 665 | 1% | 1206 | Vishay/Dale | CRCW1206665RFKEA | YES | YES |
| RS1, RS2 | 2 | RES 0.15 OHM 0.75W 1% 1512 FC SMD | 150m | 1% | CC1512FC | Caddock Electronics, Inc. | CC1512FC-0.15-1% | NO | YES |
| RV11, RV12 | 2 | RES 15.0K OHM 1/10W 1% 0603 SMD | 15.0K | 1% | 0603 | Vishay/Dale | CRCW060315K0FKEA | YES | YES |
| R8, R16 | 2 | RES 10.0K OHM 1/10W 1% 0603 SMD | 10.0K | 1% | 0603 | Vishay/Dale | CRCW060310K0FKEA | YES | YES |
| TP2, TP3, TP4, TP5, TP6, TP10, TP12, TP13, TP14, TP16, TP17, TP18 | 12 | TERM SOLDER TURRET .219" .109"L | T POINT S | N/A | TURRET | Mill-Max Manufacturing Corp. | 2501-2-00-44-00-00-07-0 | YES | YES |
| U1 | 1 | Quad-Output Automotive System Power Supply IC with Integrated High Side 2A Switch | NCV8855G | N/A | QFN406x6 | ON Semiconductor | NCV8855BMNR2G | NO | YES |
| X1 | 1 | CONN HEADER 5POS .100 VERT GOLD | CON5 | N/A | JP5 | Molex/Waldom Electronics Corp | 22-28-4053 | YES | YES |
| X2, X5 | 2 | Note 1 | CON4 | N/A | JP4T | Molex/Waldom Electronics Corp | Note 1 | YES | YES |
| X6, X8, X10, X12 | 4 | CONN HEADER 3POS .100 VERT GOLD | CON3 | N/A | JP3 | Molex/Waldom Electronics Corp | 22-28-4033 | YES | YES |
| X7 | 1 | DO NOT POPULATE | POST | N/A | TP1AAA | Molex/Waldom Electronics Corp | DO NOT POPULATE | YES | YES |
| Shorting Jumpers for X2, X5, X6, X8, X10, X12 | 6 | CONN JUMPER SHORTING GOLD | N/A | N/A | N/A | Sullins Connector Solutions | SSC02SYAN | YES | YES |



Note 1: X2 and X5 are formed from two CONN HEADER 3POS .100 VERT GOLD (22-28-4033) plus one CONN HEADER 2POS .100 VERT GOLD (22-28-4023).