



All resistors are 1% tolerance unless otherwise indicated  
 All capacitors are X7R or COG dielectric unless otherwise indicated

| Index | Description   | Part Value | Designator   | Voltage/Power Rating | Package | Quantity | Manufacturer PN        | Fitted     |
|-------|---|------------|--|----------------------|---------|----------|------------------------|------------|
| 1     | LOGO Automotive   |            | LOGO Automotive  |                      |         | 1        |                        | Fitted     |
| 2     | Testpoint   |            | BBM, BBP, V5V, VANA, VB, VBS, VCP, VPRE  |                      |         | 8        |                        | Fitted     |
| 3     | Ceramic Capacitor, Multilayer, Ceramic, 16V, 5% +Tol, 5% -Tol, X7R, 15% TC, 0.068uF, Surface Mount, 0603      | 68nF       | C3, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61   | 16V                  | 0603    | 19       | C0603C6834RACU         | Fitted     |
| 4     | Multilayer Ceramic Capacitor, 100 pF, 50 V, ± 5%, COG (NPO), 0402 [1005 Metric]                               | 100pF      | C4, C5, C6, C7   | 50V                  | 0402    | 4        | C0402C101J5GACTU       | Fitted     |
| 5     | Cap Ceramic 0.0068uF 1000V COG 5% Pad SMD 1210 125C Automotive T/R  | 6.8nF      | C8, C10  | 1000V                | 1210    | 0        | C1210C682J0GACAU       | Not Fitted |
| 6     | Cap Ceramic 0.0068uF 1000V COG 5% Pad SMD 1210 125C Automotive T/R  | 6.8nF      | C9, C11  | 1000V                | 1210    | 0        | C1210C682J0GACAU       | Not Fitted |
| 7     | Ceramic Capacitor, Multilayer, Ceramic, 100V, 10% +Tol, 10% -Tol, X7R, +15%TC, 10nF, Surface Mount, 0402 inch | 10nF       | C19  | 100V                 | 0402    | 0        | CL05B103KCV5PNC        | Not Fitted |
| 8     | 0603 25 V 1 uF ±10 % Tolerance X7R SMT Multilayer Ceramic Chip Capacitor                                      | 1uF        | C20  | 25V                  | 0603    | 1        | TMK107A87105KAHT       | Fitted     |
| 9     | Cap Ceramic 0.47uF 25V X7R 10% Pad SMD 0603 125C Low ESR Automotive AEC-Q200 T/R                              | 470nF      | C21  | 25V                  | 0603    | 1        | CGA3E3X7R1E474K080AB   | Fitted     |
| 10    | Cap Ceramic 2.2uF 250V X7T 20% SMD 5.7 x 5.0 mm 125 C Plastic T/R   | 2.2uF      | C22, C88   | 250V                 | 2220    | 2        | CGA9P3X7T2E225M250KA   | Fitted     |
| 11    | Cap Ceramic 0.1uF 250V X7T 20% SMD 0805 125°C Blister Plastic T/R   | 100nF      | C23  | 250V                 | 0805    | 1        | CGA4I3X7T2E104M125AA   | Fitted     |
| 12    | Cap Cer 0805 100nF 100V X7R 5%  | 100nF      | C24  | 100V                 | 0805    | 1        | C0805C224J1RECAUTO     | Fitted     |
| 13    | WCAP-CSGP 0402 [1005Metric] Ceramic Capacitor 0.039uF 0.020W 1.00mmx0.50mm X7R ±10% 1000pF                    | 1nF        | C24B, C62B   | 16V                  | 0402    | 2        | 885012205025           | Fitted     |
| 14    | Cap Ceramic 100pF 16V COG 10% SMD 0402 125°C Paper T/R  | 100pF      | C24C   | 16V                  | 0402    | 1        | VJ0402A101KXJPW1BC     | Fitted     |
| 15    | Cap Cer 0805 220nF 100V X7R 5%  | 220nF      | C25, C27, C29, C31, C33, C36, C37, C39, C41, C85, C89, C94, C95, C97, C99, C101, C103, C105, C107, C108  | 100V                 | 0805    | 0        | C0805C224J1RECAUTO     | Not Fitted |
| 16    | Cap Cer 0.1uF 16V X7R 0603  | 100nF      | C26, C28, C30, C32, C34, C35, C38, C40, C42, C43, C90, C93, C96, C98, C100, C102, C104, C106, C109   | 16V                  | 0603    | 19       | C0603C104I4RAC3190     | Fitted     |
| 17    | Multilayer Ceramic Capacitor, 0.022 uF, 100 V, ± 10%, X7R, 0603 [1608 Metric]                                 | 22nF       | C62, C63, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84   | 100V                 | 0603    | 22       | C0603C223K1RACTU       | Fitted     |
| 18    | CL21 Series 10 nF 100 V ±10% Tolerance X7R SMT Multilayer Ceramic Capacitor                                   | 10nF       | C91  | 100V                 | 0805    | 1        | CL21B103KANNNC         | Fitted     |
| 19    | 1210 100V X7R 4.7uF 10% automotive grade multilayer ceramic capacitor   | 4.7uF      | C92  | 100V                 | 1210    | 1        | 12101C475K4T2A         | Fitted     |
| 20    | ESD SMD Auto X7R 0805 (2012Metric) Ceramic Capacitor 0.079uF 0.049W 2.00mmx1.25mm X7R ±5% 0.22muF             | 220nF      | C110   | 100V                 | 0805    | 1        | C0805C224J1RECAUTO     | Fitted     |
| 21    | TDK CGA3E3X7S2A473K080AB SMD Multilayer Ceramic Capacitor, 0603 [1608 Metric], 0.047 F, 100 V, 10%, X7S       | 47nF       | C113   | 100V                 | 0603    | 1        | CGA3E3X7S2A473K080AB   | Fitted     |
| 22    | Ceramic Capacitor, Multilayer, Ceramic, 100V, 20% +Tol, 20% -Tol, X7R, 15% TC, 0.0068uF, Surface Mount, 0603  | 6.8nF      | C_ESD_NTCA, C_ESD_NTCB, C_ESD_NTCC, C_ESD_NTCD, C_ESD_NTCE, C_ESD_NTCF, C_ESD_NTGC, C_ESD_NTCH, C_ESD_NTCI, C_ESD_NTCL   | 100V                 | 0603    | 10       | C0603X682M1RECAUTO     | Fitted     |
| 23    | 100V 100nF X7S [R]20% 0603 Multilayer Ceramic Capacitors MLCC - SMD/SMT R0H5                                  | 100nF      | C_FIL_NTCA, C_FIL_NTCB, C_FIL_NTCC, C_FIL_NTCD, C_FIL_NTCE, C_FIL_NTCF, C_FIL_NTGC, C_FIL_NTCH, C_FIL_NTCL, C_FIL_NTCL   | 100V                 | 0603    | 10       | CGA3E3X7S2A104M080AB   | Fitted     |
| 24    | Ind Common Mode Filter Wirewound 100uH 5KOHm -30% to 50% 100KHz 150mA 1812 T/R                                | 100uH      | CMC_H, CMC_L   |                      |         | 2        | ACT458-101-2P-TL003    | Fitted     |
| 25    | Tvs Diode, Bidir, 85V, 3Kw, Smc Rohs Compliant: Yes [Stmicroelectronics 5M30T100CAY                           |            | D1   |                      |         | 0        | SM30T100CAY            | Not Fitted |
| 26    | Rectifier Diode, 1 Phase, 2 Element, 0.215A, 100V (VRRM), Silicon, TO-236AB                                   |            | D2   |                      |         | 1        | BAV99-QVL              | Fitted     |
| 27    | Rectifier Diode Small Signal Switching 120V 0.2A 50ns 3-Pin SOT-23 T/R  |            | D3   |                      |         | 1        | BAV19L1T3G             | Fitted     |
| 28    | Fiducial 1mm  |            | FidB1, FidB2, FidB3, FidT1, FidT2, FidT3   |                      |         | 6        |                        | Fitted     |
| 29    | KEYSTONE - 4952 - PCB Test Point, Through Hole Mount, Brass, Tin Plated Contacts                              |            | GND1, GND2, GND3, GND4   |                      |         | 4        | 4952                   | Fitted     |
| 30    |   |            | ISOH_M, ISOH_P, ISOHM, ISOHP, ISOL_M, ISOL_P, ISOLM, ISOLP   |                      |         | 8        |                        | Fitted     |
| 31    | Resistor  |            | J1_NTCA, J1_NTCB, J1_NTCC, J1_NTCD, J1_NTCE, J1_NTCF, J1_NTGC, J1_NTCH, J1_NTCL, J1_NTCL, J2_NTCA, J2_NTCB, J2_NTCC, J2_NTCD, J2_NTCE, J2_NTCF, J2_NTGC, J2_NTCH, J2_NTCL, J2_NTCL, J3, J4, J5, J6, J7, J8, J14, J15, J16, J17, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31, J32, J33, J34, J35, J36, J37, J38, J39, J40, J41, J42, J43 |                      |         | 56       |                        | Fitted     |
| 32    | Connettore a 5 pin  |            | J11, J13, J44, J45, J46  |                      |         | 0        |                        | Not Fitted |
| 33    |   |            | J12  |                      |         | 0        |                        | Not Fitted |
| 34    |   |            | J47  |                      |         | 0        |                        | Not Fitted |
| 35    | Connettore a 6 pin  |            | J48  |                      |         | 0        |                        | Not Fitted |
| 36    | Conn Shrouded Header (4 Sides) HDR 2 POS 2.54mm Solder RA Thru-Hole SL Tube                                   |            | J, H, J, L   |                      |         | 2        | 70551-0001             | Fitted     |
| 37    |   |            | J_ISOHM, J_ISOHP, J_ISOLM, J_ISOLP   |                      |         | 4        |                        | Fitted     |
| 38    | WR-PHD Straight Male, PCB Header, Through Hole, 1 Rows, 2 Contacts, 2.54mm Pitch, [NoValue]                   |            | JC18, JGND_CD, JVBS_VB   |                      |         | 3        | 61300211121, [NoParam] | Fitted     |
| 39    | 3.0Mm X 3.0Mm, -40 To +125 Deg C, 47 uH, 1392M / Tape And Reel Rohs Compliant: Yes                            | 47uH       | L1   |                      |         | 1        | VLS3015CX-470M-H       | Fitted     |
| 40    |   |            | L9965A   |                      |         | 1        | L9965A                 | Fitted     |
| 41    | 2.0 X 1.25 MM SMD CHIP LED LAMP Single Color LED, Green, Water Clear, 1.3mm                                   |            | LED1   |                      |         | 1        | KPHCM-2012CGCK         | Fitted     |
| 42    | Board Connector, 24 Contact(s), 2 Row(s), Male, Right Angle, Solder Terminal                                  |            | P1   |                      |         | 1        | 2MM-HSP-D12-HT-02-H-TB | Fitted     |
| 43    | Header, 2.54 Mm, Pin Header, 13 Pins, Single Row, 3A, Wr-phd Series   |            | P2   |                      |         | 1        | 61301311121            | Fitted     |
| 44    | Board Connector, 12 Contact(s), 2 Row(s), Male, Right Angle, Solder Terminal                                  |            | P3   |                      |         | 1        | 2MM-HSP-D06-HT-02-H-TB | Fitted     |
| 45    | SMD Chip Resistor, 10 Ohm, ± 5%, 250 mW, 1206 [3216 Metric], Thick Film, General Purpose                      | 10R        | R1   | 250mW                | 1206    | 1        | CRCW120610R0JNTA       | Fitted     |
| 46    | Thick Film Resistors - SMD 0.33W 240ohm 1% AEC-Q200   | 240R       | R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23   | 330mW                | 0603    | 22       | SG73PJTTD2400F         | Fitted     |
| 47    | Fixed Resistor, Metal Glaze/thick Film, 0.5W, 12ohm, 400V, 0.5% +/-Tol, 100ppm/Cel, Surface Mount, 0805       | 12R        | R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42  | 500mW                | 0805    | 19       | ERJUP6D12R0V           | Fitted     |
| 48    | Res Thick Film 0805 3.3K Ohm 5% 0.25W ±200ppm/°C Molded SMD Punched Carrier T/R                               | 3.3kR      | R43_NTCA, R43_NTCB, R43_NTCC, R43_NTCD, R43_NTCE, R43_NTCE, R43_NTCE, R43_NTGC, R43_NTCH, R43_NTCL, R43_NTCL, R62  | 250mW                | 0805    | 11       | ERJ-P06J33ZV           | Fitted     |
| 49    | Res, 10K, 1%, 0.5W, 1206, Thick Film;   | 10kR       | R44_NTCA, R44_NTCL, R44_NTCC, R44_NTCD, R44_NTCE, R44_NTCE, R44_NTGC, R44_NTCH, R44_NTCL, R44_NTCL   | 500mW                | 1206    | 10       | RCC120610K0FKFA        | Fitted     |
| 50    | CRCW 0402 0402 (1005Metric) Chip Resistor ±1% ±100ppm/C 390ohms 0.063W 1/16W                                  | 39R        | R45, R46, R47, R48   | 63mW                 | 0603    | 4        | CRCW040239R0FKTD       | Fitted     |
| 51    | Res General Purpose Thick Film 0603 1 Ohm 1% 1/10W ±200ppm/°C Molded SMD Paper T/R                            | 1R         | R67  | 100mW                | 0603    | 1        | RC0603FR-071RL         | Fitted     |
| 52    | Circuit Breaker 0603 - NOT MOUNTED  |            | SB1, SB2, SB3, SB4   |                      |         | 4        |                        | Fitted     |
| 53    | Circuit Breaker 0603 - NOT MOUNTED  |            | SB5, SB6, SB7, SB8, SB9, SB10, SB11, SB12  |                      |         | 8        |                        | Fitted     |
| 54    | Telecom Transformer 3750Vrms 250mOhm Prim. 250mOhm Sec. DCR 4-Pin SMD   |            | T2, T3   |                      |         | 2        | ESMIT-4180/C           | Fitted     |
| 55    | ESD Suppressor Diode TVS Bi-Dir 3V Automotive 2-Pin SOD-882T T/R  |            | TVS1, TVS2, TVS3, TVS4   |                      |         | 4        | ESDVL1C8-18T2Y         | Fitted     |
| 56    | Automotive isolated communication port interface for L9965  |            | U1   |                      |         | 0        | EMIF04-0410M8Y         | Not Fitted |