

| Designator | Part Number | Manufacturer | Quantity | Comment | Description | Footprint |
|---|-------------------------------|---------------------|----------|-------------------|--|--------------------------|
| C1C1, C1C2, C1C3, C1C4 | C0805C1022GCAU10 | KEMET | 4 | 1 nF | MLCC Ceramic 1 nF 200V 5% Capacitor | CAP 0805_2012 |
| C2C1, C2C2, C2C3, C2C4 | C0805C10K5GEC7210 | KEMET | 4 | 10 nF | MLCC Ceramic 10 nF 50V 10% Capacitor | CAP 0805_2012 |
| C3C1, C3C2, C3C3, C3C4, C18, C24, C26 | 0805C10K4Z2A, 0805YC10K4AT4A | AVX | 7 | 100 nF | MLCC Ceramic 100 nF 50V 10% Capacitor, MLCC Ceramic 100 nF 16V 10% Capacitor | CAP 0805_2012 |
| C4, C11, C13, C15, C16, C17, C28, C29, C31, C34, C36 | 0603YC10K4AT2A, 0603SC10K4Z2A | AVX | 11 | 100 nF | MLCC Ceramic 100 nF 16V 10% Capacitor, MLCC Ceramic 100 nF 50V 10% Capacitor | CAP 0603_1608 |
| C5, C6, C7, C8 | 0603A102AT4A | AVX | 4 | 1 nF | MLCC Ceramic 1 nF 10V 5% Capacitor | CAP 0603_1608 |
| C9, C10 | 0603SA68RCAT4A | AVX | 2 | 6.8 pF | MLCC Ceramic 6.8pF 50V 0.25 pF Capacitor | CAP 0603_1608 |
| C12, C33 | 0603YC10K4AT2A, 0603C10K4AT4A | AVX | 2 | 1 uF | MLCC Ceramic 1 uF 16V 10% Capacitor, MLCC Ceramic 1 uF 25V 10% Capacitor | CAP 0603_1608 |
| C14 | GRM18B71A475ME1SD | Murata | 1 | 4.7 uF | MLCC Ceramic 4.7 uF 10V 20% Capacitor | CAP 0603_1608 |
| C19 | H80A630ARA220MF80G | United Chemi-Con | 1 | 22 uF | Aluminum Electrolytic 22 uF 63V 20% Capacitor | CAP AL3MD 6.3MM H7_7MM |
| C20 | 1206SC25K4T2A | AVX | 1 | 2.2 uF | MLCC Ceramic 2.2 uF 50V 10% Capacitor | CAP 1206_3216-1.8MM |
| C21, C22 | 1206YC10K4AT2A | AVX | 2 | 10 uF | MLCC Ceramic 10 uF 16V 10% Capacitor | CAP 1206_3216-1.8MM |
| C23, C25, C27, C35 | 0805YC10K4AT2A | AVX | 4 | 10 uF | MLCC Ceramic 10 uF 25V 20% Capacitor | CAP 0805_2012 |
| C30, C32 | 0805YC10K4AT4A | AVX | 2 | 1 uF | MLCC Ceramic 1 uF 16V 10% Capacitor | CAP 0805_2012 |
| C37, C39 | 06031A68RF AT2A | AVX | 2 | 68 pF | MLCC Ceramic 68 pF 100V 1% Capacitor | CAP 0603_1608 |
| C38 | 06031U47RF AT2A | AVX | 1 | 47 pF | MLCC Ceramic 47 pF 100V 1% Capacitor | CAP 0603_1608 |
| C40 | C0603C1034GACTU | KEMET | 1 | 10 nF | MLCC Ceramic 10 nF 16V 5% Capacitor | CAP 0603_1608 |
| D1C1, D1C2, D1C3, D1C4, D5C1, D5C2, D5C3, D5C4 | BAT46FILM | STMicroelectronics | 8 | BAT46FILM | Schottky Diode | SOD323 |
| D2C1, D2C2, D2C3, D2C4, D4C1, D4C2, D4C3, D4C4 | CDSU101A-HF | Comchip Technology | 8 | CDSU101A-HF | General Purpose Diode | SOD523F |
| D3C1, D3C2, D3C3, D3C4 | SM6139CAY | STMicroelectronics | 4 | SM6139CAY | TVS Diode | DO214AA 5MM |
| D6C1, D6C2, D6C3, D6C4 | 82X38AC3V3-E3-08 | Vishay | 4 | 82X38AC3V3-E3-08 | Zener Diode 3.3V 200 mW | SOD323 |
| D7 | 1MBK75240B5-7-F | Diodes Incorporated | 1 | 1MBK75240B5-7-F | Zener 20 mW 10V | SOD-123 |
| D8 | 1MBR140 | ON Semiconductor | 1 | 1MBR140 | Schottky Rectifier Diode | DO214AC 5MM |
| D9, D10 | 1MBR0520L | ON Semiconductor | 2 | 1MBR0520L | Schottky Rectifier Diode | SOD-123 |
| D11 | CD50T23-SM712 | Bourns | 1 | CD50T23-SM712 | CAN bus TVS diode | BOURNS SOT-23-3 |
| F1 | NANOASMD012F-2 | Littelfuse | 1 | NANOASMD012F-2 | PP-TC, 1DA 48V Nano SMD AEC-Q200 | PPTC_1206_1MM |
| FB1C1, FB1C2, FB1C3, FB1C4, FB2C1, FB2C2, FB2C3, FB2C4, FB3 | BLM21SP601SH1D | Murata Electronics | 9 | 600 Ohms | Ferrite bead | FER 0805_2012 |
| IC1 | ZXMP10A18GTA | Diodes Incorporated | 1 | ZXMP10A18GTA | MOSFET 100V P-Channel UMOS | DIODES SOT-223 |
| IC1, IC2, IC3, IC4, J3 | 1757475 | Phoenix Contact | 5 | 1757475 | Pluggable Terminal Blocks 2 Pos 5mm pitch Through Hole Header | MTSBA2 |
| J2 | SHF-105-01-L-D-TH | Samtec | 1 | SHF-105-01-L-D-TH | Shrouded Terminal Strip, 0.050 pitch | SHF-105-01-X-D-TH |
| J4 | DSUB1537613 | Harting | 1 | DSUB1537613 | DSUB 5V FE 50DP ANG-US ORP A13 | DSUB9 |
| JP1, JP2 | 61300211121 | Würth Elektronik | 2 | 61300211121 | Connector Header Through Hole 2 position 0.100 (2.54mm) | JUMPER-100 |
| L1 | SRR1210-680M | Bourns | 1 | 68 uH | Shielded SMD Power Inductor 68 uH 3 A | SRR1210 |
| L2 | ACT45B-510-2P-TL003 | TDK | 1 | 51 uH | CAN Bus Common Choke | TDK_ACT45B |
| LED1, LED2 | APT01608JGCK | Kingbright | 2 | APT01608JGCK | SMD Low Current Green LED | LED 0603_1608 GREEN |
| LED3, LED4 | APT01608JSECK | Kingbright | 2 | APT01608JSECK | SMD Low Current Red LED | LED 0603_1608 RED |
| OT1C1, OT1C2, OT1C3, OT1C4 | MMB13906.215 | Nexperia | 4 | MMB13906.215 | PNP BJT Switching Transistor | NEXPERIA SOT-23-3 |
| RT1C1, RT1C2, RT1C3, RT1C4 | PAT0805E25R0BS11 | Vishay | 4 | 25 Ohms | Thin Film Resistor 25 Ohms 0.1% | RES 0805_2012 |
| R2C1, R2C2, R2C3, R2C4, R3C1, R3C2, R2C3, R3C4 | CRCW080510K0FKKEAC | Vishay / Dale | 8 | 10 kOhms | Thin Film Resistor 10 kOhms 1% | RES 0805_2012 |
| R4C1, R4C2, R4C3, R4C4 | CRCW0805100R0FKKEAC | Vishay / Dale | 4 | 100 Ohms | Thin Film Resistor 100 Ohms 1% | RES 0805_2012 |
| R5, R7, R9, R11 | CRCW0603620K0FKKEAC | Vishay / Dale | 4 | 62 kOhms | Thin Film Resistor 62 kOhms 1% | RES 0603_1608 |
| R6, R8, R10, R12 | 3224W-1-103G | Bourns | 4 | 10 kOhms | Inline Multiturn 10 kOhms 10% potentiometer | POT BOURNS TRIMPOT 3224W |
| R13, R14, R16, R24, R25, R26 | CRCW060310K0FKKEAC | Vishay / Dale | 6 | 10 kOhms | Thin Film Resistor 10 kOhms 1% | RES 0603_1608 |
| R15 | CRCW0805110K0FKKEAC | Vishay / Dale | 1 | 110 kOhms | Thin Film Resistor 110 kOhms 1% | RES 0805_2012 |
| R16 | CRCW080528K0FKKEAC | Vishay / Dale | 1 | 28 kOhms | Thin Film Resistor 28 kOhms 1% | RES 0805_2012 |
| R17 | CRCW080520K0FKKEAC | Vishay / Dale | 1 | 20 kOhms | Thin Film Resistor 20 kOhms 1% | RES 0805_2012 |
| R19, R20 | CRCW1206590R0FKKEA | Vishay / Dale | 2 | 59 Ohms | Thin Film Resistor 59 Ohms 1% | RES 1206_3216 |
| R21, R22, R23 | CRCW0603431K0FKKEAC | Vishay / Dale | 3 | 4.3 kOhms | Thin Film Resistor 4.3 kOhms 1% | RES 0603_1608 |
| T1 | 760390014 | Würth Elektronik | 1 | 760390014 | WLD-PP11 Push-Pull Transformer for TI SN650X | WE7603900XX |
| UT1C1, UT1C2, UT1C3, UT1C4 | HCNR200-550E | Broadcom / Avago | 4 | HCNR200-550E | HCNR200 High-Linearity Analog Optocoupler | HCNR200 |
| U2C1, U2C2, U2C3, U2C4 | OPA388DBVR | Texas Instruments | 4 | OPA388DBVR | OPA388 Zero-Drift, Zero-Crossover, Low Offset, Precision Rail-to-Rail I/O Opamp | TI SOT-23-5 DBV |
| U3 | OPA4388PWR | Texas Instruments | 1 | OPA4388PWR | OPA4388 Zero-Drift, Zero-Crossover, Low Offset, Precision Rail-to-Rail I/O Opamp | TI TSSOP-14 PW |
| U4 | STM32G431K8T6 | STMicroelectronics | 1 | STM32G431K8T6 | STM32G431 ARM Cortex-M4 170MHz MCU | LQFP32ST |
| U5 | LMR1401QA | Texas Instruments | 1 | LMR1401QA | 4-V to 40-V, 1-A Step-Down Converter With High Efficiency Eco-mode | TI SOT-23-6 DDC |
| U6 | SN6505B | Texas Instruments | 1 | SN6505B | Low-Noise 1-A Transformer Drivers for Isolated Power Supplies | TI SOT-23-6 DBV |
| U7 | TPS7A350DBVR | Texas Instruments | 1 | TPS7A350DBVR | Low-Power, 150-mA, Low-Dropout Linear Regulator | TI SOT-23-5 DBV |
| U8, U9 | TLV70233DBVR | Texas Instruments | 2 | TLV70233DBVR | TLV702 300-mA, Low-IO, Low-Dropout Regulator | TI SOT-23-5 DBV |
| U10 | ISO1042DWR | Texas Instruments | 1 | ISO1042DWR | Isolated CAN I/O Transceiver | TI DM16_N |
| U11 | TMP107SDGKR | Texas Instruments | 1 | TMP107SDGKR | TMP107S Temperature Sensor With I2C and SMBus Interface | TI VSSOP-8 DCK |
| Y1 | ABM8W-24.000MHZ-8-B1U-13 | ABRACON | 1 | 24 MHz | 24MHz 8pF -20C +70C 20ppm Crystal Oscillator | ABM8G |