

Designator	Part Number	Manufacturer	Quantity	Comment	Description	Footprint
C1C1, C1C2, C1C3, C1C4	C0805C102J2GCAUTO	KEMET		4 1 nF	MLCC Ceramic 1 nF 200 V 5% Capacitor	CAP 0805_2012
C2C1, C2C2, C2C3, C2C4	C0805C103K5GEC7210	KEMET		4 10 nF	MLCC Ceramic 10 nF 50 V 10% Capacitor	CAP 0805_2012
C3C1, C3C2, C3C3, C3C4, C18	08055C104K4Z2A	AVX		5 100 nF	MLCC Ceramic 100 nF 50 V 10% Capacitor	CAP 0805_2012
C4, C11, C13, C15, C16, C17, C28, C29, C31, C34	0603YC104KAT2A	AVX		10 100 nF	MLCC Ceramic 100 nF 16 V 10% Capacitor	CAP 0603_1608
C5, C6, C7, C8	06032A102JAT4A	AVX		4 1 nF	MLCC Ceramic 1 nF 10 V 5% Capacitor	CAP 0603_1608
C9, C10	06035A68B4T4A	AVX		2 6.8 pF	MLCC Ceramic 6.8 pF 50 V 0.25 pF Capacitor	CAP 0603_1608
C12	0603YC105KAT2A	AVX		1 1 uF	MLCC Ceramic 1 uF 16 V 10% Capacitor	CAP 0603_1608
C14	GRM18BZ71A475ME15D	Murata		1 4.7 uF	MLCC Ceramic 4.7 uF 10 V 20% Capacitor	CAP 0603_1608
C19	HHXA630ARA220MF80G	United Chemi-Con		1 22 uF	Aluminum Electrolytic 22 uF 63 V 20% Capacitor	CAP AL5MD 6.3MMH7.7MM
C20	1206SC225K4T2A	AVX		1 2.2 uF	MLCC Ceramic 2.2 uF 50 V 10% Capacitor	CAP 1206_3216-1.8MM
C21, C22	1206YC106KAT2A	AVX		2 10 uF	MLCC Ceramic 10 uF 16 V 10% Capacitor	CAP 1206_3216-1.8MM
C23, C25, C27, C35	0805YC106MAT2A	AVX		4 10 uF	MLCC Ceramic 10 uF 25 V 20% Capacitor	CAP 0805_2012
C24, C26	0805YC104KAT4A	AVX		2 100 nF	MLCC Ceramic 100 nF 16 v 10% Capacitor	CAP 0805_2012
C30, C32	0805YC105KAT4A	AVX		2 1 uF	MLCC Ceramic 1 uF 16 V 10% Capacitor	CAP 0805_2012
C33	06033C105KAT4A	AVX		1 1 uF	MLCC Ceramic 1 uF 25 V 10% Capacitor	CAP 0603_1608
C36	06035C104K4Z2A	AVX		1 100 nF	MLCC Ceramic 100 nF 50 V 10% Capacitor	CAP 0603_1608
C37, C39	06031A68FAT2A	AVX		2 68 pF	MLCC Ceramic 68 pF 100 V 1% Capacitor	CAP 0603_1608
C38	06031U470FAT2A	AVX		1 47 pF	MLCC Ceramic 47 pF 100 V 1% Capacitor	CAP 0603_1608
C40	C0603C103J4GACTU	KEMET		1 10 nF	MLCC Ceramic 10 nF 16 V 5% Capacitor	CAP 0603_1608
D1C1, D1C2, D1C3, D1C4, D5C1, D5C2, D5C3, D5C4	BAT46JFILM	STMicroelectronics		8 BAT46JFILM	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	SM6T39CAY	STMicroelectronics		4 SM6T39CAY	TVS Diode	DO214AA SMB
D6C1, D6C2, D6C3, D6C4	BZX384C3V3-E3-08	Vishay		4 BZX384C3V3-E3-08	Zener Diode 3.3 V 200 mW	SOD323
D7	MMS25240BS-7-F	Diodes Incorporated		1 MMS25240BS-7-F	Zener 200 mW 10 V	SOD-123
D8	MBRA160	ON Semiconductor		1 MBRA160	Schottky Rectifier Diode	DO214AC SMA
D9, D10	MBR0520L	ON Semiconductor		2 MBR0520L	Schottky Rectifier Diode	SOD-123
D11	CDSOT23-SM712	Bourns		1 CDSOT23-SM712	CAN bus TVS diode	BOURNS SOT-23-3
F1	NANOASMDCO12F-2	Littelfuse		1 NANOASMDCO12F-2	PPTC .12A 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-Chnl UMOS	DIODES SOT-223
J1C1, J1C2, J1C3, J1C4, J3	1757475	Phoenix Contact		5 1757475	Pluggable Terminal Blocks 2 Pos 5mm pitch Through Hole Header	MSTBA2
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	09681537613	Harting		1 09681537613	DSUB SV FE SSDP ANG-US 09P AU3	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	APTD1608LZGCK	Kingbright		2 APTD1608LZGCK	SMD Low Current Green LED	LED 0603_1608 GREEN
LED3, LED4	APTD1608LSECK	Kingbright		2 APTD1608LSECK	SMD Low Current Red LED	LED 0603_1608 RED
Q1C1, Q1C2, Q1C3, Q1C4	MIMBT3906,215	Nexperia		4 MIMBT3906,215	PNP BJT Switching transistor	NEXPERIA SOT-23-3
R1C1, R1C2, R1C3, R1C4	PAT0805E25R0BST1	Vishay		4 25 Ohms	Thin Film Resistor 25 Ohms 0.1%	RES 0805_2012
R2C1, R2C2, R2C3, R2C4, R3C1, R3C2, R3C3, R3C4	CRCW080510K0FKEAC	Vishay / Dale		8 10 kOhms	Thin Film Resistor 10 kOhms 1%	RES 0805_2012
R4C1, R4C2, R4C3, R4C4	CRCW0805100RKEAC	Vishay / Dale		4 100 Ohms	Thin Film Resistor 100 Ohms 1%	RES 0805_2012
R5, R7, R9, R11	CRCW060362K0FKEAC	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 10kOhms 10% potentiometer	POT BOURNS TRIMPOT 3224W
R13, R14, R18, R24, R25, R26	CRCW060310K0FKEAC	Vishay / Dale		6 10 kOhms	Thin Film Resistor 10 kOhms 1%	RES 0603_1608
R15	CRCW0805110K0FKEAC	Vishay / Dale		1 110 kOhms	Thin Film Resistor 110 kOhms 1%	RES 0805_2012
R16	CRCW080528K0FKEA	Vishay / Dale		1 28 kOhms	Thin Film Resistor 28 kOhms 1%	RES 0805_2012
R17	CRCW080520K0FKEAC	Vishay / Dale		1 20 kOhms	Thin Film Resistor 20 kOhms 1%	RES 0805_2012
R19, R20	CRCW120659R0FKEA	Vishay / Dale		2 59 Ohms	Thin Film Resistor 59 Ohms 1%	RES 1206_3216
R21, R22, R23	CRCW06034K70FKEAC	Vishay / Dale		3 4.7 kOhms	Thin Film Resistor 4.7 kOhms 1%	RES 0603_1608
T1	760390014	Würth Elektronik		1 760390014	MID-PPTI Push-Pull Transformer for TI SN650X	WE7603900XX
U1C1, U1C2, U1C3, U1C4	HCNR200-550E	Broadcom / Avago		4 HCNR200-550E	HCNR200 High-Linearity Analog Optocoupler	HCNR200
U2C1, U2C2, U2C3, U2C4	OPA388IDBVR	Texas Instruments		4 OPA388IDBVR	OPA388 Zero-Drift, Zero-Crossover, Low Offset, Precision Rail-to-Rail I/O Opamp	TI SOT-23-5 DBV
U3	OPA4388IPWR	Texas Instruments		1 OPA4388IPWR	OPA4388 Zero-Drift, Zero-Crossover, Low Offset, Precision Rail-to-Rail I/O Opamp	TI TSSOP-14 PW
U4	STM32G431KBT6	STMicroelectronics		1 STM32G431KBT6	STM32G431 ARM Cortex-M4 170MHz MCU	LOFF32ST
U5	LMR14010A	Texas Instruments		1 LMR14010A	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	TPS76350DBVR	Texas Instruments		1 TPS76350DBVR	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 FD Transceiver	TI-DW16_N
U11	TMP1075DGKR	Texas Instruments		1 TMP1075DGKR	TMP1075 Temperature Sensor With I2C and SMBus Interface	TI VSSOP-8 DGK
Y1	ABM8W-24.0000MHZ-8-B1U-T3	ABRACON		1 24 MHz	24MHz 8pF -20C +70C 20ppm Crystal Oscillator	ABM8G