

Component	Description	Designator	Footprint	Value	Quantity
AP10160MLSECK	SMD Low Current Shunt LED	APPL1, ST51	LED 0603_1608 (0603)	AP10160MLSECK	2
1nF	MUCC Ceramic 1 nF 500V 5% Capacitor	C1C1, C1C2, C1C3, C1C4	CAP 0805_2012	C0805C102J2GCAU10	4
10nF	MUCC Ceramic 10nF 50V 10% Capacitor	C3C1, C3C2, C3C3, C3C4	CAP 0805_2012	C0805C100K50C7270	4
100nF	MUCC Ceramic 100nF 50V 10% Capacitor MUCC Ceramic 100nF 25V 10% Capacitor	C2C1, C2C2, C2C3, C2C4, C18, C24, C26	CAP 0805_2012	0805C100K422A, 0805C100K414A	7
100nF	MUCC Ceramic 100nF 50V 10% Capacitor MUCC Ceramic 100nF 25V 10% Capacitor	C4, C11, C13, C15, C24, C17, C28, C29, C31, C34, C36	CAP 0603_1608	0603C100KAT2A, 0603C100K422A	11
1nF	MUCC Ceramic 1 nF 10V 5% Capacitor	C5, C6, C7, C8	CAP 0603_1608	0603A103AT3AA	4
6.8pF	MUCC Ceramic 6.8pF 50V 0.25 pF Capacitor	C9, C10	CAP 0603_1608	0603A680C414A	2
1uF	MUCC Ceramic 1 uF 16V 10% Capacitor MUCC Ceramic 1 uF 10V 10% Capacitor	C12, C33	CAP 0603_1608	0603C105KA12A, 0603C105KA114A	2
4.7uF	MUCC Ceramic 4.7uF 10V 20% Capacitor	C14	CAP 0603_1608	06M180714A75ME10	1
22uF	Aluminum Electrolytic 22uF 63V 20% Capacitor	C19	CAP AL SMD 6.3MM HT 7MM	HH4A630A8A220MF80G	1
2.2uF	MUCC Ceramic 2.2uF 50V 10% Capacitor	C20	CAP 1206_3216-1.8MM	T206C22K422A	2
10uF	MUCC Ceramic 10uF 50V 10% Capacitor	C21, C22	CAP 1206_3216-1.8MM	T206C100KA12A	2
10uF	MUCC Ceramic 10uF 25V 20% Capacitor	C23, C25, C27, C35	CAP 0805_2012	0805C100MAT2A	4
1uF	MUCC Ceramic 1uF 16V 10% Capacitor	C30, C32	CAP 0805_2012	0805C105KA14A	2
48pF	MUCC Ceramic 48pF 100V 5% Capacitor	C37, C39	CAP 0603_1608	0603A480FAT2A	2
47pF	MUCC Ceramic 47pF 100V 5% Capacitor	C38	CAP 0603_1608	0603A470FAT2A	1
10nF	MUCC Ceramic 10nF 50V 5% Capacitor	C40	CAP 0603_1608	C0603C103HACTU10	1
BAT46F8M	Schottky Diode	D1C1, D1C2, D1C3, D1C4, D5C1, D5C2, D5C3, D5C4	SOD323	BAT46F8M	8
CD5U101A-HF	General Purpose Diode	D4C1, D4C2, D4C3, D4C4, D4C1, D4C2, D4C3, D4C4	SOD522F	CD5U101A-HF	8
5M6T39CAY	TVS Diode	D3C1, D3C2, D3C3, D3C4	DO214AA SMD	5M6T39CAY	4
BZX384C3V3-E3-08	Zener Diode 3.3V 200mW	D6C1, D6C2, D6C3, D6C4	SOD323	BZX384C3V3-E3-08	4
MUR25J40BS-7-F	Zener 200mW 10V	D7	SOD-123	MUR25J40BS-7-F	1
M58RA160	Schottky Rectifier Diode	D8	DO214AC SMA	M58RA160	1
M58R050L	Schottky Rectifier Diode	D9, D10	SOD-123	M58R050L	2
CD5U123-SMT12	CAN bus TVS diode	D11	BOURNS SOT-23-3	CD5U123-SMT12	1
AP10160MLSECK	SMD Low Current LED	ERR1, FWR1	LED 0603_1608 RED	AP10160MLSECK	2
NANOASMD012F-2	PPFC, 12A 48V Nano SMD AEC-Q200	F1	PPFC_120A_1MM	NANOASMD012F-2	1
600 Ohms @ 100MHz	Ferrite bead	FB1C1, FB1C2, FB1C3, FB1C4, FB2C1, FB2C2, FB2C3, FB2C4	FER 0805_2012	BLM21SP605HTD	8
600 Ohms	Ferrite bead	FB3	FER 0805_2012	BLM21SP605HTD	1
Z0MP10A18G1A	MSDET 100V P-CHT JUMOS	AC1	DIODES SOT-223	Z0MP10A18G1A	1
1753475	Pluggable Terminal Blocks 2-Pin Strain-jitch Through Hole Header	J1C1, J1C2, J1C3, J1C4, J3	M51BA2	1753475	5
SHF-105-01-L-D-TH	Shielded Terminal Strip, 0.050pitch	J2	SHF-105-01-X-D-TH	SHF-105-01-L-D-TH	1
09M1537613	DSUB 3V FE SSOP ANG-US CRP ALU3	J4	DSUB9	09M1537613	1
61300211121	Connector Header Through Hole 2 position 0.100 (2.54mm)	J#1, J#2	JUMPER-100	61300211121	2
68uH	Shielded SMD Power Inductor 68uH 3A	L1	SBR1210	SBR1210-680M	1
51uH	CAN Bus Common Mode Inductor	L2	TDK-ACT46B	ACT46B-510-2P-TL003	1
MUM8T390A-215	PNP BJT Switching Transistor	Q1C1, Q1C2, Q1C3, Q1C4	NEPERIA SOT-23-3	MUM8T390A-215	4
25 Ohms	Thin Film Resistor 25 Ohms 0.1%	R1C1, R1C2, R1C3, R1C4	RES 0805_2012	PA10805250805T1	4
10k Ohms	Thin Film Resistor 10 kOhms 1%	R2C1, R2C2, R2C3, R2C4, R3C1, R3C2, R3C3, R3C4	RES 0805_2012	CRCW080510K0FKEAC	8
100 Ohms	Thin Film Resistor 100 Ohms 1%	R4C1, R4C2, R4C3, R4C4	RES 0805_2012	CRCW0805100R0FKEAC	4
62k Ohms	Thin Film Resistor 62 kOhms 1%	R5, R7, R9, R11	RES 0603_1608	CRCW060362K0FKEAC	4
81k Ohms	Inline Multilayer 10 kOhms 10% potentiometer	R6, R8, R10, R12	POT BOURNS TRIMPOT 3224W	3224W-1-10G	4
10k Ohms	Thin Film Resistor 10 kOhms 1%	R13, R14, R16, R24, R25, R26	RES 0603_1608	CRCW060310K0FKEAC	6
110k Ohms	Thin Film Resistor 110k Ohms 1%	R15	RES 0805_2012	CRCW0805110K0FKEAC	1
28k Ohms	Thin Film Resistor 28 kOhms 1%	R16	RES 0805_2012	CRCW080528K0FKEA	1
20k Ohms	Thin Film Resistor 20 kOhms 1%	R17	RES 0805_2012	CRCW080520K0FKEAC	1
190 Ohms	Thin Film Resistor 190 Ohms 1%	R18, R20	RES 1206_3216	CRCW1206190R0FKEA	2
4.7k Ohms	Thin Film Resistor 4.7 kOhms 1%	R21, R22, R23	RES 0603_1608	CRCW0603470R0FKEAC	3
7602004	MD PPS1 Push-Pull Transformer for TI 2NA020	T1	WE7602000X	76020004	1
HCNR200-550E	HCNR200 High-Linearity Analog Optocoupler	U1C1, U1C2, U1C3, U1C4	HCNR000	HCNR200-550E	4
TLV2277108BV	TLV2277 Rail-to-Rail I/O Opamp	U2C1, U2C2, U2C3, U2C4	TI SOT-23-5 DBV	TLV227708BV	4
TLV22748PWR	TLV2274 Rail-to-Rail I/O Opamp	U3	TI TSSOP-14 PW	TLV2274PWR	1
STM32G431K8T6	STM32G431 ARM Cortex-M4 110MHz MCU	U4	LOFP32ST	STM32G431K8T6	1
LM814010A	4V to 40.9V 1.5A Step-Down Converter With High Efficiency Low-mode	U5	TI SOT-23-6 DDC	LM814010A	1
SN6505B	Low Noise 1-A Transformer Drivers for Isolated Power Supplies	U6	TI SOT-23-4 DBV	SN6505B	1
TPS7A3500BVR	Low Power, 150mA, Low Dropout Linear Regulator	U7	TI SOT-23-5 DBV	TPS7A3500BVR	1
TLV702320BVR	TLV702 300-mA, Low IQ, Low Dropout Regulator	U8, U9	TI SOT-23-5 DBV	TLV702320BVR	2
ISO104C0WR	Isolated CAN FD Transceiver	U10	TI DW16_N	ISO104C0WR	1
TMP107SDGKR	TMP107 Temperature Sensor With I2C and SMBus Interface	U11	TI VSSOP-8 DCK	TMP107SDGKR	1
24 MHz	24MHz Bsp -20C +70C 20ppm Crystal Oscillator	F1	ABWAG	ABWAG 24.000000MHz B81U-13	1