

Item	Quantity	Reference	Description	Value	Voltage	Package	Manufacturer	Part Number
1	1	C1	THT Electrolytic capacitor	N.M.	Radial p7.5/10 d22	CAPE-R22H50-P100		
2	4	C2,C3,C7,C8	SMT ceramic capacitor	N.M.	Size 2225 (5664 Metric)	C2225		
3	1	C4	Film capacitor	3u3/1.1kV	Pitch 27.5 mm	CAP-RAD-16X31_5H29_5P27_5	Panasonic	ECWFG1B335J
4	10	C5,C9,C21,C23,C35,C37,C39,C41,C44,C45	SMT Ceramic capacitor	1uF/50V	Size 0603 (1608 Metric)	C0603		
5	6	C6,C10,C16,C22,C24,C30,C20,C34	SMT ceramic capacitor	100nF/50V	Size 0603 (1608 Metric)	C0603		
6	6	C11,C12,C15,C25,C26,C29	SMT ceramic capacitor	100pF/16V	Size 0603 (1608 Metric)	C0603		
7	4	C13,C27	SMT ceramic capacitor	N.M.	Size 0603 (1608 Metric)	C0603		
8	2	C14,C28	SMT ceramic capacitor	33pF/50V	Size 0402 (1005 metric)	C0402		
9	2	C17,C31	SMT ceramic capacitor	33pF/25V	Size 0603 (1608 Metric)	C0603		
10	2	C18,C33	SMT ceramic capacitor	1uF/16V	Size 0603 (1608 Metric)	C0603		
11	2	C19,C32	SMT ceramic capacitor	100nF/16V	Size 0603 (1608 Metric)	C0603		
12	4	C36,C40,C42,C46	SMT Ceramic capacitor	4.7uF/50V	Size 1206	C1206		
13	2	C38,C43	SMT Ceramic capacitor	N.M.	Size 0603	C0603		
14	2	C47,C48	SMT ceramic capacitor	10uF/25V	Size 0805 (2012 Metric)	C0805		
15	4	D1,D3,D5,D7	Automotive low drop power Schottky rectifier	STPS2L40ZFY	SOD123Flat	SOD-123	STMicroelectronics	STPS2L40ZFY or equivalent
16	3	D2,D4,D6	Diode Ultrafast 1200 V, 1 A	STTH112A	SMA	DO-214AC	STMicroelectronics	STTH112A or equivalent
17	2	D8,D11	SURFACE MOUNT PRECISION ZENER DIODE	BZT585B12T	SOD523	SOD-523	Diodes Incorporated	BZT585B12T or equivalent
18	2	D9,D12	SURFACE MOUNT PRECISION ZENER DIODE	BZT585B15T	SOD523	SOD-523	Diodes Incorporated	BZT585B15T or Equivalent
19	2	D10,D13	200 mW ZENER DIODE 4.7 V	BZT52C4V7T	SOD523	SOD-523	MCC	BZT52C4V7T-TP or equivalent
20	4	FB1,FB2,FB3,FB4	Ferrite Beads	BLM21AG471SN1	Size 0805	R0805	Murata	BLM21AG471SN1 or Equivalent
21	3	OUT,HV,GNDPWR	M3 Screw	PAD_4_7D2_4MM	Diam. 10, hole diam. 3.2 mm	PAD-10F3_2		
22	3	JR1,R47,R54	SMT Resistor	0	Size 0603	R0603		
23	1	J1	Terminal block T.H. 5 positions, 3.5 mm	MORSV-350-5P_screw	Pitch 3,5 mm	MORS_WR-TBL_691243110005_5P_3V5	Würth Elektronik	691243110005 or equivalent
24	1	J2	Strip connector 7 pos, 2.54 mm	STRIP 1x7	1x7 pins	STRIP_7V	Amphenol FCI	68000-407HLF or Equivalent
25	1	J3	Strip connector 6 pos, 2.54 mm	STRIP 1x6	1x6 pins	STRIP_6V	WURTH ELEKTRONIK	61300611121 or equivalent
26	2	J4,J5	Strip connector 3 pos, 2.54 mm	STRIP 1x3	1x3 pins	STRIP_3V	WURTH ELEKTRONIK	61300311121 or equivalent
27	4	LED1,LED2,LED3,LED4	WL-SMCW SMT Mono-color Chip LED Waterclear	RED	Size 0805	led-0805	WURTH ELEKTRONIK	150080RS75000 or equivalent
28	2	Q1A,Q2A	Trench gate field-stop, 650 V, 30 A, high-speed HB2 series IGBT	STGB30M65DFB2	D*PAK ( TO-263 )	D2PAK	STMicroelectronics	STGB30H65DFB2
29	2	Q1,Q2	Silicon carbide Power MOSFET, 1200 V, 60 A, 35 mOhm	N.M.	H2PAK-7	H2PAK-7	STMicroelectronics	SCTH60N120G2-7 or equivalent
30	2	Q3,Q4	N-channel 60 V, 21 mOhm typ., 7 A STRipFET F7, Power MOSFET in a PowerFLAT	STL7N6F7	PowerFLAT 2x2 mm	POWERFLAT6-2X2_P065-E	STMicroelectronics	STL7N6F7 or equivalent
31	2	Q5,Q6	Low voltage fast-switching NPN power transistors	2STF1360	SOT-89	SOT-89	STMicroelectronics	2STF1360 or Equivalent
32	2	R1,R2	SMT Resistor	10M	Size 1206 (3216 Metric)	R1206		
33	4	R4,R19,R28,R40	SMT resistor	750	Size 0603 (1608 Metric)	R0603		
34	6	R5,R7,R18,R29,R30,R39	SMT resistor	100	Size 0603 (1608 Metric)	R0603		
35	2	R6,R27	SMT resistor	15	Size 1210	R1210		
36	2	R8,R31	SMT resistor	3.9	Size 1210	R1210		
37	2	R9,R32	SMT resistor	N.M.	Size 0603 (1608 Metric)	R0603		
38	2	R10,R33	SMT resistor	51	Size 0805 (2012 Metric)	R0805		
39	13	R11,R14,R15,R17,R20,R22,R35,R38,R48,R55,R58,R63,R64	SMT resistor	N.M.	Size 0402 (1005 metric)	R0402		
40	2	R12,R36	SMT resistor	51k	Size 0603 (1608 Metric)	R0603		
41	2	R13,R34	SMT resistor	10k	Size 0402 (1005 metric)	R0402		
42	2	R16,R37	SMT resistor	1k	Size 0603 (1608 Metric)	R0603		
43	9	R21,R41,R44,R46,R50,R51,R53,R57,R59	SMT resistor	0	Size 0402 (1005 metric)	R0402		
44	1	R23	SMT Resistor	N.M.	Size 0805	R0805		
45	2	R24,R42	SMT resistor	2.2	Size 0402 (1005 metric)	R0402		
46	2	R25,R43	SMT resistor	100k	Size 0402 (1005 metric)	R0402		
47	2	R45,R52	SMT Resistor	1k	Size 0603	R0603		
48	2	R49,R56	SMT Resistor	N.M.	Size 0603	R0603		
49	1	R60	SMT resistor	4.7k	Size 0603 (1608 Metric)	R0603		
50	1	R61	SMT resistor	1.47k	Size 0603 (1608 Metric)	R0603		
51	1	R62	SMT resistor	1.18k	Size 0603 (1608 Metric)	R0603		
52	10	TP1,TP2,TP3,TP4,TP5,TP11,TP12,TP13,TP14,TP15	TP for Probe	TP-diam1_27mm-Hole0_8mm	Diam. 1.27, Hole 0.8mm	TP-F0_8_PAD_1_35		
53	9	TP6,TP7,TP8,TP9,TP10,TP16,TP17,TP18,TP19	TP for Probe	TP-diam1_27mm-Hole0_8mm	Diam. 1.27, Hole 0.8mm	TP-1_5		
54	2	U1,U2	Galvanically isolated 6 A single gate driver	STGAP3S6I	SO-16W	SO16_L10_4	STMicroelectronics	STGAP3S6I
55	2	U3,U4	5.4kVDC Isolated 2W Gate Drive DC-DC Converters	MGJ2D051515BSC		CONV_MGJ2	Murata	MGJ2D051515BSC or equivalent
56	1	U5	200 mA low quiescent current and low noise LDO	LDK220M-R	SOT23-5L	SOT23-5L	STMicroelectronics	LDK220M-R or equivalent
57	1	VP1	PCB Assembly version solder dot	FULL		square2x2mm		
58	3	VP2,VP3,VP4	PCB Assembly version solder dot	EMPTY		square2x2mm		
59	1	PCB	P.C.B. EVLSTGAP3S6 Rev.2.0					STMicroelectronics