

Document reference: <b>April 2025 Vers.2.0</b>	Product reference: <b>EVLSTGAP3SXI Rev. 2.0</b>	
Company: www.st.com		
<b>STMicroelectronics</b>		

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

Index	Quantity	Reference	Description	Value / Generic Part Number	Voltage	Package	PCB Footprint	Manufacturer	Manufacturer's ordering code / Orderable Part	Supplier	Supplier's ordering code
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	ECWF61B335J or equivalent		
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	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	2	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	47pF	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	2	C20,C34	SMT ceramic capacitor	100nF	50V	Size 0603 (1608 Metric)	C0603				
13	4	C36,C40,C42,C46	SMT Ceramic capacitor	4.7uF	50V	Size 1206	C1206				
14	2	C38,C43	SMT Ceramic capacitor	N.M.		Size 0603	C0603				
15	2	C47,C48	SMT ceramic capacitor	10uF	25V	Size 0805 (2012 Metric)	C0805				
16	4	D1,D3,D5,D7	Automotive low drop power Schottky rectifier	STPS2L40ZFY	40V	SOD123Flat	SOD-123	STMicroelectronics	STPS2L40ZFY or equivalent		
17	3	D2,D4,D6	Diode Ultrafast 1200 V, 1 A	STTH112A		SMA	DO-214AC	STMicroelectronics	STTH112A or equivalent		
18	2	D8,D11	SURFACE MOUNT PRECISION ZENER DIODE	BZTS585B12T		SOD523	SOD-523	DIODES Incorporated	BZTS585B12T or equivalent		
19	2	D9,D12	SURFACE MOUNT PRECISION ZENER DIODE	BZTS585B15T		SOD523	SOD-523	Diodes Incorporated	BZTS585B15T or equivalent		
20	2	D10,D13	200 mW ZENER DIODE 4.7 V	BZTS52C4V7T	4.7V	SOD523	SOD-523	MCC	BZTS52C4V7T-TP or equivalent		
21	4	FB1,FB2,FB3,FB4	Ferrite Beads	BLM21AG4715N1		Size 0805	R0805	Murata	BLM21AG4715N1 or Equivalent		
22	3	OUT,HV,GNDPWR	M3 screw	N.M.							
23	3	JR1,R47,R54	SMT Resistor	0		Size 0603	R0603				
24	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		
25	1	J2	Strip connector 7 pos, 2.54 mm	STRIP 1x7		1x7 pins	STRIP_7V	Amphenol FCI	68000-407HLF or equivalent		
26	1	J3	Strip connector 6 pos, 2.54 mm	STRIP 1x6		1x6 pins	STRIP_6V	WURTH ELEKTRONIK	61300611121 or equivalent		
27	2	J4,J5	Strip connector 3 pos, 2.54 mm	STRIP 1x3		1x3 pins	STRIP_3V	WURTH ELEKTRONIK	61300311121 or equivalent		
28	4	LED1,LED2,LED3,LED4	WL-SMCV SMT Mono-color Chip LED Waterclear	RED		Size 0805	led-0805	WURTH ELEKTRONIK	150080RS75000 or equivalent		
29	2	Q1,Q2	Trench gate field-stop IGBT, H series 1200V, 40A high-speed	STGW40H120DF2		TO-247	TO247-3PIN-SPLIT2	STMicroelectronics	STGW40H120DF2 or equivalent		
30	2	Q1A,Q2A	Trench gate field-stop IGBT, H series 1200V, 40A high-speed	N.M.		TO-220	TO220-3PIN-SPLIT2	STMicroelectronics			
31	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		
32	2	Q5,Q6	Low voltage fast-switching NPN power transistors	25TF1360	60V		SOT-89	STMicroelectronics	25TF1360 or Equivalent		
33	2	R1,R2	SMT Resistor	10M		Size 1206 (3216 Metric)	R1206				
34	4	R3,R9,R26,R32	SMT resistor	N.M.		Size 0603 (1608 Metric)	R0603				
35	4	R4,R19,R28,R40	SMT resistor	750		Size 0603 (1608 Metric)	R0603				
36	6	R5,R7,R18,R29,R30,R39	SMT resistor	100		Size 0603 (1608 Metric)	R0603				
37	2	R6,R27	SMT resistor	6.8		Size 1210	R1210				
38	2	R8,R31	SMT resistor	6.8		Size 1210	R1210				
39	2	R10,R33	SMT resistor	20		Size 0805 (2012 Metric)	R0805				
40	11	R11,R14,R17,R20,R22,R38,R48,R55,R58,R63,R64	SMT resistor	N.M.		Size 0402 (1005 metric)	R0402				
41	2	R12,R36	SMT resistor	51k		Size 0603 (1608 Metric)	R0603				
42	2	R13,R34	SMT resistor	10k		Size 0402 (1005 metric)	R0402				
43	2	R16,R37	SMT resistor	1k		Size 0603 (1608 Metric)	R0603				
44	9	R21,R41,R44,R46,R50,R51,R53,R57,R59	SMT resistor	0		Size 0402 (1005 metric)	R0402				
45	1	R23	SMT Resistor	N.M.		Size 1206 (3216 Metric)	R1206				
46	2	R24,R42	SMT resistor	2R2		Size 0402 (1005 metric)	R0402				
47	2	R25,R43	SMT resistor	100k		Size 0402 (1005 metric)	R0402				
48	2	R45,R52	SMT Resistor	1K		Size 0603 (1608 Metric)	R0603				
49	2	R49,R56	SMT Resistor	N.M		Size 0603 (1608 Metric)	R0603				
50	1	R60	SMT resistor	4.7k		Size 0603 (1608 Metric)	R0603				
51	1	R61	SMT resistor	1.47k		Size 0603 (1608 Metric)	R0603				
52	1	R62	SMT resistor	1.18k		Size 0603 (1608 Metric)	R0603				
53	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				
54	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				
55	2	U1,U2	Galvanically isolated 10 A single gate driver	STGAP3SXI		SO-16W	SO16_L10_4	STMicroelectronics	STGAP3SXI		
56	2	U3,U4	5.4kVDC Isolated 2W Gate Drive DC-DC Converters	MGJ2D051515BSC	Vin 5V, Vout1 15V, Vout2 -15V		CONV_MGJ2	Murata	MGJ2D051515BSC or equivalent		
57	1	U5	200 mA low quiescent current and low noise LDO	LDK220M-R		SOT23-5L	SOT23-5L	STMicroelectronics	LDK220M-R or equivalent		
58	1	VP1	PCB Assembly version solder dot	FULL			square2x2mm				
59	4	VP2,VP3,VP4	PCB Assembly version solder dot	EMPTY			square2x2mm				
60	1		P.C.B. EVLSTGAP3SX Rev.2			84x116 mm		STMicroelectronics			