Document reference:	Product reference:
September 2024 Vers.1.0	**EVLSTGAP3SXS-H Rev.1.0**
Company: www.st.com	
STMicroelectronics	

All resistors are 1% tolerance

Item	Quantity	Reference	Description	Value	Voltage	Package	Manufacturer	Part Number
1	1	C4	Film capacitor	3u3/1.1kV	CMAX	Pitch 27.5 mm	Panasonic	ECWFG1B335J
2	4	C5,C10,C18,C21	SMT ceramic capacitor	1uF/50V		Size 0603 (1608 Metric)		
3	6	C6,C11,C16,C19,C22,C26	SMT ceramic capacitor	100nF/50V		Size 0603 (1608 Metric)		
4	2	C7,C29	SMT ceramic capacitor	100nF		Size 0603 (1608 Metric)		
5	2	C8,C30	SMT ceramic capacitor	1uF		Size 0603 (1608 Metric)		
6	6	C12,C13,C15,C23,C24,C28	SMT ceramic capacitor	100pF/16V		Size 0603 (1608 Metric)		
7	2	C14,C25	SMT ceramic capacitor	N.M.	<VOLTAGE>	Size 0603 (1608 Metric)		
8	2	C17,C27	SMT ceramic capacitor	47pF/25V		Size 0603 (1608 Metric)		
9	4	C31,C36,C37,C42	SMT Ceramic capacitor	4.7uF/50V		Size 1206		
10	4	C32,C35,C38,C41	SMT Ceramic capacitor	1uF/50V	CMAX	Size 0603		
11	2	C33,C39	SMT Ceramic capacitor	N.M.		Size 0603		
12	2	C34,C40	SMT Ceramic capacitor	1u/50V	CMAX	Size 0603		
13	2	C45,C46	SMT ceramic capacitor	100n/50V	50V	Size 0603 (1608 Metric)		
14	2	C47,C48	SMT ceramic capacitor	10u/25V		Size 0805 (2012 Metric)		
15	4	C51,C52,C53,C54	SMT ceramic capacitor	N.M.		Size 2225 (5664 Metric)		
16	2	C55,C56	SMT ceramic capacitor	33pF/50V		Size 0402 (1005 metric)		
17	4	D1,D3,D4,D6	Automotive low drop power Schottky rectifier	STPS2L40ZFY	40V	SOD123Flat	STMicroelectronics	STPS2L40ZFY or equivalent
18	3	D2,D5,D13	Diode Ultrafast 1200 V, 1 A	STTH112A		SMA	STMicroelectronics	STTH112A or equivalent
19	2	D7,D10	SURFACE MOUNT PRECISION ZENER DIODE	BZT585B20T		SOD523	Diodes Incorporated	BZT585B20T or Equivalent
20	2	D8,D11	SURFACE MOUNT PRECISION ZENER DIODE	BZT585B18T		SOD523	DIODES Incorporated	BZT585B18T or equivalent
21	2	D9,D12	200 mW ZENER DIODE 4.7 V	BZT52C4V7T	4.7V	SOD523	MCC	BZT52C4V7T-TP or equivalent
22	4	FB1,FB2,FB3,FB4	Ferrite Beads	BLM21AG471SN1		Size 0805	Murata	BLM21AG471SN1 or Equivalent
23	3	OUT,HV,GND_PWR	M3 screw	N.M.				
24	3	JR1,R46,R53	SMT Resistor	0		Size 0603		
25	1	J1	Strip connector 6 pos, 2.54 mm	STRIP 1x6		1x6 pins	WURTH ELEKTRONIK	61300611121 or equivalent
26	2	J5,J10	Strip connector 3 pos, 2.54 mm	STRIP 1x3		1x3 pins	WURTH ELEKTRONIK	61300311121 or equivalent
27	1	J8	Strip connector 7 pos, 2.54 mm	STRIP 1x7		1x7 pins	Amphenol FCI	68000-407HLF or Equivalent
28	1	J9	Terminal block T.H. 5 positions, 3.5 mm	MORSV-350-5P_screw		Pitch 3,5 mm	Wurth Elektronik	691243110005 or equivalent
29	4	LED1,LED2,LED3,LED4	WL-SMCW SMT Mono-color Chip LED Waterclear	RED		Size 0805	WURTH ELEKTRONIK	150080RS75000 or Equivalent
30	2	Q2,Q4	Silicon carbide Power MOSFET 1200 V, 21 mohm typ., 91 A in an HiP247-4 package	SCTWA70N120G2V-4	1200 V	HiP247-4	STMicroelectronics	SCTWA50N120-4 or equivalent
31	2	Q5,Q6	Low voltage fast-switching NPN power transistors	2STF1360	60V	SOT-89	STMicroelectronics	2STF1360 or Equivalent
32	2	Q9,Q10	N-channel 60 V, 21 mOhm typ., 7 A STripFET F7, Power MOSFET in a PowerFLAT	STL7N6F7	60 V	PowerFLAT 2x2 mm	STMicroelectronics	STL7N6F7 or equivalent
33	3	R1,R2,R83	SMT Resistor	10M		Size 1206		
34	4	R7,R8,R13,R30	SMT resistor	750		Size 0603 (1608 Metric)		
35	6	R11,R17,R24,R31,R34,R40	SMT resistor	100		Size 0603 (1608 Metric)		
36	2	R15,R32	SMT resistor	22		Size 1210		
37	2	R18,R35	SMT resistor	2R2		Size 1210		
38	2	R19,R36	SMT resistor	10		Size 0805 (2012 Metric)		
39	2	R20,R37	SMT resistor	10k		Size 0402 (1005 metric)		
40	11	R21,R25,R47,R54,R63,R70,R71,R76,R80,R81,R84	SMT resistor	N.M.		Size 0402 (1005 metric)		
41	2	R22,R38	SMT resistor	50K		Size 0603 (1608 Metric)		
42	2	R23,R39	SMT resistor	1K		Size 0603 (1608 Metric)		
43	1	R26	SMT resistor	1.47k		Size 0603 (1608 Metric)		
44	7	R43,R49,R50,R56,R67,R73,R77	SMT resistor	0		Size 0402 (1005 metric)		
45	2	R44,R51	SMT Resistor	1K		Size 0603		
46	2	R45,R52	SMT resistor	N.M		Size 0402 (1005 metric)		
47	2	R48,R55	SMT Resistor	N.M		Size 0603		
48	2	R68,R74	SMT resistor	2.2		Size 0402 (1005 metric)		
49	2	R69,R75	SMT resistor	100k		Size 0402 (1005 metric)		
50	1	R78	SMT resistor	4.7k		Size 0603 (1608 Metric)		
51	1	R79	SMT resistor	1.18k		Size 0603 (1608 Metric)		
52	1	R82	SMT Resistor	N.M.		Size 1206		
53	11	TP1,TP5,TP6,TP12,TP13,TP27,TP28,TP29,TP30,TP33,TP34	TP for Probe	TP-diam1_27mm-Hole0_8mm		Diam. 1.27, Hole 0.8mm		
54	9	TP2,TP3,TP4,TP23,TP24,TP25,TP26,TP31,TP32	Test point - PCB 1.5 mm diameter	T POINT R		Copper Pad		
55	2	U1,U2	Galvanically isolated 10 A single gate driver	STGAP3SXS		SO-16W	STMicroelectronics	STGAP3SXS
56	2	U3,U4	DC/DC 2W TH 5-15/15V 5.4KV SIP	MGJ2D051515BSC			Murata	MGJ2D051515BSC or equivalent
57	1	U6	200 mA low quiescent current and low noise LDO	LDK220M-R		SOT23-5L	STMicroelectronics	LDK220M-R or equivalent
58	3	VP1,VP3,VP4	PCB Assembly version solder dot	EMPTY				
59	1	VP2	PCB Assembly version solder dot	FULL				
60	1		P.C.B. EVLSTGAP3SXS-H Rev.1.0				STMicroelectronics	