



Bill of Material

Sales code: STEVAL-ILL019V1	Project code: EMMA277
Company: STMicroelectronics	Project name: Offline RRGB LED module driver

Index	Quantity	Reference	Value / Generic Part Number	Package / Class	Manufacturer	Manufacturer's ordering code / Orderable Part Number	Supplier	Supplier's ordering code
1	1	C1	220nF / ~305V AC	X2 capacitor	EPCOS	B32923C3224M		
2	1	C2	150nF / ~305V AC	X2 capacitor	EPCOS	B32922C3154M		
3	1	C3	470nF / ~305V AC	X2 capacitor	EPCOS	B32923C3474M		
4	1	C4	2.2nF / 63V	0805 SMD capacitor				
5	1	C5	220nF / 63V	0805 SMD capacitor				
6	23	C6,C12,C13,C14,C15,C19,C20,C23,C24,C25,C28,C29,C30,C33,C34,C35,C38,C39,C40,C41,C42,C43,C45	100nF / 63V	0805 SMD capacitor				
7	2	C7, C11	47µF / 35V	Electrolytic capacitor			GM	123-701
8	1	C8	330pF/63V	0805 SMD capacitor				
9	2	C9, C10	1mF / 63V	Electrolytic capacitor	EPCOS	B41821F8108M		
10	1	C16	2.2µF / 25V	1206 ceramic capacitor X7R	AVX	12063C225KAT2A		
11	1	C17	4.7µF / 63V	Electrolytic capacitor			GM	123-042
12	1	C18	1nF / 250V AC	Y1 capacitor	MURATA	DE1E3KX102MA5B	Farnell	3531971
13	8	C21,C22,C26,C27,C31,C32,C36,C37	330pF / 63V	0805 SMD capacitor				
14	1	C44	10nF / 63V	0805 SMD capacitor				
15	1	DB1	1A / 250V	Diode bridge SMD			GM	924-009
16	1	D1	P6KE300A	Transil unidirectional 300V	STMicroelectronics	P6KE300A		
17	1	D2	STTH1R06U	1A / 600V ultrafast diode	STMicroelectronics	STTH1R06U		
18	15	D3,D7,D8,D9,D11,D13,D15,D17,D18,D19,D20,D22,D23,D24,D25	1N4148	150mA / 75V universal diode			GM	917-001
19	1	D4	STTH3R02S	3A / 200V ultrafast diode	STMicroelectronics	STTH3R02S		
20	1	D5	STTH102A	1A / 200V ultrafast diode	STMicroelectronics	STTH102A		
21	1	D6	BZV55C15	15V Zener diode (SOD80)			GM	919-006
22	4	D10,D12,D14,D16	STPS1H100A	1A / 100V Schottky diode	STMicroelectronics	STPS1H100A		
23	1	D21	BZV55C30	30V Zener diode (SOD80)			GM	919-058
24	1	F1	2.5A / 250V	Fuse			GM	633-204
25	1	F1	Fuse socket				GM	829-023
26	5	H1,H2,H3,H4, T1HEAT	Screw	Screw 3x6mm			GM	662-005
27	4	H11, H22, H33, H44	Column distance	15mm			GM	623-047
28	5	IC1, IC5, IC6, IC7, IC8	L6562AD	PFC controller	STMicroelectronics	L6562AD		
29	1	IC2	TL431AID	Programmable voltage reference	STMicroelectronics	TL431AID		
30	1	IC3	L78M15ACDT	Linear voltage regulator	STMicroelectronics	L78M15ACDT		

31	1	IC4	L78L05ACD13TR	Linear voltage regulator	STMicroelectronics	L78L05ACD13TR		
32	1	IC9	ST7FLIT15BF1M6	Microcontroller	STMicroelectronics	ST7FLIT15BF1M6		
33	1	J1	ARK120/2	Input connector			GM	821-001
34	2	J3, J6	S1G40	Control conector 40 pins			GM	832-021
35	1	L1	B82732F2451B001	Frame core chokes 2x100mH/0.45A	EPCOS	B82732F2451B001		
36	4	L2, L3, L4, L5	MSS1260-105KLD	1mH / 0.4A	Coilcraft	MSS1260-105KLD		
37	1	OI1	PC817B	Optocoupler			GM	523-171
38	2	R1, R2	1.5M Ω	1206 SMD resistor				
39	2	R3, R6	22K Ω	0805 SMD resistor				
40	1	R4	9.1K Ω	0805 SMD resistor				
41	2	R5, R22	39K Ω	0805 SMD resistor				
42	3	R7, R20, R21	2.2K Ω	0805 SMD resistor				
43	2	R8, R9	220K Ω	1206 SMD resistor				
44	6	R10, R13, R27, R33, R39, R45	10 Ω	0805 SMD resistor				
45	2	R11, R23	47K Ω	0805 SMD resistor				
46	6	R12, R18, R28, R34, R40, R46	1K Ω	0805 SMD resistor				
47	2	R14, R15	1.3 Ω	1206 SMD resistor				
48	1	R16	1.5 Ω	1206 SMD resistor				
49	3	R17, R19, R54	4.7K Ω	0805 SMD resistor				
50	1	R24	3.9K Ω	0805 SMD resistor				
51	4	R25, R31, R37, R43	2.7K Ω	0805 SMD resistor				
52	4	R26, R32, R38, R44	1.5K Ω	0805 SMD resistor				
53	8	R29, R30, R35, R36, R41, R42, R47, R48	5.6 Ω	1206 SMD resistor				
54	4	R49, R50, R51, R52	1.8K Ω	0805 SMD resistor				
55	1	R53	390K Ω	0805 SMD resistor				
56	1	R55	10K Ω	0805 SMD resistor				
57	4	R56, R57, R58, R59	160K Ω	0805 SMD resistor				
58	1	TR1	* note1	Transformer ER30 core	TDK			
59	1	T1	STP7NK80ZFP	Power MOSFET 9A / 800V	STMicroelectronics	STP7NK80ZFP		
60	1	T1HEAT	HEATSINK				GM	620-030
61	4	T2, T3, T4, T5	STS4NF100	Power MOSFET 4A / 100V	STMicroelectronics	STS4NF100		