



Bill of Material

Sales code: STEVAL-ILL013V1	Project code: EMMA268
Company: STMicroelectronics	Project name: 80W dimmable LED driver with high PF converter

Index	Quantity	Reference	Value / Generic Part Number	Package / Class	Manufacturer	Manufacturer's ordering code / Orderable Part Number	Supplier	Supplier's ordering code
1	1	J1	Socket	Input socket				
2	1	F1	Fuse	2,5A/250V				
3	1	F1	Fuse socket	socket				
4	1	NTC	10Ω	NTC thermistor	EPCOS	B57235S100M		
5	1	TR1	2x22mH/1A	Common mode choke	EPCOS	B82732R2102B030		
6	1	BR1	1A/250V	Diode bridge				
7	1	C101	1nF/250V AC	Y1 capacitor	MURATA	DE1E3KX102MA5B		
8	1	C102	470nF/ 265V AC	X2 capacitor	EPCOS	B32922C3474K		
9	2	C103, C104	220nF/ 265V AC	X2 capacitor	EPCOS	B32922A2224M		
10	1	C105	10nF/63V	SMD capacitor 1206				
11	2	C106, C202	100nF/63V	SMD capacitor 1206				
12	1	C107	10μF/35V	Electrolytic capacitor				
13	2	C108, C109	12nF/63V	SMD capacitor 1206				
14	1	C110	33μF/35V	Electrolytic capacitor				
15	1	C111	2200nF/25V X7R	SMD 1206 ceramic capacitor	AVX	12063C225KAT2A		
16	1	C112	150nF/50V	SMD capacitor 1206				
17	1	C113	47μF/450V	Electrolytic capacitor	EPCOS	B43501A5476M000		
18	1	D101	18V/0,5W	Zener diode				
19	4	D102, D104, D201, D204	1N4148	SMD diode				
20	1	D103	STTH1L06U	SMB package	STMicroelectronics	STTH1L06U		
21	2	U101, U201	L6562A	PFC controller	STMicroelectronics	L6562AD		
22	4	R101, R102 R103, R104	1MΩ	SMD resistors 1206				
23	1	R105	15KΩ	SMD resistors 1206				
24	2	R106, R107	270KΩ	SMD resistors 1206				
25	2	R108, R109	47Ω	SMD resistors 1206				
26	3	R110, R116, R208	47kΩ	SMD resistors 1206				
27	2	R111, R122	0Ω	SMD resistors 1206				
28	3	R112, R113, R114	1Ω/1%	SMD resistors 1206				
29	2	R115, R201	33Ω	SMD resistors 1206				
30	1	R117	22kΩ	SMD resistors 1206				
31	2	R118, R119	1MΩ/ 1%	Axial res. 0,6W/1%				
32	1	R120	15KΩ/ 1%	SMD resistors 1206				
33	1	R121	82kΩ/ 1%	SMD resistors 1206				
34	3	R123, R124 R125	330KΩ	SMD resistors 1206				

35	2	R126, R127	20K Ω	Axial res. 0,6W				
36	1	R128	43K Ω	SMD resistor 1206				
37	1	T101	Transformer	E25/13/7 1.5mm gap , N67 Primary: 105 turns 2x0.3 Secondary: 11 turns 1 x 0.3	* note 1			
38	1	Q101	STP8NM50	Power MOSFET	STMicroelectronics	STP8NM50FP		
39	1	Q102	BUX87	Bipolar transistor	STMicroelectronics	BUX87		
40	2	Heatsink		Heatsink for MOSFETs				
41	2	R202, R207	1K Ω	SMD resistors 1206				
42	2	R203, R209	3900 Ω	SMD resistors 1206				
43	1	R204	1,5 Ω / 0,6W	Axial res.				
44	1	R205	2,7 Ω / 0,6W	Axial res.				
45	1	R206	2,2 Ω / 0,6W	Axial res.				
46	1	C201	22 μ F/35V	Electrolytic cap				
47	1	C203	220pF/63V	SMD capacitor 1206				
48	1	C204	390pF/63V	SMD capacitor 1206				
49	1	C205	820pF/63V	SMD capacitor 1206				
50	1	C206	1,5nF/63V	SMD capacitor 1206				
51	1	C207	330pF/63V	SMD capacitor 1206				
52	1	C208	0,47 μ F/450V	Electrolytic capacitor	EPCOS	B43041A5474M000		
53	1	D202	STPSC806D	Silicon carbide diode	STMicroelectronics	STPSC806D		
54	1	D203	STTH1L06A	SMA package	STMicroelectronics	STTH1L06A		
55	4	JP1, JP2 JP3, JP4	Jumper	Two pins connector				
56	2	JPJ1, JPJ2	Jumper	Jumpers				
57	1	J2	Socket	Output socket				
58	1	J3	Socket	Output socket				
59	1	J4	Socket	PWM socket				
60	1	Q201	STF9NM50N	Power MOSFET	STMicroelectronics	STF9NM50N		
61	1	L201	1,6mH	E25/13/7 2mm gap N67, 172 turns 3x 0.28	* note 2			