



Bill of Materials for the FSL538HFLYGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	X2 Capacitor	0.33uF/275V	±10%	17*7.5*15.5mm Pitch=15mm	CARLI	PX334K3ID1	Yes	Yes
C3	1	MLCC X7R Capacitor	223P/100V	±10%	1206	Taiwan-Resister	CP223K100XRC	Yes	Yes
C4	1	Electrolytic Capacitor	33uF/450V	±10%	18*21mm	SAMYOUNG	NHA	Yes	Yes
C5	1	MLCC X7R Capacitor	221P/100V	±10%	1206	Taiwan-Resister	CP221K100XRC	Yes	Yes
C6, C6A	2	Electrolytic Capacitor	680uF/25V		10*20mm	SAMYOUNG	SHL	Yes	Yes
C7	1	Electrolytic Capacitor	68uF/25V		5*11mm	SAMYOUNG	KMG	Yes	Yes
C9	1	MLCC X7R Capacitor	101P/100V	±10%	1206	Taiwan-Resister	CP101K100XRC	Yes	Yes
C10	2	MLCC X7R Capacitor	471p/50V	±10%	805	Taiwan-Resister	CP471K050XRB	Yes	Yes
C13, C17	1	MLCC X7R Capacitor	102P/50V	±10%	805	Taiwan-Resister	CP102K050XRB	Yes	Yes
C15	1	MLCC X7R Capacitor	104P/50V	±10%	805	Taiwan-Resister	CP104K050XRB	Yes	Yes
C16	1	Electrolytic Capacitor	22uF/50V		5*11 mm	SAMYOUNG	KMG	Yes	Yes
C18, C18A	2	Electrolytic Capacitor	330uF/10V		6.3*11mm	SAMYOUNG	KMG	Yes	Yes
C19	1	Electrolytic Capacitor	47uF/16V		5*11mm	SAMYOUNG	KMG	Yes	Yes
R3	1	Resistor SMD	200Ω	±5%	1206	Taiwan-Resister	RP12200RJR	Yes	Yes
R4, R5, R6, R7	4	Resistor SMD	240Ω	±5%	1206	Taiwan-Resister	RP12240RJR	Yes	Yes
R8	1	Resistor SMD	200KΩ	±5%	1206	Taiwan-Resister	RP12200KJR	Yes	Yes
R9	1	Resistor SMD	1Ω	±5%	1206	Taiwan-Resister	RP1201ROJR	Yes	Yes
R10	1	Resistor SMD	24kΩ	±5%	805	Taiwan-Resister	RP0824KOJR	Yes	Yes
R12	1	Resistor SMD	20kΩ	±5%	805	Taiwan-Resister	RP0820KOJR	Yes	Yes
R14	1	Resistor SMD	47kΩ	±5%	1206	Taiwan-Resister	RP1247KOJR	Yes	Yes
R19	1	Resistor SMD	182KΩ	±5%	1206	Taiwan-Resister	RP12182KJR	Yes	Yes
R21	1	Resistor SMD	0Ω	±5%	1206	Taiwan-Resister	RP12000JR	Yes	Yes
R22	1	Resistor SMD	22MΩ	±5%	1206	Taiwan-Resister	RP1222MOJR	Yes	Yes
R23	1	Resistor SMD	360KΩ	±5%	1206	Taiwan-Resister	RP12360KJR	Yes	Yes
D1	1	Fast Rectifier	600V, 1A		DO-214AC	ON Semiconductor	ES1J	Yes	Yes
D2	1	Zener Diode	7.5V, 0.2W		SOD-523F	ON Semiconductor	MM527V5	Yes	Yes
D3	1	Fast Rectifier	200V, 1A		DO-214AC	ON Semiconductor	RS1D	Yes	Yes
D4	1	Jumper wire	short					Yes	Yes
D5	1	Schottky Rectifier	150V, 10A		TO-277	ON Semiconductor	FSV10150V	Yes	Yes
D7	1	Schottky Rectifier	50V, 2A		DO-214AA	ON Semiconductor	SS25	Yes	Yes
D8	1	TVS	150V, 600W		DO-15	ON Semiconductor	P6KE150A	Yes	Yes
5 V, 12 V, GND, L, N	5	TEST PIN	Pin φ2.2*18.2mm OEM-10		2.2*18.2mm	KANG YANG	SG004-05 Pin	Yes	Yes

F1	1	Fuse	FUSE CERAMIC 1A / 250V SLOW		3.6φ10mm		375G	Yes	Yes
MOV	1	MOV	470V	±10%		THINKING	MOV-471KD10SBNL	Yes	Yes
NTC	1	Jumper wire	short					Yes	Yes
BD1	1	Bridge Rectifier	600V, 2A		KBPM	ON Semiconductor	2KBPO6M	Yes	Yes
L1	1	Common-mode choke	10mH		UU9.8	SEN HUEI	TRN0356	Yes	Yes
L2, L3	2	Inductor, Ferrite core	1uH		DR 6x8	WURTH	744772010	Yes	Yes
TX1	1	Transformer	960uH	±10%	EE-19	SEN HUEI		No	Yes
U1	1	PWM with power SenseFET			7DIP	ON Semiconductor	FSL538HPG	No	Yes
	1	PCB					PLM0387V0	No	Yes
NTC, D4, F1, C4, D8	5	Teflon tube	17L x 305m					Yes	Yes