



Bill of Materials for the FSL538AFLYGEVB 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
C2	1	MLCC X7R Capacitor	102P/1kV	±10%	1206	KEMET	C1206C102KDRACTU	Yes	Yes
C4	1	Electrolytic Capacitor	47uF/400V	±20%	12.5*26mm	Rubycon	QXW	Yes	Yes
C5	1	MLCC X7R Capacitor	221P/100V	±10%	1206	Taiwan-Resister	CP221K100XRC	Yes	Yes
C6,C6A	2	Electrolytic Capacitor	220uF/35V	±20%	8*11mm	JACKCON	LHK	Yes	Yes
C7,C16	2	Electrolytic Capacitor	22uF/50V	±20%	5*11mm	JACKCON	LHK	Yes	Yes
C10,C17	2	MLCC X7R Capacitor	102P/50V	±10%	805	Taiwan-Resister	CP102K050XRB	Yes	Yes
C13,C15	2	MLCC X7R Capacitor	104P/50V	±10%	805	Taiwan-Resister	CP104K050XRB	Yes	Yes
C14	1	Y1 Capacitor	222 pF/250 V	±20%		UNIVERSE	CD12-E2GA222MYASA	Yes	Yes
C18, C18A	2	Electrolytic Capacitor	470uF/25V	±10%	10*20mm	Chemi-con	KME	Yes	Yes
C19	1	Electrolytic Capacitor	68uF/25V	±20%	5*11mm	Rubycon	ZLH	Yes	Yes
R3,R21	2	Resistor SMD	0Ω	±5%	1206	Taiwan-Resister	RP12000JR	Yes	Yes
R4,R5	2	Resistor SMD	240Ω	±5%	1206	Taiwan-Resister	RP12240RJR	Yes	Yes
R1,R2,R8	3	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
R11,R17	2	Resistor SMD	5K1Ω	±5%	805	Taiwan-Resister	RP0805K1JR	Yes	Yes
R14	1	Resistor SMD	30KΩ	±5%	1206	Taiwan-Resister	RP1230KOJR	Yes	Yes
R18	1	Resistor SMD	2 MΩ	±5%	1206	Taiwan-Resister	RP1202MJR	Yes	Yes
R19	1	Resistor SMD	150KΩ	±5%	1206	Taiwan-Resister	RP12150KJR	Yes	Yes
R22	1	Resistor SMD	22MΩ	±5%	1206	Taiwan-Resister	RP1222MOJR	Yes	Yes
R23	1	Resistor SMD	100KΩ	±5%	1206	Taiwan-Resister	RP12100KJR	Yes	Yes
R3,R21	2	Resistor SMD	0Ω	±5%	1206	Taiwan-Resister	RP12000JR	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	120V, 10A		TO-277	ON Semiconductor	FSV10120V	Yes	Yes
15 V,12 V,GND, L,N	5	TEST PIN	Pin ψ2.2*18.2mm OEM-10		2.2*18.2mm	KANG YANG	SG004-05 Pin	Yes	Yes
F1	1	Fuse	FUSE CERAMIC 1A / 250V SLOW		3.6ψ10mm		375G	Yes	Yes
MOV	1	MOV	470V	±10%		THINKING	MOV-471KD10SBNL	Yes	Yes

BD1	1	Bridge Rectifier	600V, 2A		SDIP-4	ON Semiconductor		DF065	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	850uH	±10%	EE-25-10 pin				No	Yes
U1	1	PWM with power SenseFET			7DIP	ON Semiconductor		FSL538APG	No	Yes
U2	1	Opto Coupler	CTR=80-160%		DIP 4-pin	ON Semiconductor		FOD817A	Yes	Yes
U3	1	Shunt Regulator	Adjustable, 2.5 V	1%	TO-92	ON Semiconductor		NCP431AVLPRAG	Yes	Yes
	1	PCB						PLM0434V0	No	Yes
D4,F1	2	Teflon tube	17L x 305m						Yes	Yes