



Bill of Materials for the FSL518AFLYGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C10, C17	2	MLCC X7R Capacitor	102 pF/50 V	±10%	805	Taiwan-Resister	CP102K050XRBB	Yes	Yes
C13	1	MLCC X7R Capacitor	682 pF/50 V	±10%	805	Taiwan-Resister	CP682K050XRBB	Yes	Yes
C15	1	MLCC X7R Capacitor	104 pF/50 V	±10%	805	Taiwan-Resister	CP104K050XRBB	Yes	Yes
C1	1	X2 Capacitor	0.22 µF/275 V	±10%	P=10mm	CARLI	PX224K3IC5	Yes	Yes
C2	1	MLCC X7R Capacitor	102P/1kV	±10%	1206	KEMET	C1206C102KDRACTU	Yes	Yes
C14	1	Y1 Capacitor	222 pF/250 V	±20%		UNIVERSE	CD12-E2GA222MYASA	Yes	Yes
C4	1	Electrolytic Capacitor	18 µF/400 V		10*20mm	AISHI	EHL2GM180G200T	Yes	Yes
C6, C6A	2	Electrolytic Capacitor	470 µF/25 V		10*12mm	CHEMI-CON	EKMG250ELL471MJC5S	Yes	Yes
C7	1	Electrolytic Capacitor	68 µF/25 V	±20%	5*11mm	Rubycon	25ZLH68M5X11	Yes	Yes
C16	1	Electrolytic Capacitor	22 µF/50 V	±20%	5*11 mm	JACKCON	LHK	Yes	Yes
R14	1	Resistor SMD	47.5 kΩ	±5%	805	Taiwan-Resister	RP0847K5JR	Yes	Yes
R11, R17	1	Resistor SMD	5.1 kΩ	±5%	1206	Taiwan-Resister	RP1205K1JR	Yes	Yes
R18	1	Resistor SMD	1 MΩ	±5%	805	Taiwan-Resister	RP0801MJR	Yes	Yes
R19	1	Resistor SMD	180 kΩ	±1%	805	Taiwan-Resister	RP08180KFR	Yes	Yes
R23	1	Resistor SMD	100 kΩ	±5%	805	Taiwan-Resister	RP08100KJR	Yes	Yes
R1, R2, R8	3	Resistor SMD	200 kΩ	±5%	1206	Taiwan-Resister	RP12200KJR	Yes	Yes
R9	1	Resistor SMD	1 R	±5%	1206	Taiwan-Resister	RP1201R0JR	Yes	Yes
R3, R21	1	Resistor SMD	0 R	±5%	1206	Taiwan-Resister	RP12000JR	Yes	Yes
R22	1	Resistor SMD	22 MΩ	±5%	1206	Taiwan-Resister	RP1222M0JR	Yes	Yes
D1	1	Fast Rectifier	600 V, 1 A		DO-214AC	ON Semiconductor	ES1J	Yes	Yes
D2	1	Zener Diode	7.5 V, 0.2 W		SOD-523F	ON Semiconductor	MM527V5	Yes	Yes
D3	1	Fast Rectifier	200 V, 1 A		DO-214AC	ON Semiconductor	RS1D	Yes	Yes
D4	1	Jumper wire	Short		5mm			Yes	Yes
D5	1	Schottky Rectifier	120 V, 10 A		TO-277	ON Semiconductor	FSV10120V	Yes	Yes
L, N, 12V, GND	4	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	470 V	±10%		THINKING	MOV-471KD105BNL	Yes	Yes
NTC	1	Jumper wire	short		7mm			Yes	Yes
L1	1	Common-mode choke	30 mH		UU9.8	SEN HUEI	TRN0330	Yes	Yes
L2	1	Inductor, Ferrite core	1 µH		DR 6x8	WURTH	744772010	Yes	Yes
BD1	1	Bridge Rectifier	600 V, 1.5 A		SDIP-4	ON Semiconductor	DF06S	Yes	Yes
TV1	1	Transformer	745 µH	±5%	FF-104-0D	SEN HUEI	TRN0369	No	Yes

REF	QTY	DESCRIPTION	VALUE	TOL	PACKAGE	MANUFACTURER	PART NUMBER	NO	YES
U1	1	PWM with power SenseFET			PDIP-7	ON Semiconductor	SW-19AG	No	Yes
U2	1	Opto Coupler	CTR=80-160%		DIP 4-pin	ON Semiconductor	FSL518APG	Yes	Yes
U3	1	Shunt Regulator	Adjustable, 2.5 V	1%	TO-92	ON Semiconductor	FOD817A	Yes	Yes
	1	PCB			38 * 80 mm		NCP431AVLPFRAG	No	Yes
NTC, D4, F1	3	Teflon tube	17L x 305m				PLM0433V0	Yes	Yes