



Bill of Materials for the LB11696VGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	Motor Pre-Driver	-	-	SSOP30 (275mil)	ON Semiconductor	LB11696V	No	Yes
Q1	1	WL:NPN Tr. for inverted logic	-	-	CPA	ON Semiconductor	2SC2812N	Yes	Yes
Q2	1	VL:NPN Tr. for inverted logic	-	-	CPA	ON Semiconductor	2SC2812N	Yes	Yes
Q3	1	UL:NPN Tr. for inverted logic	-	-	CPA	ON Semiconductor	2SC2812N	Yes	Yes
T1	1	W:Nch FET for low side driver	-	-	TP-FA	ON Semiconductor	SFT1446	Yes	Yes
T2	1	V:Nch FET for low side driver	-	-	TP-FA	ON Semiconductor	SFT1446	Yes	Yes
T3	1	U:Nch FET for low side driver	-	-	TP-FA	ON Semiconductor	SFT1446	Yes	Yes
T4	1	W:Pch FET for high side driver	-	-	TP-FA	ON Semiconductor	SFT1342	Yes	Yes
T5	1	V:Pch FET for high side driver	-	-	TP-FA	ON Semiconductor	SFT1342	Yes	Yes
T6	1	U:Pch FET for high side driver	-	-	TP-FA	ON Semiconductor	SFT1342	Yes	Yes
SW(S/S)	1	Switch	-	-	6mm x 9mm	MIYAMA	MS-611A-A01	Yes	Yes
SW(F/R)	1	Switch	-	-	6mm x 9mm	MIYAMA	MS-611A-A01	Yes	Yes
TP1-TP10	10	Test points	-	-	-	MAC8	ST-1-3	Yes	Yes
Socket	1	Motor connection socket	-	-	-	YAMAICHI	IC-91-1403-G4	Yes	Yes
R6	1	RD(pull up)	10k, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1JTTD103J	Yes	Yes
R7	1	S/S(pull up)	10k, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1JTTD103J	Yes	Yes
R8	1	HP(pull up)	10k, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1JTTD103J	Yes	Yes
R9	1	RF (filter)	1k, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1JTTD102J	Yes	Yes
R10	1	Hall bias VREG	330, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1JTTD331J	Yes	Yes
R11	1	Hall bias GND	330, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1JTTD331J	Yes	Yes
R12-15	4	RF	0.51, (0.25W)	±5%	2012, (0805Inch)	ROHM	MCR10EZHJLR51	Yes	Yes
R16-18	3	NPN Tr. Emitter resistor	820, (0.33W)	±5%	3216, (1206Inch)	ROHM	ESR18EZPJ821	Yes	Yes
R19-21	3	Pch FET Gate to Source	1k, (0.33W)	±5%	3216, (1206Inch)	ROHM	ESR18EZPJ102	Yes	Yes
R22-24	3	Nch FET Gate resistor	220, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1JTTD221J	Yes	Yes
R25-27	3	Jumper	0, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1J 0ΩJ	Yes	Yes
J3	1	EI+ Jumper	0, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1J 0ΩJ	Yes	Yes
J4	1	EI-(to TOC)	0, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1J 0ΩJ	Yes	Yes
J5	1	LVS(to VREG)	0, (0.1W)	±5%	1608, (0603Inch)	KOA	RK73B1J 0ΩJ	Yes	Yes
C4	1	IN3+/-	4700pF, 50V	±5%	1608, (0603Inch)	MURATA	GRM188B11H472K	Yes	Yes
C5	1	IN2+/-	4700pF, 50V	±5%	1608, (0603Inch)	MURATA	GRM188B11H472K	Yes	Yes
C6	1	IN1+/-	4700pF, 50V	±5%	1608, (0603Inch)	MURATA	GRM188B11H472K	Yes	Yes
C7	1	EI+ Bypass Capacitor	0.1uF, 25V	±10%	1608, (0603Inch)	MURATA	GRM188B11E104K	Yes	Yes
C8	1	PWM	2200pF, 50V	±5%	1608, (0603Inch)	MURATA	GRM1882C1H222J	Yes	Yes
C9	1	CSD	0.47uF, 25V	±10%	1608, (0603Inch)	MURATA	GRM188B31E474KA	Yes	Yes
C10	1	VREG Bypass capacitor	0.1uF, 25V	±10%	1608, (0603Inch)	MURATA	GRM188B11E104K	Yes	Yes
C12	1	VCC Bypass Capacitor	10uF, 25V	±10%	3216, (1206Inch)	MURATA	GRM31CB31E106KA	Yes	Yes
C13	1	RF (filter)	1000pF, 50V	±5%	1608, (0603Inch)	MURATA	GRM1882C1H102J	Yes	Yes
C14-16	1	Pch FET Gate to Source	1000pF, 50V	±5%	1608, (0603Inch)	MURATA	GRM1882C1H102J	Yes	Yes
C17	1	VM Bypass Capacitor	47uF, 100V	±20%	3216, (1206Inch)	PANASONIC	ECA2AHG470	Yes	Yes
C18	1	VM Bypass Capacitor	0.1uF, 25V	±10%	1608, (0603Inch)	MURATA	GRM188B11E104K	Yes	Yes