



### Bill of Materials for the LV88563JAGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	Pre-driver for a single-phase BLDC motor			SSOP20J	ON Semiconductor	LV88563JA	No	Yes
U2	1	Pre-driver for a single-phase BLDC motor	No Installed		VCT20 3x3	ON Semiconductor	LV88561 / 563R	No	Yes
U3-4	2	Potentiometer	100k		TSSOP-24	ON Semiconductor	CAT5251Y100	Yes	Yes
U5	1	Current shunt monitor	No Installed		MSOP8	ANALOG DEVICES	AD8219BRMZ	Yes	Yes
T1-2	2	Complementary dual power MOSFET			SOIC8	ON Semiconductor	FW389-TL-2W (100V, 2A)	Yes	Yes
T3	1	NPN Transistor			PCP	ON Semiconductor	2SC3646T-TD-E	Yes	Yes
T4-5	2	NCH MOSFET			SOT-323	ON Semiconductor	MCH3486-TL-W	Yes	Yes
T6-7	2	NPN Transistor			SOT-23	ON Semiconductor	BC846ALT1G	Yes	Yes
D1-2	2	Schottky diode			SMA	ON Semiconductor	MBRA340T3G	Yes	Yes
D3	1	ZENER-DIODE	12V		SOD-323	ON Semiconductor	MM3Z12VT1G	Yes	Yes
RO1	1	Solder JP			4030			Yes	Yes
RO2-23	22	Solder JP			3010			Yes	Yes
RO21-RO23	7	Solder JP	short					Yes	Yes
VR1-7	7	Potentiometer			10x10mm	SUNTAN	TSR-3386K104R	Yes	Yes
H1	1	Hall element			4-SOP	ASAHI KASEI	HW-101A	Yes	Yes
J1	1	Pin Socket 20			Pitch 2.54mm	Useconn	FH-2x20SG	Yes	Yes
J2	1	Pin Socket 20			Pitch 2.54mm	Useconn	FH-2x20SG	Yes	Yes
J3	1	Motor connector			Pitch 2.54mm	HIROSE Electronics	DF1-6P-2.5DSA(05)	Yes	Yes
J4	1	Power supply connector			Pitch 2.54mm	Tyco Electronics	282834-2	Yes	Yes
J5	1	AC-DC adapter connector				Singatron	2DC-0415D200	Yes	Yes
C1	1	Capacitor	4.7u, 100V		3225 BIG	MURATA	GRM32DC72A475K	Yes	Yes
C2 C9	2	Capacitor	0.1u,100V		1608 BIG	MURATA	GRM188R72A104K	Yes	Yes
C3-6	4	Capacitor	1000p, 50V		1608 BIG	MURATA	GRM188B11H102K	Yes	Yes
C7-8	2	Capacitor	1u, 25V		1608 BIG	MURATA	GRM188B31E105K	Yes	Yes
C10	1	Capacitor	220p, 50V		1608 BIG	MURATA	GRM188B11H221K	Yes	Yes
C11-12	2	Capacitor	0.01u, 50V		1608 BIG	MURATA	GRM188B11H103K	Yes	Yes
C13	1	Capacitor	0.1u,25V		1608 BIG	MURATA	GRM188B11E104K	Yes	Yes
R1 R3	2	Resistor	OPEN		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R2 R4	2	Resistor	100, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R5-6	2	Resistor	2.2k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes

R7 R9	2	Resistor	1k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R8 R10 R29-30	4	Resistor	100k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R11-12	2	Resistor	51m, 0.5W		3216 BIG	Rohm	UCR18EVHFSR051	Yes	Yes
R13-26	14	Resistor	No Installed		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R27	1	Resistor	10k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R28	1	Resistor	2k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R31	1	Resistor	5.1k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R32	1	Resistor	1k, 0.5W		3225 BIG	Rohm	ESR25JZPJ102	Yes	Yes
R33	1	Resistor	No Installed		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R34 R37 R42	3	Resistor	1k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R35	1	Resistor	0					Yes	Yes
R36	1	Resistor	3.9k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R38-40	3	Resistor	OPEN		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes
R41	1	Resistor	47k, 0.1W		1608 BIG	KOA	RK73B1JTxxxJ	Yes	Yes